2026
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2028

MEASURING INSTRUMENTS

CATALOGUE NO. EU262

BEST SELLER

INSIZE

MEASUREMENT SOLUTION PROVIDER

All products in this catalogue are usually stocked and available from INSIZE Europe in Spain (subject to our final confirmation)

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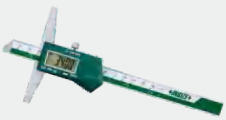
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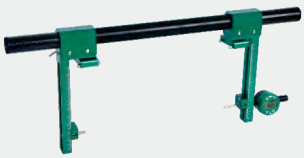
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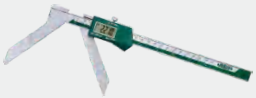
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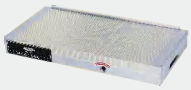
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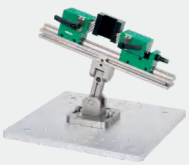
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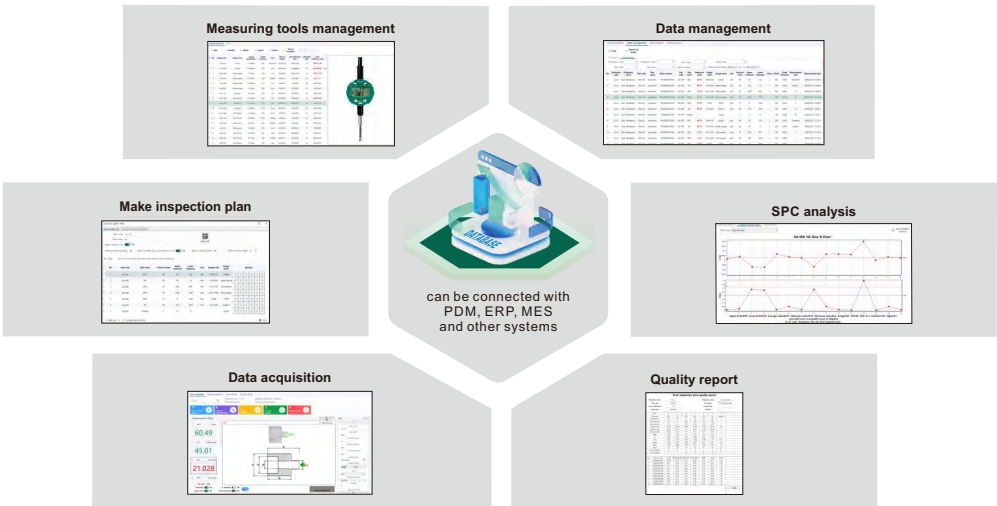
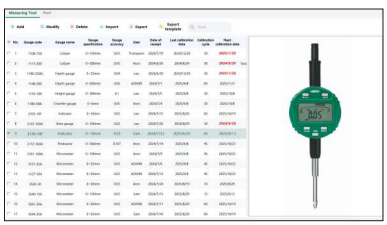
MEASUREMENT DATA MANAGEMENT AND ANALYSIS SOFTWARE (BASIC TYPE)
CODE 7349

VIDEO



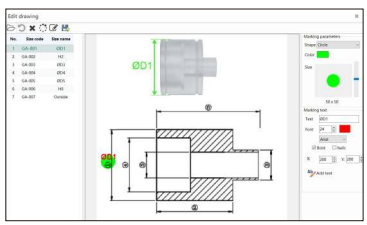
Measuring tools management

- Information, pictures and calibration date of measuring tools, can import and export Excel



Make inspection plan

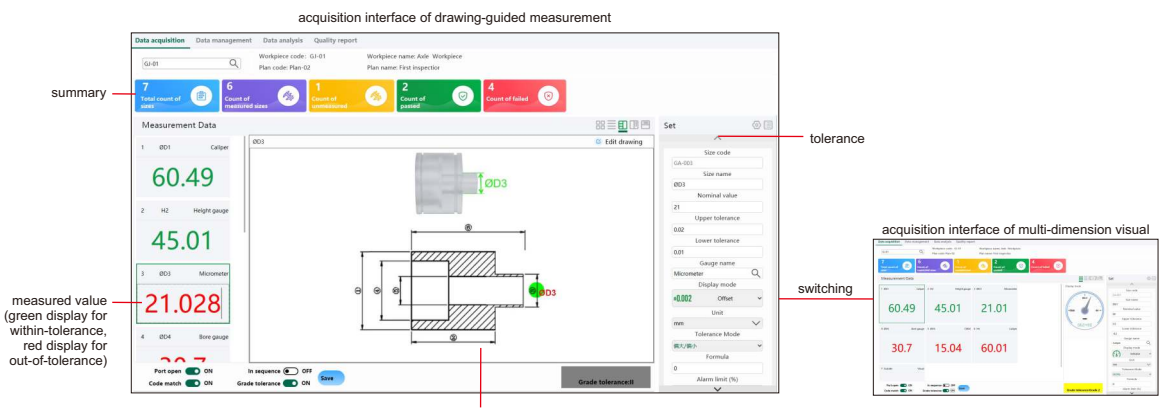
- Define the dimensions, tolerances, measuring tools, drawing guides and formulas of workpieces, can import and export Excel
- Define parameters, QR code and batches of control plans



Data acquisition

- Drawing-guided measurement and acquisition data of measuring tools
- Support multiple data acquisition methods
  manual input: data input with keyboard
  data transfer: data collection with data output cable
- Support a variety of visual displays such as meters, trend graphs, levels, temperatures and deviations

acquisition interface of drawing-guided measurement

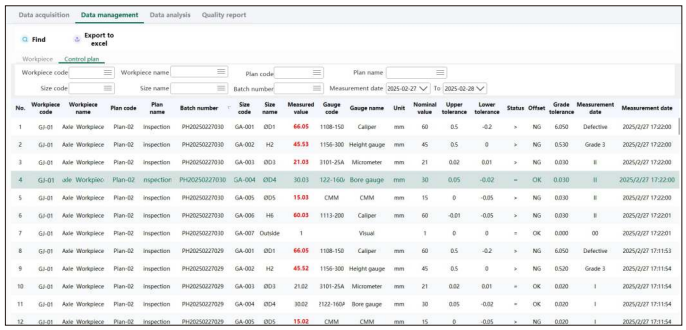


To be continued

Continued from previous page

Data management

- Query measurement data (red display for out-of-tolerance) and result status (OK/NG, Rework, UpMax/LowMin), can export Excel



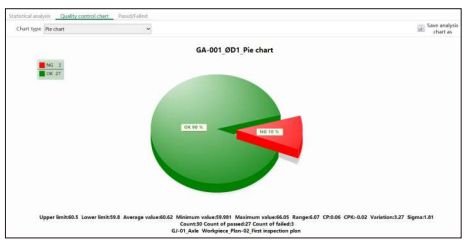
No.	Workpiece code	Workpiece name	Plan code	Plan name	Batch number	Size code	Size name	Measured value	Gauge code	Gauge name	Unit	Nominal value	Upper tolerance	Lower tolerance	Status	Offset	Grade tolerance	Measurement date	Measurement date
1	GJ-01	Axle Workpiece	Plan-02	Inspection	PH20250227030	GA-001	ØD1	66.05	1108-150	Caliper	mm	60	0.5	-0.2	>	NG	6.050	Defective	2025/2/27 17:22:00
2	GJ-01	Axle Workpiece	Plan-02	Inspection	PH20250227030	GA-002	H2	45.53	1156-300	Height gauge	mm	45	0.5	0	>	NG	0.530	Grade 3	2025/2/27 17:22:00
3	GJ-01	Axle Workpiece	Plan-02	Inspection	PH20250227030	GA-003	ØD3	21.03	3101-25A	Micrometer	mm	21	0.02	0.01	>	NG	0.030	II	2025/2/27 17:22:00
4	GJ-01	xle Workpiec	Plan-02	nspection	PH20250227030	GA-004	ØD4	30.03	1222-160/	Bore gauge	mm	30	0.05	-0.02	=	OK	0.030	II	2025/2/27 17:22:00
5	GJ-01	Axle Workpiece	Plan-02	Inspection	PH20250227030	GA-005	ØD5	15.03	CMM	CMM	mm	15	0	-0.05	>	NG	0.030	II	2025/2/27 17:22:00
6	GJ-01	Axle Workpiece	Plan-02	Inspection	PH20250227030	GA-006	H6	60.03	1113-200	Caliper	mm	60	-0.01	-0.05	>	NG	0.030	II	2025/2/27 17:22:01
7	GJ-01	Axle Workpiece	Plan-02	Inspection	PH20250227030	GA-007	Outside	1		Visual		1	0	0	=	OK	0.000	00	2025/2/27 17:22:01
8	GJ-01	Axle Workpiece	Plan-02	Inspection	PH20250227029	GA-001	ØD1	66.05	1108-150	Caliper	mm	60	0.5	-0.2	>	NG	6.050	Defective	2025/2/27 17:11:53
9	GJ-01	Axle Workpiece	Plan-02	Inspection	PH20250227029	GA-002	H2	45.52	1156-300	Height gauge	mm	45	0.5	0	>	NG	0.520	Grade 3	2025/2/27 17:11:54
10	GJ-01	Axle Workpiece	Plan-02	Inspection	PH20250227029	GA-003	ØD3	21.02	3101-25A	Micrometer	mm	21	0.02	0.01	=	OK	0.020	I	2025/2/27 17:11:54
11	GJ-01	Axle Workpiece	Plan-02	Inspection	PH20250227029	GA-004	ØD4	30.02	1222-160/	Bore gauge	mm	30	0.05	-0.02	=	OK	0.020	I	2025/2/27 17:11:54
12	GJ-01	Axle Workpiece	Plan-02	Inspection	PH20250227029	GA-005	ØD5	15.02	CMM	CMM	mm	15	0	-0.05	>	NG	0.020	I	2025/2/27 17:11:54

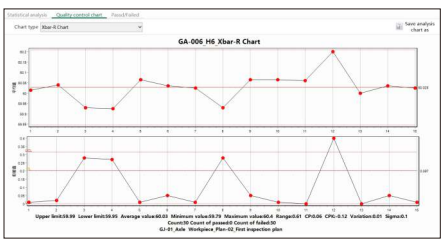
SPC analysis

- Parameters of SPC analysis: average, min value, max value, range, Cp, Cpk, variation, sigma, counts of OK/NG, can export Excel

No.	Workpiece code	Workpiece name	Nominal value	Upper limit	Lower limit	Average value	Minimum value	Maximum value	Range	CP	CPK	Variation	Sigma	Count	Count of passed	Count of failed
1	GA-001	ØD1	60	60.5	59.8	60.625	59.981	66.05	6.069	0.064	-0.023	3.273	1.809	30	27	3
2	GA-002	H2	45	45.5	45	45.146	44.01	45.56	1.550	0.282	0.165	0.087	0.296	30	23	7
3	GA-003	ØD3	21	21.02	21.01	21.048	21	21.11	0.110	0.047	-0.265	0.001	0.035	30	6	24
4	GA-004	ØD4	30	30.05	29.98	30.084	29.95	30.7	0.750	0.066	-0.064	0.031	0.176	30	15	15
5	GA-005	ØD5	15	15	14.95	15.058	14.96	15.6	0.640	0.080	-0.186	0.011	0.105	30	4	26
6	GA-006	H6	60	59.99	59.95	60.028	59.79	60.4	0.610	0.064	-0.120	0.011	0.105	30	0	30
7	GA-007	Outside	1	1	1	0.900	0	1	1.000	0.000	-0.111	0.090	0.300	30	27	3

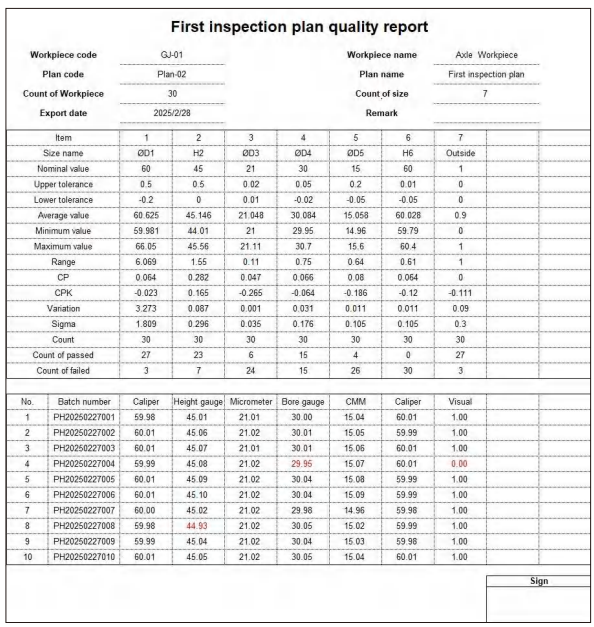
- Provide variety of quality analysis control charts: Pie Chart, X Chart, Xbar-R Chart, Xbar-S Chart, I-MR Chart and Run Chart, can export JPEG image





Quality report

- Generate quality reports with control plan information, SPC parameters, and measurement data, can export Excel



First inspection plan quality report

Workpiece code	GJ-01	**Workpiece name**	Axle Workpiece
Plan code	Plan-02	**Plan name**	First inspection plan
Count of Workpiece	30	**Count of size**	7
Export date	2025/2/28	**Remark**	

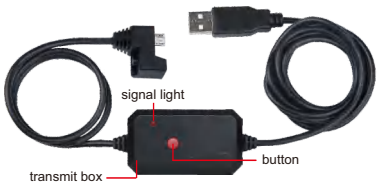
Item	1	2	3	4	5	6	7
Size name	ØD1	H2	ØD3	ØD4	ØD5	H6	Outside
Nominal value	60	45	21	30	15	60	1
Upper tolerance	0.5	0.5	0.02	0.05	0.2	0.01	0
Lower tolerance	-0.2	0	0.01	-0.02	-0.05	-0.05	0
Average value	60.625	45.146	21.048	30.084	15.058	60.028	0.9
Minimum value	59.981	44.01	21	29.95	14.96	59.79	0
Maximum value	66.05	45.56	21.11	30.7	15.6	60.4	1
Range	6.069	1.55	0.11	0.75	0.64	0.61	1
CP	0.064	0.282	0.047	0.066	0.08	0.064	0
CPK	-0.023	0.165	-0.265	-0.064	-0.186	-0.12	-0.111
Variation	3.273	0.087	0.001	0.031	0.011	0.011	0.09
Sigma	1.809	0.296	0.035	0.176	0.105	0.105	0.3
Count	30	30	30	30	30	30	30
Count of passed	27	23	6	15	4	0	27
Count of failed	3	7	24	15	26	30	3

No.	Batch number	Caliper	Height gauge	Micrometer	Bore gauge	CMM	Caliper	Visual
1	PH20250227001	59.98	45.01	21.01	30.00	15.04	60.01	1.00
2	PH20250227002	60.01	45.06	21.02	30.01	15.05	59.99	1.00
3	PH20250227003	60.01	45.07	21.01	30.01	15.06	60.01	1.00
4	PH20250227004	59.99	45.08	21.02	29.95	15.07	60.01	0.00
5	PH20250227005	60.01	45.09	21.02	30.04	15.08	59.99	1.00
6	PH20250227006	60.01	45.10	21.02	30.04	15.09	59.99	1.00
7	PH20250227007	60.00	45.02	21.02	29.98	14.96	59.98	1.00
8	PH20250227008	59.98	44.93	21.02	30.05	15.02	59.99	1.00
9	PH20250227009	59.99	45.04	21.02	30.04	15.03	59.98	1.00
10	PH20250227010	60.01	45.05	21.02	30.05	15.04	60.01	1.00

Sign

DATA OUTPUT CABLES (KEYBOARD FORMAT)

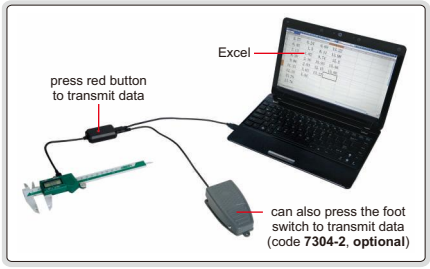
- Recognized as HID keyboard device by computer, no need to install drivers and softwares
- Data can be transmitted to Excel, Word, txt and other files (press transmit button, which is recognized by the computer as keyboard input data and press enter key, such as 12.34↙)
- For any softwares which can receive keyboard signal
- Optional accessory: foot switch (code: **7304-2**), hub (code: **7324-HUB4**, **7324-HUB7**), extension cables (code: **7325-ADD5**, **7325-ADD10**)



7302-21

VIDEO

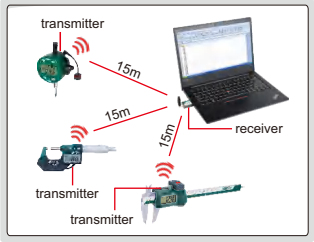
application



Code	Description	Plug	Connecting with measuring tool	Transmit data
7302-21	cable for digital calipers (length 3m)		button	▪ Press the button on the plug of cable, can also press the button of the transmit box, or press the foot switch ▪ Data is transmitted once, the signa light of the transmit box flashes once
7302-22	cable for large digital calipers (length 2.5m)			▪ Press the button of the transmit box, or press the foot switch ▪ Data is transmitted once, the signal light of the transmit box flashes once
7302-31	cable for digital micrometers (length 2.5m)		signal light “data” button back	▪ Press the “data” button of digital micrometer, can also press the button of the transmit box, or press the foot switch ▪ Data is transmitted once, the signal light of the transmit box flashes once, at the same time, the signal light on the digital micrometer flashes once
7302-40M	cable for digital indicators (length 2.5m)		“DATA” button signal light for **2108**, **2138**, **2139** series digital indicators	▪ Press the “DATA” button of digital indicator, can also press the button of the transmit box, or press the foot switch ▪ Data is transmitted once, the signal light of the transmit box flashes once, at the same time, the signal light on digital indicator flashes once Note: long press button to zero the digital indicators
			 for other digital indicators	▪ Press the button of the transmit box, or press the foot switch ▪ Data is transmitted once, the signal light of the transmit box flashes once Note: long press button to zero the digital indicators
7302-50M	cable for digital gauges (length 2.5m)			▪ Press the button of the transmit box, or press the foot switch ▪ Data is transmitted once, the signal light of the transmit box flashes once

WIRELESS DATA TRANSMISSION SYSTEM

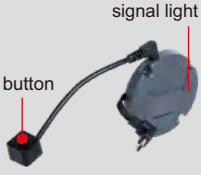
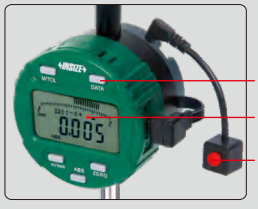
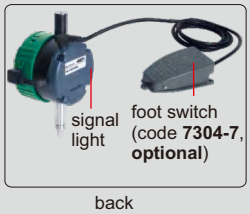
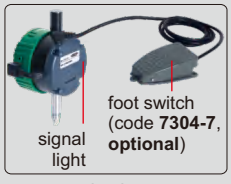
VIDEO



- Through wireless transmission, the readings of measuring tools can be transmitted to computers or mobile phones
- Conform to IEEE802 wireless standard 2.4GHz band communication frequency
- Transmission distance is 15 meter (under the condition of no obstruction and no electromagnetic interference)

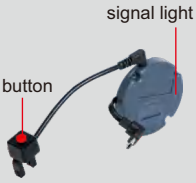
Transmitter

- Connecting to digital measuring tools such as calipers, micrometers and indicators
- CR2032 battery

Code	Description	Transmitter	Connecting with measuring tool	Transmit data
7315-25	transmitter for digital calipers	button signal light	signal light button	▪ Press the button of the transmitter ▪ Data is transmitted once, the signal light of the transmitter flashes once
7315-22	transmitter for large digital calipers	button signal light	signal light button	▪ Press the button of the transmitter ▪ Data is transmitted once, the signal light of the transmitter flashes once
7315-31	transmitter for digital micrometers		"data" button signal light back	▪ Press the "data" button of digital micrometer ▪ Data is transmitted once, the signal light on the digital micrometer flashes once
7315-50M	transmitter for digital indicators	button signal light	signal light button	▪ Press the button of the transmitter ▪ Data is transmitted once, the signal light of the transmitter flashes once
7315-51	transmitter for digital indicators	 signal light button	 "DATA" button signal light button for **2108, 2138, 2139** series digital indicators  signal light foot switch (code **7304-7**, **optional**) back	▪ Press the "DATA" button of digital indicator, can also press the button of the transmitter ▪ Transmitter button can be fixed on request ▪ Data is transmitted once, the signal light on digital indicator flashes once
			button for other digital indicators  signal light foot switch (code **7304-7**, **optional**) back	▪ Press the button of the transmitter ▪ Transmitter button can be fixed on request ▪ Data is transmitted once, the signal light on digital indicator flashes once

To be continued

Continued from previous page

Code	Description	Transmitter	Connecting with measuring tool	Transmit data
7315-51B	transmitter for bore gauges			■ Press the "DATA" button of digital indicator, can also press the button of the transmitter ■ Data is transmitted once, the signal light on digital indicator flashes once

Receiver (keyboard signal)

- For computers and mobile phones
- Recognized as HID keyboard device, the transmitted data is recognized by computers or mobile phones as keyboard input data and press enter, such as 12.34↙. No need to install drivers and softwares
- Data can be transmitted to excel, word, txt etc.
- For any softwares which can receive keyboard signal

Code	Product	Description	Remark
7315-3	USB port	single channel receiver	connected with 1 transmitter only
7315-6	USB port	multichannel receiver	connected with 6 transmitters, each channel has status indicator
7315-7	type-C port		
7315-8	micro USB port		
7315-9	lightning port		

Receiver (text format, virtual com port)

- For computers with windows system
- Text format virtual com port, converted to keyboard format with supplied software
- Supplied with Excel directional input software
- Measurement data can be transmitted to excel, word, txt etc. and any software which receives keyboard signal

Code	Product	Description	Remark
7315-2		multichannel receiver	connected with maximum 16 transmitters, each of them has unique identification code

Excel directional input software

- Supplied with **7315-2** receiver
- The readings of measuring tools can be transmitted to the designated area of excel, which facilitates data management and improves efficiency

Excel directional input software (included in **7315-2**), application example 1

Set the display area of caliper at B4-B9,
the readings of caliper are displayed at B4, B5...B9.
Set the display area of micrometer at C4-C9,
the readings of micrometer are displayed at C4, C5... C9.
Set the display area of height gauge at D4-D9,
the readings of height gauge are displayed at D4, D5... D9.

	A	B	C	D
1	Project	Length	Width	Height
2	Dimension and Tolerance	50±0.05	24±0.01	10+0.05/-0.06
3	Measuring tool	Caliper	Micrometer	Height gage
4	1	50.02	24.004	9.98
5	2	50.01	24.010	10.01
6	3	49.99	23.990	10.02
7	4	50.00	23.996	9.99
8	5	50.04	24.000	10.01
9	6	Channel 1	Channel 2	Channel 3

serial of workpieces

the next data display area is indicated in green

Excel directional input software (included in **7315-2**), application example 2

Set the display area of micrometer at B4-C9, data input is from the left to the right, the readings of micrometer are displayed at B4, C4, B5, C5... B9, C9.
Set the display area of caliper at D4-D9,
the readings of caliper are displayed at D4, D5... D9.
Set the display area of depth gauge at E4-E9,
the readings of depth gauge are displayed at E4, E5... E9.

	A	B	C	D	E
1	Project	External diameter1	External diameter2	Length	Depth
2	Dimension and Tolerance	Φ23+0.01/-0.02	Φ21+0.01/-0.02	50±0.04	28±0.05
3	Measuring tool	Micrometer	Micrometer	Caliper	Depth gage
4	1	23.010	21.008	49.98	28.01
5	2	23.010	21.000	49.98	27.98
6	3	22.999	21.000	50	28
7	4	23.007	20.998	50	28
8	5	23.000	20.985	50.01	28.01
9	6	23.008	Channel 1	Channel 2	Channel 3

serial of workpieces

the next data display area is indicated in green

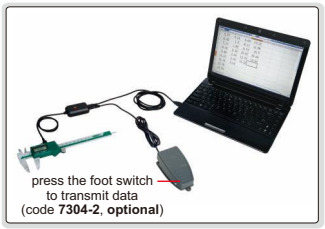
FOOT SWITCH

- For data transmission

Code	Description	Applicable products
7304-2	data transmission foot switch with cable (length 2m)	**7302** series data cables **7305** series data cables

7304-2

application



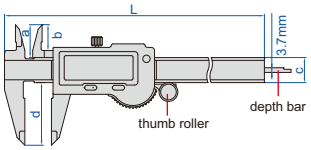
IP67 WATERPROOF DIGITAL CALIPERS

INSIZE PLUS

INSPECTION CERTIFICATE | DATA OUTPUT | IP67 WATERPROOF

- IP67 dust/waterproof
- Resolution: 0.01mm/0.0005"
- Button function: zero, mm/inch, preset, data output
- Battery CR2032
- Automatic power off, move the digital unit to turn on power
- Data output
- Meet DIN862
- Made of stainless steel
- Optional accessory:
  wireless transmitter code **7315-80** (receiver is needed),
  accessory set for digital calipers (code **6144,** only for range 0-150mm and 0-200mm),
  depth base attachment (code **6140**)

1195-150



(mm)

Code	Range	Accuracy	L	a	b	c	d	Remark
1195-150*	0-150mm/0-6"	±0.02mm	235	21	16.5	16	40	with depth bar
1195-200*	0-200mm/0-8"	±0.03mm	290	24.5	20	16	50	with depth bar
1195-300*	0-300mm/0-12"	±0.03mm	387	23	18.5	16	64	without depth bar

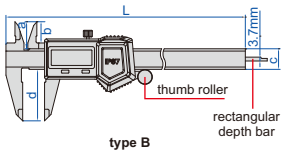
* Supplied with manufacturer inspection certificate

IP67 WATERPROOF DIGITAL CALIPERS

INSPECTION CERTIFICATE | ATTENTION: IT IS NECESSARY TO SET ZERO AFTER POWER ON EACH TIME | ATTENTION: NO DATA OUTPUT | IP67 WATERPROOF

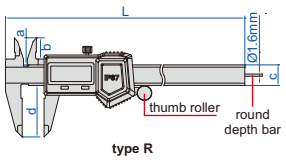
- Accuracy: ±0.03mm
- IP67 dust/waterproof
- Resolution: 0.01mm/0.0005"
- Button function: zero, on/off, mm/inch, ABS/REL, hold
- Battery CR2032, meet DIN862
- Made of stainless steel
- Optional accessory: accessory set for digital calipers (code **6144,** only for range 0-150mm and 0-200mm), depth base attachment (code **6140**)

1118-150B



type B

1118-150R



type R

(mm)

Code	Range	Thumb roller	Type	L	a	b	c	d
1118-150B*	0-150mm/0-6"	with	B	236	21	16	16	40
1118-200B*	0-200mm/0-8"	with	B	286	24	19	16	50
1118-300B*	0-300mm/0-12"	with	B	400	25	20.5	16	60
1118-150BW*	0-150mm/0-6"	without	B	236	21	16	16	40
1118-200BW*	0-200mm/0-8"	without	B	286	24	19	16	50
1118-300BW*	0-300mm/0-12"	without	B	400	25	20.5	16	60
1118-150R*	0-150mm/0-6"	with	R	236	21	16	16	40

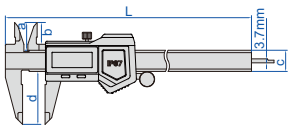
*Supplied with manufacturer inspection certificate

IP67 WATERPROOF DIGITAL CALIPERS

INSPECTION CERTIFICATE | DATA OUTPUT | IP67 WATERPROOF

- IP67 dust/waterproof
- Resolution: 0.01mm/0.0005"
- Button function: zero, on/off, mm/inch
- Battery CR2032
- Meet DIN862
- Made of stainless steel
- Optional accessory:
  wireless transmitter code **7315-26** (receiver is needed)

1105-150



(mm)

Code	Range	Accuracy	L	a	b	c	d
1105-150*	0-150mm/0-6"	±0.03mm	236	21	16	16	40
1105-200*	0-200mm/0-8"	±0.03mm	286	24	19	16	50
1105-300*	0-300mm/0-12"	±0.03mm	400	25	20.5	16	60

* Supplied with manufacturer inspection certificate

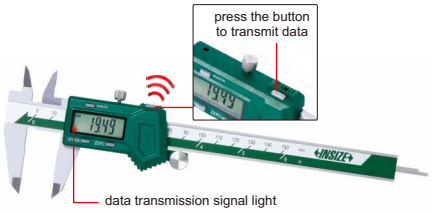
BUILT-IN WIRELESS DIGITAL CALIPERS

INSPECTION CERTIFICATE

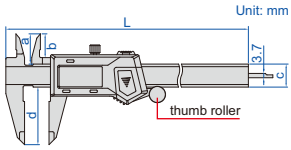
ATTENTION: THE WORKING LIFE OF A BATTERY IS ABOUT 3-5 MONTHS

VIDEO

- Non waterproof
- Built-in wireless data transmission module
- Transmission distance is 10 meter (under the condition of no obstruction and no electromagnetic interference)
- Accuracy: ±0.03mm
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch, data transmission
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel
- Optional accessory: receiver (code **7315-2/3/6/7/8/9**), accessory set for digital calipers (code **6144**, only for range 0-150mm and 0-200mm), depth base attachment (code **6140**)



1113-150

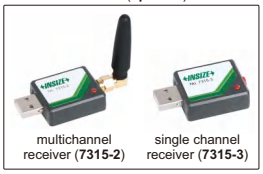


(mm)

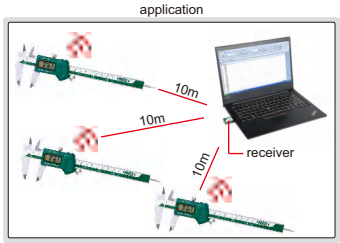
Code	Range	Thumb roller	L	a	b	c	d
1113-150*	0-150mm/0-6"	with	236	21	16	16	40
1113-200*	0-200mm/0-8"	with	286	24	19	16	50
1113-300*	0-300mm/0-12"	with	400	25	20.5	16	60
1113-150W*	0-150mm/0-6"	without	236	21	16	16	40
1113-200W*	0-200mm/0-8"	without	286	24	19	16	50
1113-300W*	0-300mm/0-12"	without	400	25	20.5	16	60

*Supplied with manufacturer inspection certificate

receiver (**optional**)



application



DIGITAL CALIPERS (STANDARD TYPE)

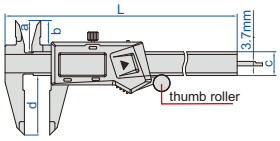
INSPECTION CERTIFICATE

DATA OUTPUT

POPULAR MODEL

- Non waterproof
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Meet DIN862
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-25** (receiver is needed), accessory set for digital calipers (code **6144,** only for range 0-150mm and 0-200mm), depth base attachment (code **6140**)

1108-150



Code	Range	Accuracy	Thumb roller	L	a	b	c	d
1108-150*	0-150mm/0-6"	±0.02mm	with	236mm	21mm	16mm	16mm	40mm
1108-200*	0-200mm/0-8"	±0.03mm	with	286mm	24mm	19mm	16mm	50mm
1108-300*	0-300mm/0-12"	±0.03mm	with	400mm	25mm	20.5mm	16mm	60mm
1108-150W*	0-150mm/0-6"	±0.02mm	without	236mm	21mm	16mm	16mm	40mm
1108-200W*	0-200mm/0-8"	±0.03mm	without	286mm	24mm	19mm	16mm	50mm
1108-300W*	0-300mm/0-12"	±0.03mm	without	400mm	25mm	20.5mm	16mm	60mm

*Supplied with manufacturer inspection certificate

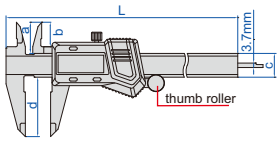
DIGITAL CALIPERS

INSPECTION CERTIFICATE

ATTENTION: NO DATA OUTPUT

- Non waterproof
- Zinc alloy housing for digital unit
- Resolution: 0.01mm/0.0005"
- Buttons: zero, on/off, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Meet DIN862
- Made of stainless steel
- Optional accessory: accessory set for digital calipers (code **6144,** only for range 0-150mm and 0-200mm), depth base attachment (code **6140**)

1114-150A



Code	Range	Accuracy	Thumb roller	L	a	b	c	d
1114-150A*	0-150mm/0-6"	±0.03mm	with	236mm	21mm	16mm	16mm	40mm
1114-200A*	0-200mm/0-8"	±0.03mm	with	286mm	24mm	19mm	16mm	50mm
1114-300A*	0-300mm/0-12"	±0.03mm	with	400mm	25mm	20.5mm	16mm	60mm
1114-150AW*	0-150mm/0-6"	±0.03mm	without	236mm	21mm	16mm	16mm	40mm
1114-200AW*	0-200mm/0-8"	±0.03mm	without	286mm	24mm	19mm	16mm	50mm
1114-300AW*	0-300mm/0-12"	±0.03mm	without	400mm	25mm	20.5mm	16mm	60mm

*Supplied with manufacturer inspection certificate

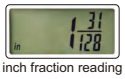
DIGITAL CALIPERS (FRACTION READING)

INSPECTION CERTIFICATE

DATA OUTPUT

- Non waterproof
- Resolution: 1/128", 0.01mm, 0.0005"
- Buttons: unit (inch fraction/mm/inch), on/off, zero
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output (for mm and inch)
- Meet DIN862
- Made of stainless steel
- Optional accessory:
  wireless transmitter code **7315-25** (receiver is needed),
  accessory set for digital calipers
  (code **6144,** only for range 0-150mm and 0-200mm),
  depth base attachment (code **6140**)

1102-150



inch fraction reading

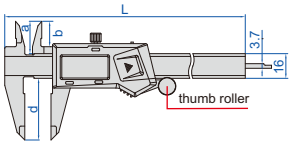
mm reading

inch reading

(mm)

Code	Range	Accuracy	Thumb roller	L	a	b	d
1102-150*	0-150mm/0-6"	±0.02mm	with	236	21	16	40
1102-200*	0-200mm/0-8"	±0.03mm	with	286	24	19	50
1102-300*	0-300mm/0-12"	±0.03mm	with	400	25	20.5	60
1102-150W*	0-150mm/0-6"	±0.02mm	without	236	21	16	40
1102-200W*	0-200mm/0-8"	±0.03mm	without	286	24	19	50
1102-300W*	0-300mm/0-12"	±0.03mm	without	400	25	20.5	60

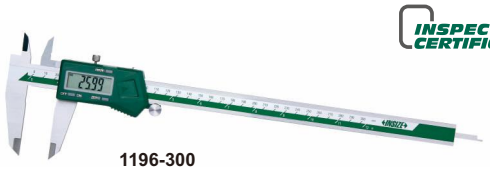
*Supplied with manufacturer inspection certificate



HEAVY DUTY 300mm DIGITAL CALIPERS

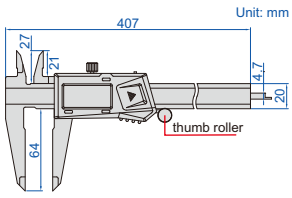
INSPECTION CERTIFICATE

DATA OUTPUT



1196-300

- Non waterproof
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Meet DIN862
- Made of stainless steel
- Optional accessory:
  wireless transmitter code **7315-22** (receiver is needed)



Code	Range	Accuracy	Thumb roller
1196-300*	0-300mm/0-12"	±0.03mm	with
1196-300W*	0-300mm/0-12"	±0.03mm	without

*Supplied with manufacturer inspection certificate

DIGITAL CALIPERS WITH ROUND DEPTH BAR

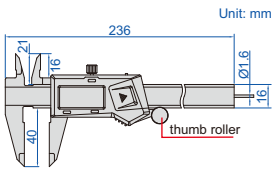
INSPECTION CERTIFICATE

DATA OUTPUT

1119-150

round depth bar Ø1.6mm

- Non waterproof
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Meet DIN862
- Made of stainless steel
- Optional accessory:
  wireless transmitter code **7315-25** (receiver is needed),
  accessory set for digital calipers (code **6144**),
  depth base attachment (code **6140**)



Code	Range	Accuracy	Thumb roller
1119-150*	0-150mm/0-6"	±0.03mm	with
1119-150W*	0-150mm/0-6"	±0.03mm	without

*Supplied with manufacturer inspection certificate

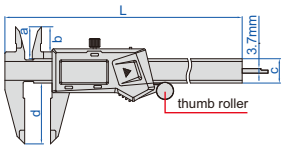
METRIC DIGITAL CALIPERS

DATA OUTPUT

LOCK READING WITH "HOLD" BUTTON

INSPECTION CERTIFICATE

1109-150



- Non waterproof
- Resolution: 0.01mm
- Buttons: on/off, zero, hold
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output, meet DIN862
- Made of stainless steel
- Optional accessory:
  wireless transmitter code **7315-25** (receiver is needed),
  accessory set for digital calipers
  (code **6144,** only for range 0-150mm and 0-200mm),
  depth base attachment (code **6140**)

(mm)

Code	Range	Accuracy	Thumb roller	L	a	b	c	d
1109-150*	0-150mm	±0.03mm	with	236	21	16	16	40
1109-200*	0-200mm	±0.03mm	with	286	24	19	16	50
1109-300*	0-300mm	±0.03mm	with	400	25	20.5	16	60
1109-150W*	0-150mm	±0.03mm	without	236	21	16	16	40
1109-200W*	0-200mm	±0.03mm	without	286	24	19	16	50
1109-300W*	0-300mm	±0.03mm	without	400	25	20.5	16	60

*Supplied with manufacturer inspection certificate

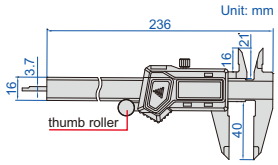
LEFT HAND DIGITAL CALIPERS

INSPECTION CERTIFICATE

DATA OUTPUT

- Non waterproof
- Designed for left handed users
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Meet DIN862
- Made of stainless steel
- Optional accessory:
  wireless transmitter code **7315-22** (receiver is needed),
  accessory set for digital calipers (code **6144**),
  depth base attachment (code **6140**)

1130-150



Code	Range	Accuracy	Thumb roller
1130-150*	0-150mm/0-6"	±0.03mm	with
1130-150W*	0-150mm/0-6"	±0.03mm	without

*Supplied with manufacturer inspection certificate

DIGITAL CALIPERS WITH CERAMIC TIPPED JAWS

INSPECTION CERTIFICATE

DATA OUTPUT

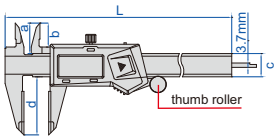
- Non waterproof
- Ceramic tipped jaws for outside measurement, extremely wear-resistant, non-magnetic and non electric conductive
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Meet DIN862
- Optional accessory: depth base attachment (code **6140**)

1193-150

ceramic tipped jaws

With data interface (optional wireless transmitter code 7315-25, receiver is needed)

Code	Range	Accuracy	L	a	b	c	d
1193-150*	0-150mm/0-6"	±0.03mm	235mm	21mm	16.5mm	16mm	40mm
1193-200*	0-200mm/0-8"	±0.03mm	287mm	24mm	20mm	16mm	50mm
1193-300*	0-300mm/0-12"	±0.03mm	390mm	26mm	21.5mm	16mm	60mm
1193-150W*	0-150mm/0-6"	±0.03mm	235mm	21mm	16.5mm	16mm	40mm
1193-200W*	0-200mm/0-8"	±0.03mm	287mm	24mm	20mm	16mm	50mm
1193-300W*	0-300mm/0-12"	±0.03mm	390mm	26mm	21.5mm	16mm	60mm



*Supplied with manufacturer inspection certificate

DIGITAL CALIPERS WITH CARBIDE TIPPED JAWS

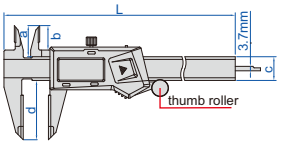
INSPECTION CERTIFICATE

DATA OUTPUT

- Non waterproof
- Accuracy: ±0.03mm
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Meet DIN862
- Made of stainless steel
- Optional accessory:
  wireless transmitter code **7315-25** (receiver is needed),
  depth base attachment (code **6140**)

1110-150A

1110-150B



Carbide tipped upper and lower jaws **(mm)**

Code	Range	Thumb roller	L	a	b	c	d
1110-150A*	0-150mm/0-6"	with	236	21	16	16	40
1110-200A*	0-200mm/0-8"	with	286	24	19	16	50
1110-300A*	0-300mm/0-12"	with	400	25	20.5	16	60
1110-150AW*	0-150mm/0-6"	without	236	21	16	16	40
1110-200AW*	0-200mm/0-8"	without	286	24	19	16	50
1110-300AW*	0-300mm/0-12"	without	400	25	20.5	16	60

Carbide tipped lower jaws **(mm)**

Code	Range	Thumb roller	L	a	b	c	d
1110-150B*	0-150mm/0-6"	with	236	21	16	16	40
1110-200B*	0-200mm/0-8"	with	286	24	19	16	50
1110-300B*	0-300mm/0-12"	with	400	25	20.5	16	60
1110-150BW*	0-150mm/0-6"	without	236	21	16	16	40
1110-200BW*	0-200mm/0-8"	without	286	24	19	16	50
1110-300BW*	0-300mm/0-12"	without	400	25	20.5	16	60

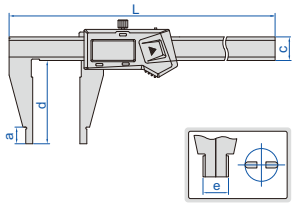
*Supplied with manufacturer inspection certificate

DIGITAL CALIPERS

DATA OUTPUT

- Non waterproof
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel

1170-300



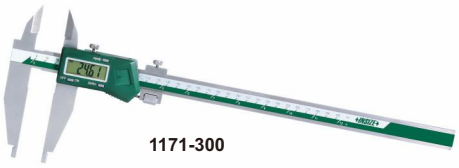
With data interface
(optional wireless transmitter code 7315-25, receiver is needed) **(mm)**

Code	Range	Accuracy	L	a	c	d	e
1170-200	0-200mm/0-8"	±0.03mm	314	12	17	60	10
1170-306	0-300mm/0-12"	±0.04mm	420	12	17	60	10
1170-300	0-300mm/0-12"	±0.06mm	420	12	17	90	10

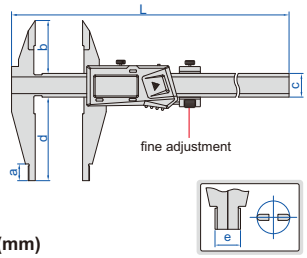
DIGITAL CALIPERS

DATA OUTPUT

- Non waterproof
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel



1171-300



With data interface **(mm)**

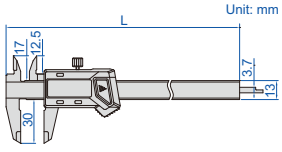
Code	Range	Accuracy	L	a	b	c	d	e	Fine adjustment	Wireless transmitter (optional)
1171-200	0-200mm/0-8"	±0.03mm	320	12	38	17	60	10	without	**7315-25** (receiver is needed)
1171-306	0-300mm/0-12"	±0.04mm	420	12	38	17	60	10	without	
1171-300	0-300mm/0-12"	±0.06mm	440	12	45	20	90	10	with	**7315-22** (receiver is needed)

MINI DIGITAL CALIPERS

ATTENTION: NO DATA OUTPUT

1111-100A

- Non waterproof
- Resolution: 0.01mm/0.0005"
- Buttons: zero, mm/inch, on/off
- Automatic power off, move the digital unit to turn on power
- Battery LR44
- Meet DIN862
- Made of stainless steel



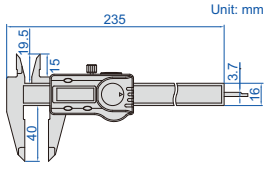
Code	Range	Accuracy	L
1111-75A	0-75mm/0-3"	±0.02mm	144mm
1111-100A	0-100mm/0-4"	±0.02mm	170mm

PLASTIC DIGITAL CALIPER

ATTENTION: NO DATA OUTPUT

1139-150

- Non waterproof
- Made of hard plastic, non-magnetic and non electric conductive
- Prevent workpieces from scratching by calipers
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Battery CR2032, automatic power off



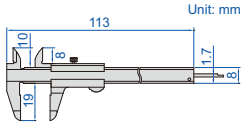
Code	Range	Accuracy	
		external/internal	step/depth
1139-150	0-150mm/0-6"	±0.1mm	±0.2mm

MINI VERNIER CALIPERS

- Meet DIN862
- Made of stainless steel
- Satin chrome plated reading surface

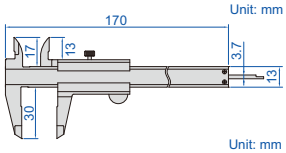
Code	Range	Graduation	Accuracy
1204-70	0-70mm	0.05mm	±0.05mm

1204-70



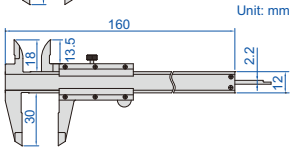
Code	Range	Graduation	Accuracy
1203-1003	0-100mm	0.05mm	±0.05mm

1203-1003



Code	Range	Graduation	Accuracy
1201-1003	0-100mm	0.05mm	±0.05mm

1201-1003

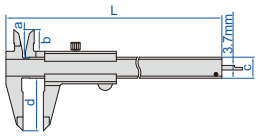


VERNIER CALIPERS

POPULAR MODEL

- Meet DIN862
- Made of stainless steel
- Satin chrome plated reading surface

1205-150S



Graduation 0.05mm/1/128" (mm)

Code	Range	Accuracy	L	a	b	c	d
1205-150S	0-150mm/0-6"	±0.05mm	235	20.5	15.5	16	40
1205-200S	0-200mm/0-8"	±0.05mm	290	23.5	19	17	50
1205-300S	0-300mm/0-12"	±0.05mm	414	27.5	22	20	64

Graduation 0.02mm/0.001" (mm)

Code	Range	Accuracy	L	a	b	c	d
1205-1502S	0-150mm/0-6"	±0.03mm	235	20.5	15.5	16	40
1205-2002S	0-200mm/0-8"	±0.03mm	290	23.5	19	17	50
1205-3002S	0-300mm/0-12"	±0.03mm	414	27.5	22	20	64

Graduation 0.05mm (mm)

Code	Range	Accuracy	L	a	b	c	d
1205-1503S	0-150mm	±0.05mm	235	20.5	15.5	16	40
1205-2003S	0-200mm	±0.05mm	290	23.5	19	17	50
1205-3003S	0-300mm	±0.05mm	414	27.5	22	20	64

Graduation 0.02mm (mm)

Code	Range	Accuracy	L	a	b	c	d
1205-1501S	0-150mm	±0.03mm	235	20.5	15.5	16	40
1205-2001S	0-200mm	±0.03mm	290	23.5	19	17	50
1205-3001S	0-300mm	±0.03mm	414	27.5	22	20	64

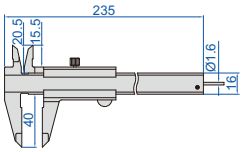
VERNIER CALIPER WITH ROUND DEPTH BAR

- Graduation: 0.05mm/1/128"
- Round depth bar
- Meet DIN862
- Made of stainless steel
- Satin chrome plated reading surface

Code	Range	Accuracy
1202-150	0-150mm/0-6"	±0.05mm

1202-150

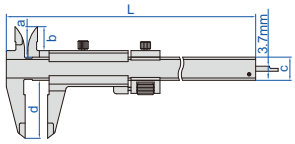
Unit: mm



VERNIER CALIPERS WITH FINE ADJUSTMENT

1233-130

- Graduation 0.02mm/0.001"
- With fine adjustment
- Meet DIN862
- Made of stainless steel
- Satin chrome plated reading surface



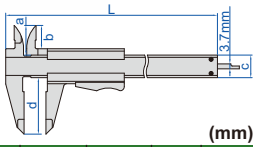
(mm)

Code	Range	Accuracy	L	a	b	c	d
1233-130	0-130mm/0-5"	±0.03mm	228	20.5	16.5	16	40
1233-180	0-180mm/0-7"	±0.03mm	295	23.5	19	17	50
1233-280	0-280mm/0-11"	±0.03mm	410	26	22	20	64

VERNIER CALIPERS WITH THUMB CLAMP

1223-150

- Meet DIN862
- With thumb clamp
- Made of stainless steel
- Satin chrome plated reading surface



Graduation 0.05mm/1/128" (mm)

Code	Range	Accuracy	L	a	b	c	d
1223-150	0-150mm/0-6"	±0.05mm	230	20.5	16.5	16	40
1223-200	0-200mm/0-8"	±0.05mm	295	23.5	19	16	50

Graduation 0.02mm/0.001" (mm)

Code	Range	Accuracy	L	a	b	c	d
1223-1502	0-150mm/0-6"	±0.03mm	230	20.5	16.5	16	40
1223-2002	0-200mm/0-8"	±0.03mm	295	23.5	19	16	50

VERNIER CALIPERS WITH CARBIDE TIPPED JAWS

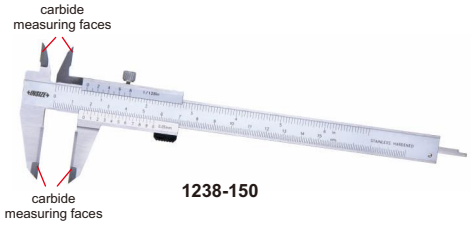
- Carbide tipped jaws for inside and outside measurements
- Meet DIN862
- Made of stainless steel
- Satin chrome plated reading surface

Graduation 0.05mm/1/128" (mm)

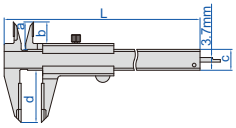
Code	Range	Accuracy	L	a	b	c	d
1238-150	0-150mm/0-6"	±0.05mm	230	21	16.5	16	40
1238-200	0-200mm/0-8"	±0.05mm	295	24	19	16	50
1238-300	0-300mm/0-12"	±0.05mm	410	25	20	16	60

Graduation 0.02mm/0.001" (mm)

Code	Range	Accuracy	L	a	b	c	d
1238-1502	0-150mm/0-6"	±0.03mm	230	21	16.5	16	40
1238-2002	0-200mm/0-8"	±0.03mm	295	24	19	16	50
1238-3002	0-300mm/0-12"	±0.03mm	410	25	20	16	60



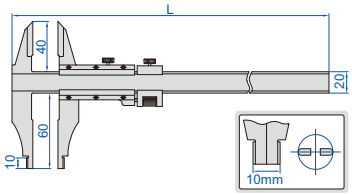
1238-150



VERNIER CALIPERS

1217-3001

Unit: mm



- With fine adjustment
- Made of stainless steel
- Satin chrome plated reading surface

Code	Range	Graduation	Accuracy	L
1217-2503	0-250mm	0.05mm	±0.05mm	390mm
1217-3001	0-300mm	0.02mm	±0.03mm	440mm

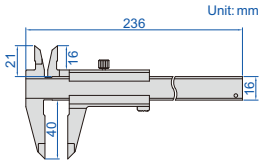
VERNIER CALIPERS (ANTI MAGNETIC)

ATTENTION: NOT HARDENED

PURE COPPER

1224-150A

Unit: mm



- Suitable for magnetic parts
- Made of pure copper

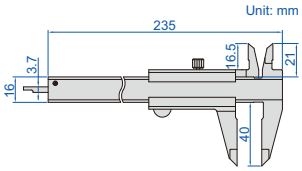
Code	Range	Graduation	Accuracy
1224-150A	0-150mm	0.02mm	±0.05mm
1224-1501A	0-150mm	0.05mm	±0.05mm

LEFT HAND VERNIER CALIPERS

- Designed for left handed users
- Made of stainless steel
- Satin chrome plated reading surface

1239-1502

Unit: mm



Code	Range	Graduation	Accuracy
1239-150	0-150mm/0-6"	0.05mm/1/128"	±0.05mm
1239-1502	0-150mm/0-6"	0.02mm/0.001"	±0.03mm

DIAL CALIPERS

INSPECTION CERTIFICATE

SHOCK PROOF

- Shockproof dial indicator
- Made of stainless steel

Dial indicator graduation: 0.02mm (mm)

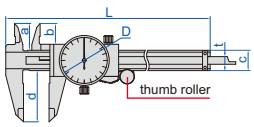
Code	Range	Accuracy	L	a	b	c	d	D	t
1312-150A*	0-150mm	±0.03mm	235	21	16.5	16	40	Ø39	6.5
1312-200A*	0-200mm	±0.03mm	288	24	19	16	48	Ø39	6.5
1312-300A*	0-300mm	±0.03mm	410	28	22	20	62	Ø44.5	7.5

Dial indicator graduation: 0.01mm (mm)

Code	Range	Accuracy	L	a	b	c	d	D	t
1311-150A*	0-150mm	±0.03mm	235	21	16.5	16	40	Ø39	6.5
1311-200A*	0-200mm	±0.03mm	288	24	19	16	48	Ø39	6.5
1311-300A*	0-300mm	±0.03mm	410	28	22	20	62	Ø44.5	7.5

*Supplied with manufacturer inspection certificate

1312-150A

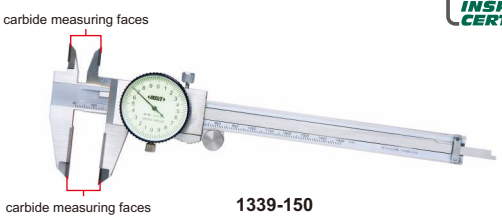


DIAL CALIPERS WITH CARBIDE TIPPED JAWS

INSPECTION CERTIFICATE

SHOCK PROOF

- Shockproof dial indicator
- Dial indicator graduation: 0.02mm
- Carbide tipped jaws for inside and outside measurements
- Made of stainless steel

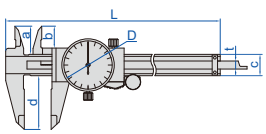


1339-150

(mm)

Code	Range	Accuracy	L	a	b	c	d	D	t
1339-150*	0-150mm	±0.03mm	235	21	16.5	16	40	Ø39	6.5
1339-200*	0-200mm	±0.03mm	288	24	19	16	48	Ø39	6.5

*Supplied with manufacturer inspection certificate

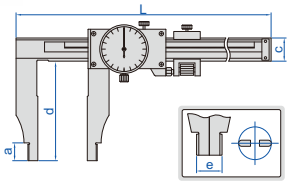


DIAL CALIPERS

SHOCK PROOF

- Shockproof dial indicator
- Dial indicator graduation: 0.02mm
- Made of stainless steel

1316-500



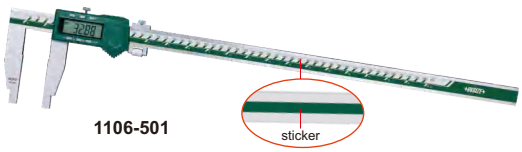
Code	Range	Accuracy	a	c	d	e	L
1316-500	0-500mm	±0.05mm	18mm	21mm	90mm	20mm	650mm
1316-600	0-600mm	±0.05mm	18mm	21mm	90mm	20mm	750mm
1316-1000	0-1000mm	±0.07mm	24mm	28mm	150mm	20mm	1190mm
1316-1500	0-1500mm	±0.11mm	24mm	28mm	150mm	20mm	1690mm

DIGITAL CALIPERS

POPULAR MODEL

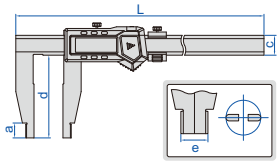
DATA OUTPUT

- Non waterproof
- Resolution: 0.01mm/0.0005"
- Button function: on/off, zero, mm/inch, ABS, data preset
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory: accessory set for large digital calipers (code **6145-500/6146-500B**, for calipers with c=24mm)



1106-501

the sticker is pure green (range ≥1500mm)



With data interface **(mm)**

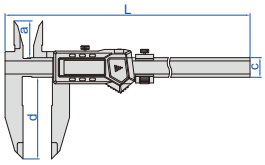
Code	Range	Accuracy	a	c	d	e	L	Wireless transmitter (optional)
1106-301	0-300mm/0-12"	±0.05mm	18	24	100	20	420	**7315-22** (receiver is needed)
1106-302	0-300mm/0-12"	±0.05mm	18	24	150	20	420	
1106-451	0-450mm/0-18"	±0.05mm	18	24	100	20	625	
1106-501	0-500mm/0-20"	±0.05mm	18	24	100	20	675	
1106-502	0-500mm/0-20"	±0.06mm	18	24	150	20	675	
1106-503	0-500mm/0-20"	±0.06mm	24	31	200	20	675	
1106-601	0-600mm/0-24"	±0.05mm	18	24	100	20	770	**7315-22** (receiver is needed)
1106-802	0-800mm/0-32"	±0.07mm	24	31	150	20	1025	
1106-1002	0-1000mm/0-40"	±0.08mm	24	31	150	20	1220	
1106-1502	0-1500mm/0-60"	±0.11mm	24	42	150	20	1780	**7315-20B** (receiver is needed)
1106-2002	0-2000mm/0-80"	±0.14mm	24	42	150	20	2290	

DIGITAL CALIPERS

DATA OUTPUT

1135-601

- Non waterproof
- Resolution: 0.01mm/0.0005"
- Button function: on/off, zero, mm/inch, ABS, data preset
- Battery CR2032
- Data output
- Made of stainless steel



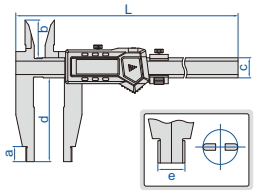
With data interface
(optional wireless transmitter code 7315-22, receiver is needed) **(mm)**

Code	Range	Accuracy	a	c	d	L
1135-451	0-450mm/0-18"	±0.05mm	45	24	100	625
1135-601	0-600mm/0-24"	±0.05mm	45	24	100	770
1135-1002	0-1000mm/0-40"	±0.08mm	60	31	150	1220

DIGITAL CALIPERS

DATA OUTPUT

1136-501



- Non waterproof
- Resolution: 0.01mm/0.0005"
- Button function: on/off, zero, mm/inch, ABS, data preset
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: accessory set for large digital calipers (code **6145-500/6146-500B**, for calipers with c=24mm)

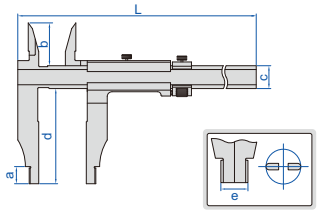
With data interface (optional wireless transmitter code 7315-22, receiver is needed, for calipers with c=24mm or 31mm) **(mm)**

Code	Range	Accuracy	a	b	c	d	e	L
1136-301	0-300mm/0-12"	±0.05mm	18	45	24	100	20	420
1136-451	0-450mm/0-18"	±0.05mm	18	45	24	100	20	625
1136-501	0-500mm/0-20"	±0.05mm	18	45	24	100	20	675
1136-502	0-500mm/0-20"	±0.06mm	18	45	24	150	20	675
1136-601	0-600mm/0-24"	±0.05mm	18	45	24	100	20	770
1136-1002	0-1000mm/0-40"	±0.08mm	24	60	31	150	20	1220

VERNIER CALIPERS (SOLID TYPE)

solid type
(without screw)

1236-511



- With fine adjustment
- Made of stainless steel
- Satin chrome plated reading surface

Graduation 0.05mm/1/128" **(mm)**

Code	Range	Accuracy	a	b	c	d	e	L
1236-524	0-500mm/0-20"	±0.08mm	18	45	24	150	20	670
1236-614	0-600mm/0-24"	±0.08mm	18	45	24	100	20	770
1236-824	0-800mm/0-32"	±0.09mm	24	60	31	150	20	1030
1236-1024	0-1000mm/0-40"	±0.12mm	24	60	31	150	20	1230

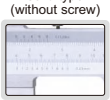
Graduation 0.02mm **(mm)**

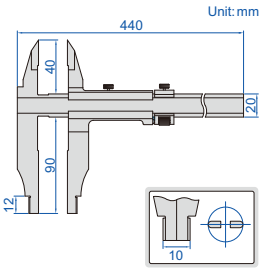
Code	Range	Accuracy	a	b	c	d	e	L
1236-511	0-500mm	±0.05mm	18	45	24	100	20	670
1236-1021	0-1000mm	±0.08mm	24	60	31	150	20	1230

VERNIER CALIPER (SOLID TYPE)

1207-394

solid type
(without screw)



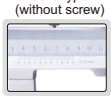


- Graduation 0.05mm/1/128"
- With fine adjustment
- Made of stainless steel
- Satin chrome plated reading surface

Code	Range	Accuracy
1207-394	0-300mm/0-12"	±0.07mm

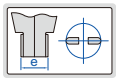
VERNIER CALIPERS (SOLID TYPE)

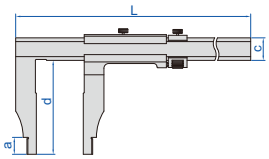
solid type
(without screw)



1208-521

- With fine adjustment
- Made of stainless steel
- Satin chrome plated reading surface





Graduation 0.05mm/1/128" **(mm)**

Code	Range	Accuracy	a	c	d	e	L
1208-214	0-200mm/0-8"	±0.06mm	10	20	100	10	330
1208-394	0-300mm/0-12"	±0.07mm	10	20	90	10	410
1208-324	0-300mm/0-12"	±0.07mm	18	24	150	20	410
1208-524	0-500mm/0-20"	±0.08mm	18	24	150	20	670
1208-614	0-600mm/0-24"	±0.08mm	18	24	100	20	770
1208-824	0-800mm/0-32"	±0.09mm	24	31	150	20	1030
1208-1024	0-1000mm/0-40"	±0.12mm	24	31	150	20	1230

Graduation 0.02mm **(mm)**

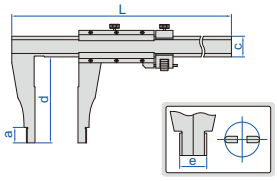
Code	Range	Accuracy	a	c	d	e	L
1208-521	0-500mm	±0.06mm	18	24	150	20	670
1208-1021	0-1000mm	±0.08mm	24	31	150	20	1230

VERNIER CALIPERS (SEPARATE TYPE)

POPULAR MODEL

1214-500

separate type
(with screws)



- Graduation 0.02mm/0.001"
- With fine adjustment
- Made of stainless steel
- Satin chrome plated reading surface

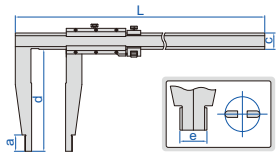
(mm)

Code	Range	Accuracy	a	c	d	e	L
1214-300	0-300mm/0-12"	±0.05mm	10	20	75	10	410
1214-450	0-450mm/0-18"	±0.05mm	18	24	100	20	620
1214-500	0-500mm/0-20"	±0.05mm	18	24	100	20	670
1214-600	0-600mm/0-24"	±0.05mm	18	24	100	20	770
1214-1000	0-1000mm/0-40"	±0.08mm	24	32	140	20	1216

LONG JAW VERNIER CALIPERS (SEPARATE TYPE)

1215-1034

separate type
(with screws)



- With fine adjustment
- Made of stainless steel
- Satin chrome plated reading surface

Graduation 0.05mm/1/128" **(mm)**

Code	Range	Accuracy	a	c	d	e	L
1215-524	0-500mm/0-20"	±0.08mm	18	24	150	20	670
1215-1034	0-1000mm/0-40"	±0.12mm	24	32	200	20	1330

DEPTH BASE ATTACHMENTS

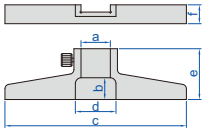
- To increase the stability of depth measurement
- Made of stainless steel

(mm)

Code	a	b	c	d	e	f
6140	16.5	9	75	18	30	6
6140-300A	20	15	125	22	34	9
6140-16B	16	12.5	75	24.5	30	11
6140-300B	20	15	125	28	35	13

6140

6140-16B



Application

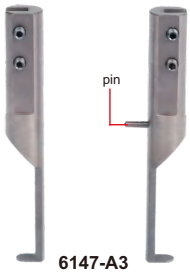
Code	Type	Application
6140	narrow base (f=6mm)	suitable for **1195/1118/1113/1108/1103/1114/1109/1130/1193/1110** series digital calipers with beam width (w) 16mm
6140-300A	narrow base (f=9mm)	suitable for **1196** series digital calipers with beam width (w) 20mm
6140-16B	wide base (f=11mm), high stability	suitable for **1195/1118/1113/1108/1103/1114/1109/1130/1193/1110** series digital calipers and **1312/1311/1339** series dial calipers with beam width (w) 16mm
6140-300B	wide base (f=13mm), high stability	suitable for **1196** series digital calipers and **1312/1311/1339** series dial calipers with beam width (w) 20mm

GROOVE POINTS FOR DIGITAL CALIPER

- Suitable for 0-150mm/0-6" and 0-200mm/0-8" digital calipers (thickness of lower jaws≤3.7mm)

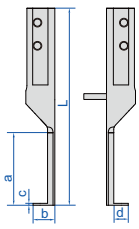
(mm)

Code	L	a	b	c	d
6147-A1	55	10	2.5	0.4	1.3
6147-A2	59	16	3.75	0.4	1.75
6147-A3	68	25	7.5	0.65	5



6147-A3

Unit: mm

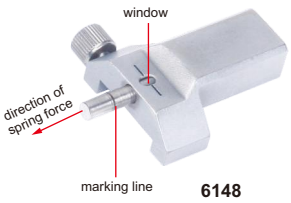


application

MEASURING FORCE DEVICE OF CALIPERS

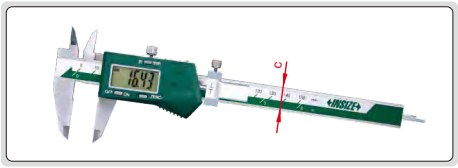
- Constant force for external measurement
- Made of stainless steel

Code	Application
6148	suitable for calipers with beam width (c) 16mm



6148

application



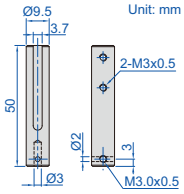
ACCESSORY SET FOR DIGITAL CALIPERS CODE 6144

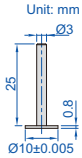
VIDEO

6144

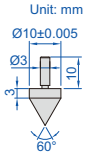
Code
6144

- Suitable for 0-150mm/0-6" and 0-200mm/0-8" digital calipers (thickness of lower jaws≤3.7mm)

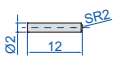




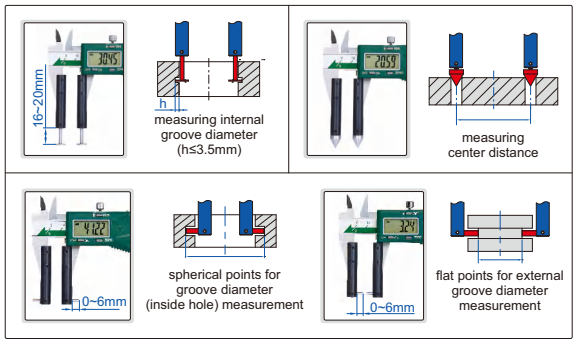
disk points (stainless steel)



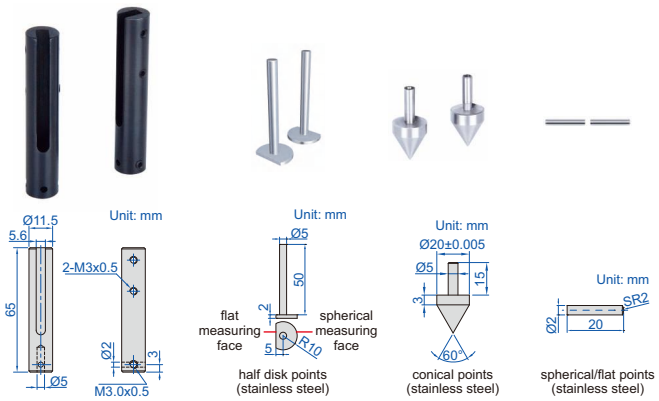
conical points (stainless steel)



spherical/flat points (stainless steel)



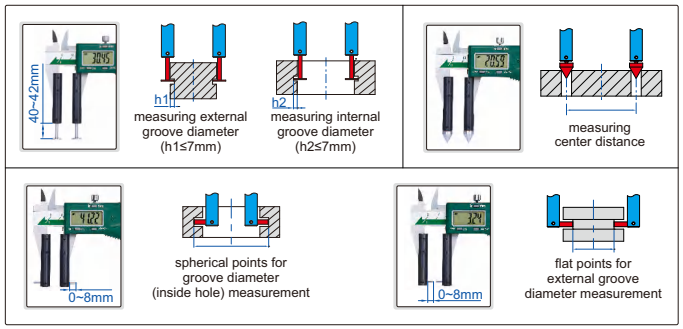
ACCESSORY SET FOR LARGE DIGITAL CALIPERS
CODE 6145-500



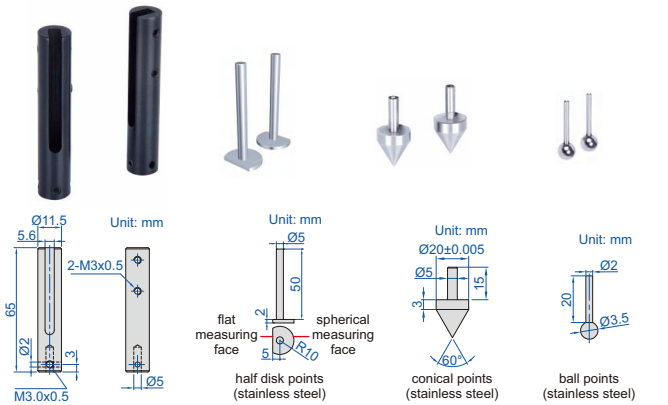
Code
6145-500

- Suitable for 0-500mm/0-20" and 0-600mm/0-24" digital calipers (thickness of lower jaws≤5.6mm)

VIDEO



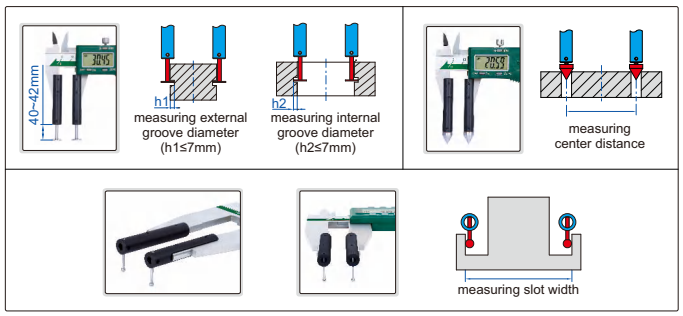
ACCESSORY SET FOR LARGE DIGITAL CALIPERS (WITH SIDE POINTS)
CODE 6146-500B



Code
6146-500B

- Suitable for 0-500mm/0-20" and 0-600mm/0-24" digital calipers (thickness of lower jaws≤5.6mm)

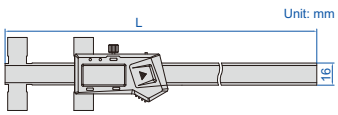
VIDEO



UNIVERSAL CALIPERS

- Non waterproof
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, set, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel

1511-200



DATA OUTPUT

With data interface (optional wireless transmitter code 7315-25, receiver is needed)

Code	Range*	Accuracy	L
1511-200	0-200mm/0-8"	±0.06mm	286mm
1511-300	0-300mm/0-12"	±0.06mm	400mm

*The range changes according to different points

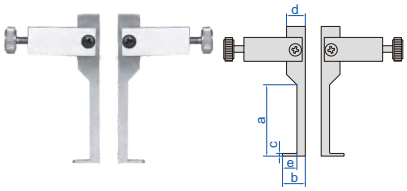
preset buttons

upper and lower jaws can be fitted with a variety of points

Flat head groove points (optional)

(mm)

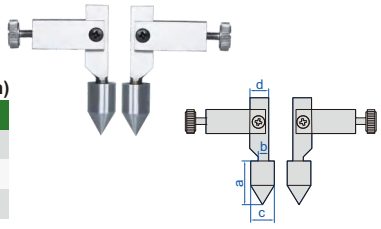
Code	a	b	c	d	e
1511-A01	12	2.5	0.4	8	1
1511-A02	16	3.5	0.4	8	2
1511-A03	25	7.5	0.6	8	5
1511-A04	30	10	1	8	6.5
1511-A05	80	22	1.5	12	10



Centerline points (optional)

(mm)

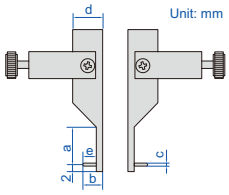
Code	a	b	c	d
1511-E01	10	4	Ø5	8
1511-E02	20	4	Ø10	8
1511-E03	25	8	Ø15	12



Cylindrical groove points (optional)

(mm)

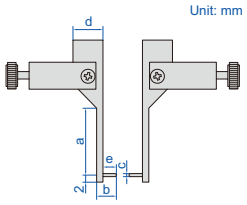
Code	a	b	c	d	e
1511-B01	20	5	Ø1	8	2
1511-B02	40	10	Ø2	8	5
1511-B03	80	22	Ø2	12	10
1511-D01	63	12	Ø2	12	7
1511-D02	63	12	Ø4	12	7



Cylindrical groove points (optional)

(mm)

Code	a	b	c	d	e
1511-C01	63	12	Ø2	12	7
1511-C02	63	12	Ø4	12	7



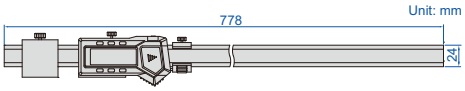
UNIVERSAL CALIPER
CODE 1125-600

VIDEO

DATA OUTPUT

1125-600

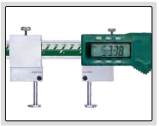
- Non waterproof
- Buttons: on/off, set, mm/inch, ABS, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-22** (receiver is needed)



Code	Range*	Resolution	Accuracy
1125-600	0-600mm/0-24"	0.01mm/0.0005"	±0.05mm

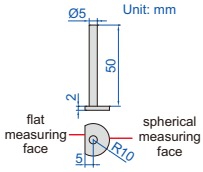
*The range changes according to different points

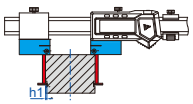
working with stands



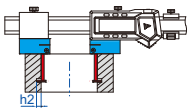
working with measuring jaws

Half disk points (included)





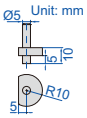
measuring external groove diameter with flat measuring face (depth h1≤2.5mm)

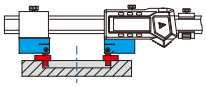


measuring internal groove diameter with spherical measuring face (depth h2≤7.5mm)

Round shoulder points (optional)

Code
1125-T102

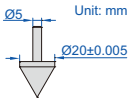


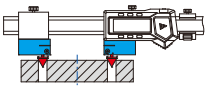


measure inside diameter of shallow hole

Conical points (optional)

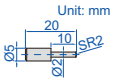
Code
1125-T101

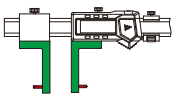


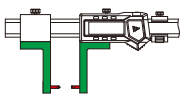


measuring center distance

Spherical points (included)

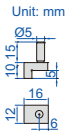


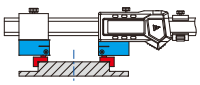




Flat shoulder points (optional)

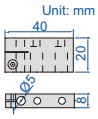
Code
1125-T103

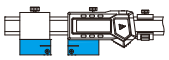




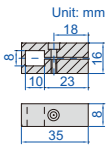
measure outside diameter of low boss

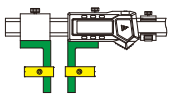
Stands (included)



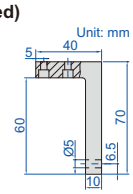


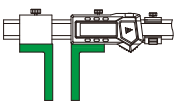
Depth stop (included)



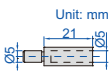


Measuring jaws (included)

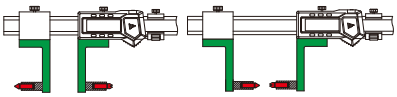




Point sleeve (optional)



Code
1125-T104



working with multifunctional points, ball points and screw thread points

Multifunctional points 7392* (optional)

*It is necessary to use point sleeve (code **1125-T104**) for these points

Ball points 7391* (optional)

Screw thread points 7381*, 7321* (optional)

DIGITAL CALIPER WITH INTERCHANGEABLE POINTS
CODE 1526-200

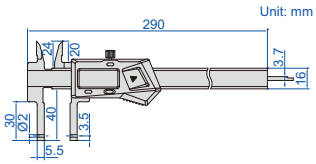
DATA OUTPUT

VIDEO

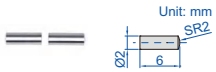
1526-200

preset buttons

- Non waterproof
- Supplied with 3 pairs of points and zero setting block for external measurement
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, set, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-25** (receiver is needed), points

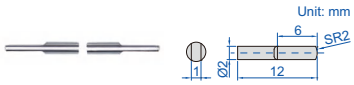


short spherical points (included)

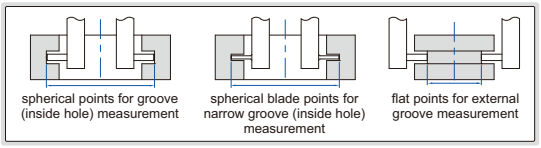


long spherical/flat points (included)

spherical blade points (included)



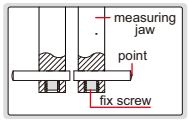
measure internal and external grooves



Point	Range	Accuracy	Application
short spherical points	12-212mm/0.5-8.5" (internal)	±0.03mm	for grooves inside small hole
long spherical/flat points	24-224mm/1-8.8" (internal) 0-187mm/0-7.5" (external)	±0.03mm	spherical points for grooves inside hole flat points for external grooves
spherical blade points	24-224mm/1-8.8" (internal) 0-187mm/0-7.5" (external)	±0.03mm	for narrow grooves inside hole

zero setting block for external measurement (included)

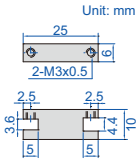
install points

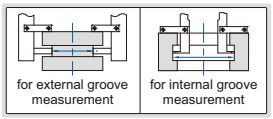


Depth stop (optional)

Code
6143

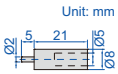
6143



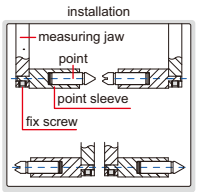


Point sleeve (optional)

1526-T101



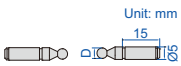
installation



Code
1526-T101

Ball points (optional)

7391-T5

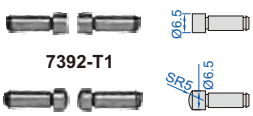


*It is necessary to use point sleeve (code **1526-T101**) for these points

Range of **1526-200 after installing the points and point sleeve

Code	Ball dia. (D)	Range **
7391-T3 *	SØ2.0mm	75-275mm/3.0-10.8" (internal) 0-146mm/0-5.7" (external)
7391-T4 *	SØ2.5mm	76-276mm/3.0-10.8" (internal) 0-145mm/0-5.7" (external)
7391-T5 *	SØ3.0mm	77-277mm/3.0-10.9" (internal) 0-144mm/0-5.6" (external)
7391-T6 *	SØ3.5mm	78-278mm/3.1-10.9" (internal) 0-143mm/0-5.6" (external)
7391-T7 *	SØ4.0mm	79-279mm/3.1-10.9" (internal) 0-142mm/0-5.6" (external)
7391-T8 *	SØ4.5mm	80-280mm/3.2-11.0" (internal) 0-141mm/0-5.5" (external)
7391-T9 *	SØ5.0mm	81-281mm/3.2-11.0" (internal) 0-140mm/0-5.5" (external)
7391-T10 *	SØ6.0mm	83-283mm/3.3-11.1" (internal) 0-138mm/0-5.4" (external)

Multifunctional points (optional)



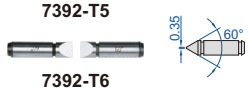
7392-T1

7392-T2

7392-T3

7392-T4

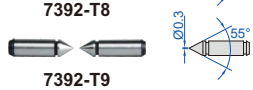
7392-T5



7392-T6

7392-T7

7392-T8



7392-T9

Code	Type
7392-T1 *	flat
7392-T2 *	spherical
7392-T3 *	spline

Code	Type
7392-T4 *	disk
7392-T5 *	blade
7392-T6 *	knife-edge

Code	Type
7392-T7 *	point
7392-T8 *	knife-edge
7392-T9 *	point

Range **
66-266mm/2.6-10.5" (internal) 0-155mm/0-6.1" (external)

*It is necessary to use point sleeve (code **1526-T101**) for these points

Range of **1526-200 after installing the points and point sleeve

To be continued

Continued from previous page

Screw thread points (optional)

7321-T16

7381-T11

Internal thread (60° thread angle)

Code	Pitch
7321-T11*	0.4-0.5mm/64-48TPI
7321-T12*	0.6-0.9mm/44-28TPI
7321-T13*	1-1.75mm/24-14TPI
7321-T14*	2-3mm/13-9TPI
7321-T15*	3.5-5mm/8-5TPI
7321-T16*	5.5-7mm/4.5-3.5TPI
7321-T1S*	6 pairs/set, including all above points

External thread (60° thread angle)

Code	Pitch
7381-T11*	0.4-0.5mm/64-48TPI
7381-T12*	0.6-0.9mm/44-28TPI
7381-T13*	1-1.75mm/24-14TPI
7381-T14*	2-3mm/13-9TPI
7381-T15*	3.5-5mm/8-5TPI
7381-T16*	5.5-7mm/4.5-3.5TPI
7381-TS*	6 pairs/set, including all above points

Range**
66-266mm/2.6-10.5" (internal) 0-155mm/0-6.1" (external)

Range of **1526-200 after installing the points and point sleeve

*It is necessary to use point sleeve (code **1526-T101**) for these points

DIGITAL CALIPER WITH INTERCHANGEABLE POINTS CODE 1124-300A

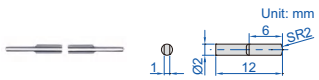
VIDEO

DATA OUTPUT

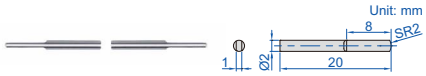
short spherical/flat points (included)

long spherical/flat points (included)

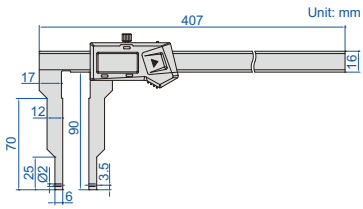
short spherical blade points (included)



long spherical blade points (included)



1124-300A

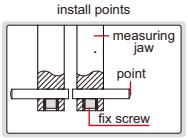


depth stop **6143** (**optional**)

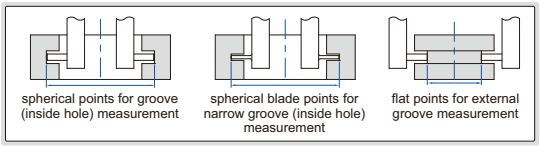
preset buttons

zero setting block for external measurement (included)

install points



measure internal and external grooves



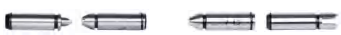
- Non waterproof
- Supplied with 4 pairs of points and zero setting block for external measurement
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, set, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-25** (receiver is needed), points (code **1526-T101, 7392, 7391, 7381, 7321**), depth stop (code **6143**)

Point	Range	Accuracy	Application
short spherical/ flat points	24-324mm/1-12.7" (internal) 0-288mm/0-11.3" (external)	±0.04mm	spherical points for grooves inside hole (small hole) flat points for external grooves
long spherical/ flat points	40-340mm/1.5-13.3" (internal) 0-272mm/0-10.7" (external)	±0.04mm	spherical points for grooves inside hole (large hole) flat points for external grooves
short spherical blade points	24-324mm/1-12.7" (internal) 0-288mm/0-11.3" (external)	±0.04mm	for narrow grooves inside hole (small hole)
long spherical blade points	40-340mm/1.5-13.3" (internal) 0-272mm/0-10.7" (external)	±0.04mm	for narrow grooves inside hole (large hole)

Multifunctional points 7392* (optional)

Ball points 7391*(optional)

Screw thread points 7381*, 7321* (optional)



*It is necessary to use point sleeve (code **1526-T101**) for these points

DIGITAL CALIPER WITH INTERCHANGEABLE POINTS

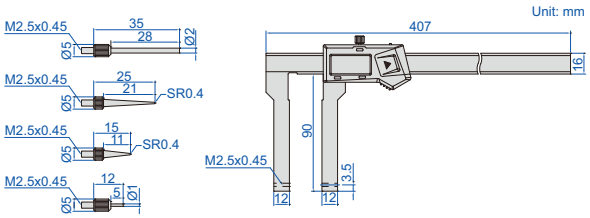
VARIOUS POINTS ARE AVAILABLE

DATA OUTPUT

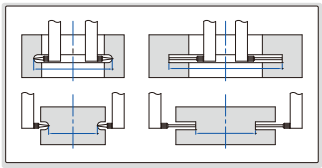
VIDEO

- Non waterproof
- Supplied with 4 pairs of points and zero setting block for external measurement
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, set, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-25** (receiver is needed), points, depth stop (code **6143**),

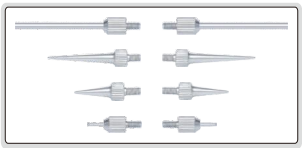
1530-300



measure internal and external grooves



4 pairs of points (included)



Code	Range*	Accuracy
1530-300	0-300mm/0-12"	±0.06mm

*For different points, the measuring range changes accordingly

preset buttons

depth stop **6143** (**optional**)

zero setting block for external measurement (included)

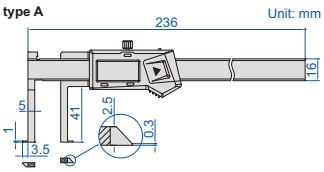
DIGITAL INSIDE GROOVE CALIPERS

- Measure diameter of grooves inside small bores
- Resolution: 0.01mm/0.0005"
- Buttons type A: on/off, set, mm/inch, preset (+, -), type B: on/off, zero, mm/inch, ABS/REL, hold
- Battery CR2032
- Made of stainless steel
- Optional accessory: depth stop (code **6143**)

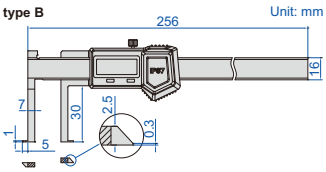
1520-150

1520-150P

type A



type B

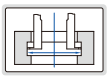


Non waterproof, with data interface (optional wireless transmitter code 7315-25, receiver is needed)

Code	Range	Type	Accuracy
1520-150	11-150mm/0.43-6"	A	±0.04mm

IP67 dust/waterproof, no automatic power off, set zero after power on each time, without data interface

Code	Range	Type	Accuracy
1520-150P	14-150mm/0.56-6"	B	±0.04mm



depth stop **6143** (**optional**)

preset buttons

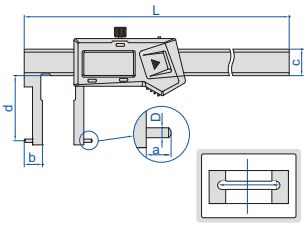
DIGITAL INSIDE POINT CALIPERS

DATA OUTPUT

preset buttons

1121-150A

depth stop **6143** (**optional**)



- Non waterproof
- Measure groove diameter
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, set, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory: depth stop (code **6143**, for calipers with c=16mm)

Preset (no need to add the width of the jaws on the reading), with data interface **(mm)**

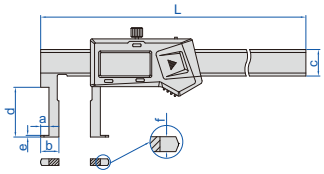
Code	Range	Accuracy	L	a	b	c	d	D	Wireless transmitter (optional)
1121-150A	24-150mm/0.94-6"	±0.04mm	250	5	12	16	28	Ø2	**7315-25** (receiver is needed)
1121-1501	35-150mm/1.38-6"	±0.05mm	250	6	17.5	16	60	Ø2	
1121-200A	25-200mm/0.98-8"	±0.04mm	310	5	12.5	16	37	Ø2	
1121-2001	40-200mm/1.57-8"	±0.05mm	310	7	20	16	70	Ø3	
1121-300A	30-300mm/1.18-12"	±0.07mm	410	5	15	16	50	Ø2	
1121-3001A	50-300mm/1.97-12"	±0.07mm	410	8	25	16	77	Ø3	
1121-500A	40-500mm/1.57-20"	±0.07mm	680	5	20	24	90	Ø3	**7315-22** (receiver is needed)

DIGITAL INSIDE GROOVE CALIPERS

- Measure groove diameter
- Resolution: 0.01mm/0.0005"
- Buttons type A: on/off, set, mm/inch, preset (+, -) ,
  type C: on/off, zero, mm/inch, ABS/REL, hold
- Battery CR2032
- Made of stainless steel
- Optional accessory: depth stop (code **6143**, for calipers with c=16mm)

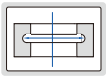
1120-150A
type A

1120-150P
type C



Non waterproof, preset (no need to add the width of the jaws on the reading), with data interface **(mm)**

Code	Range	Type	Accuracy	L	a	b	c	d	e	f	Wireless transmitter (optional)
1120-150A	22-150mm/0.87-6"	A	±0.04mm	250	5	11	16	30	1	4	**7315-25** (receiver is needed)
1120-1501	35-150mm/1.38-6"	A	±0.06mm	250	6	17.5	16	60	1.5	4	
1120-200A	25-200mm/0.98-8"	A	±0.04mm	310	5	12.5	16	40	1	4	
1120-2001	40-200mm/1.57-8"	A	±0.06mm	310	7	20	16	70	2.5	4	
1120-300A	30-300mm/1.18-12"	A	±0.05mm	410	5	15	16	50	1.5	4	
1120-3001	50-300mm/1.97-12"	A	±0.07mm	410	8	25	16	80	2.5	4	
1120-500	40-500mm/1.57-20"	A	±0.07mm	680	5	20	24	90	2.2	5.5	**7315-22** (receiver is needed)



depth stop **6143** (**optional**)

IP67 dust/waterproof, no automatic power off, set zero after power on each time, no preset (need to add the width of the jaws on the reading), without data interface **(mm)**

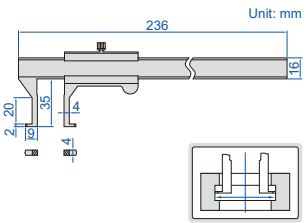
Code	Range	Type	Accuracy	L	a	b	c	d	e	f
1120-150P	22-150mm/0.87-6"	C	±0.04mm	250	5	11	16	30	1	4

preset buttons

INSIDE GROOVE VERNIER CALIPER

- Measure diameter of grooves inside bores
- Made of stainless steel
- Satin chrome plated reading surface

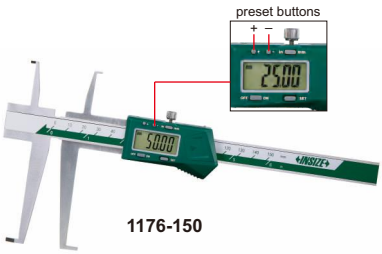
1262-150A



Code	Range	Graduation	Accuracy
1262-150A	18-150mm	0.02mm	±0.04mm

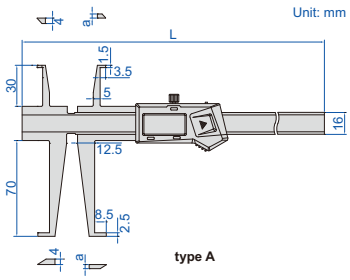
DIGITAL INSIDE GROOVE CALIPERS

preset buttons

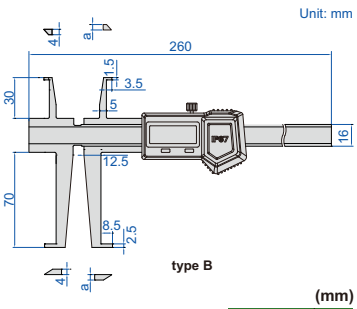


1176-150

1176-150P



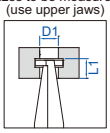
type A



type B

depth stop **6143** (**optional**)

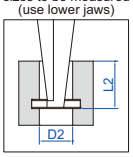
sizes to be measured (use upper jaws)



(mm)

D1	L1
Ø9	<8
Ø10	<15
Ø11~200	<30

sizes to be measured (use lower jaws)



(mm)

D2	L2
Ø17	<16
Ø18	<28
Ø19	<40
Ø20	<50
Ø21	<58
Ø22~200	<70

Non waterproof, with data interface
(optional wireless transmitter code 7315-25, receiver is needed)

Code	Range of upper jaw	Range of lower jaw	Type	Accuracy	L	a
1176-150	9-150mm/0.35-6"	17-150mm/0.70-6"	A	±0.04mm	260mm	3mm
1176-200	9-200mm/0.35-8"	17-200mm/0.70-8"	A	±0.05mm	320mm	3.5mm

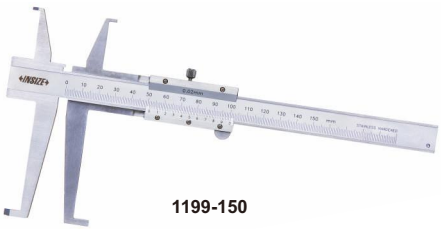
- Measure diameter of grooves inside bores
- Resolution: 0.01mm/0.0005"
- Buttons type A: on/off, set, mm/inch, preset (+, -),
  type B: on/off, zero, mm/inch, ABS/REL, hold
- Battery CR2032
- Made of stainless steel
- Optional accessory: depth stop (code **6143**)

IP67 dust/waterproof, without data interface, no automatic power off, set zero after power on each time

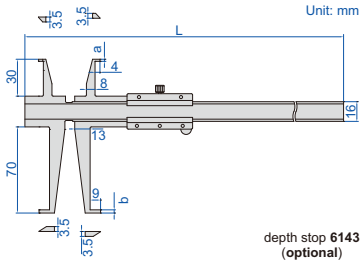
Code	Range of upper jaw	Range of lower jaw	Type	Accuracy	a
1176-150P	9-150mm/0.35-6"	17-150mm/0.70-6"	B	±0.04mm	4mm

INSIDE GROOVE CALIPERS

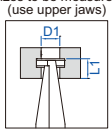
- Measure diameter of grooves inside bores
- Graduation: 0.02mm
- Made of stainless steel
- Optional accessory: depth stop (code **6143**)



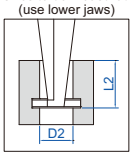
1199-150



sizes to be measured (use upper jaws)



sizes to be measured (use lower jaws)



depth stop **6143** (**optional**)

Code	Range of upper jaw	Range of lower jaw	Accuracy	L	a	b
1199-150	9-150mm	18-150mm	±0.04mm	248mm	1.6mm	2.5mm
1199-200	9-200mm	18-200mm	±0.05mm	298mm	1.8mm	2.8mm
1199-300	9-300mm	18-300mm	±0.06mm	398mm	2.0mm	3.0mm

(mm)

D1	L1
Ø9	<8
Ø10	<12
Ø11	<15
Ø12	<20
Ø13~300	<30

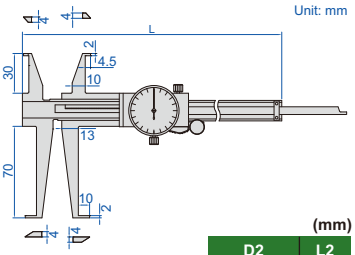
(mm)

D2	L2
Ø18	<30
Ø19	<40
Ø20	<45
Ø21	<55
Ø22	<60
Ø23~300	<70

INSIDE GROOVE DIAL CALIPERS

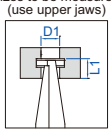
- Measure diameter of grooves inside bores
- Shockproof dial indicator
- Dial indicator graduation: 0.02mm
- Made of stainless steel
- Optional accessory: depth stop (code **6143**)

1376-150



Code	Range of upper jaw	Range of lower jaw	Accuracy	L
1376-150	11-150mm	18-150mm	±0.03mm	240mm
1376-200	11-200mm	18-200mm	±0.03mm	290mm
1376-300	11-300mm	18-300mm	±0.04mm	390mm

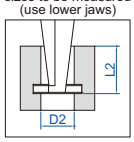
sizes to be measured (use upper jaws)



(mm)

D1	L1
Ø11	<8
Ø12	<10
Ø13	<15
Ø14	<20
Ø15~300	<30

sizes to be measured (use lower jaws)



(mm)

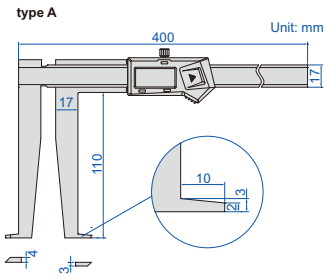
D2	L2
Ø18	<20
Ø19	<28
Ø20	<35
Ø21	<40
Ø22	<50
Ø23~300	<70

DIGITAL INSIDE GROOVE CALIPERS

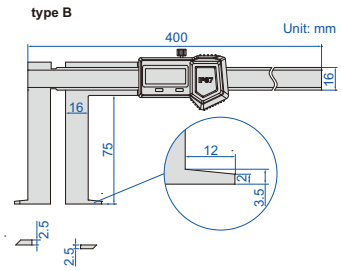
1178-300

1178-300P

type A



type B



- Measure diameter of grooves inside bores
- Resolution: 0.01mm/0.0005"
- Buttons type A: on/off, set, mm/inch, preset (+, -),
  type B: on/off, zero, mm/inch, ABS/REL, hold
- Battery CR2032
- Made of stainless steel
- Optional accessory: depth stop (code **6143**)

depth stop **6143** (**optional**)

preset buttons

Non waterproof, with data interface (optional wireless transmitter code 7315-25, receiver is needed)

Code	Range	Type	Accuracy
1178-300	25-300mm/1.18-12"	A	±0.05mm

IP67 dust/waterproof, no automatic power off, set zero after power on each time, without data interface

Code	Range	Type	Accuracy
1178-300P	33-300mm/1.30-12"	B	±0.05mm

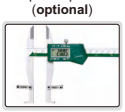
DIGITAL DEEP HOLE INSIDE GROOVE CALIPER

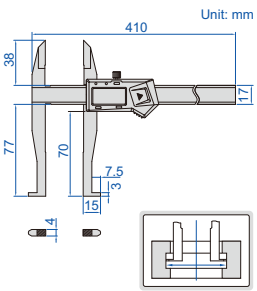
- Non waterproof
- Measure diameter of grooves inside deep holes
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, set, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: depth stop (code **6143**)

1129-300

preset buttons

depth stop **6143** (**optional**)





With data interface (optional wireless transmitter code 7315-25, receiver is needed)

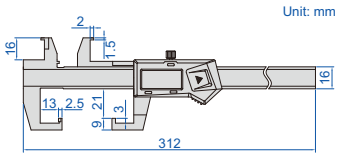
Code	Range of upper jaw	Range of lower jaw	Accuracy
1129-300	0-300mm/0-12"	30-300mm/1.2-12"	±0.06mm

DIGITAL INSIDE GROOVE CALIPER

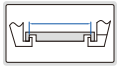
DATA OUTPUT

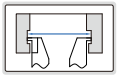
- Non waterproof
- Measure diameter or distance of grooves
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, set, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-25** (receiver is needed)

1128-200



preset buttons



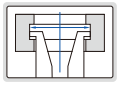


Code	Range of upper jaw	Range of lower jaw	Accuracy
1128-200	10-200mm/0.39-8"	3-200mm/0.12-8"	±0.03mm

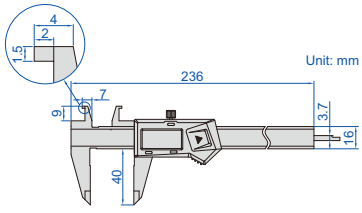
DIGITAL INSIDE GROOVE CALIPER

DATA OUTPUT

measure diameter of grooves 8-150mm



1191-150



- Non waterproof
- Upper jaws for measuring diameter of grooves
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-25** (receiver is needed)

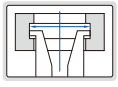
Code	Range of upper jaw	Range of lower jaw	Accuracy
1191-150	8-150mm/0.3-6"	0-150mm/0-6"	±0.03mm

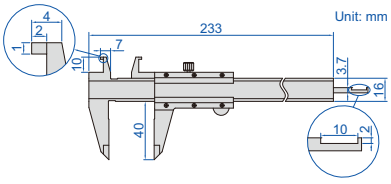
INSIDE GROOVE VERNIER CALIPER

measure depth of grooves (h<10mm)

1291-150

measure diameter of grooves 8-150mm





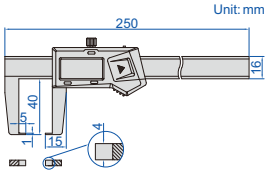
- Made of stainless steel
- Satin chrome plated reading surface

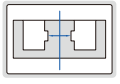
Code	Range of upper jaw	Range of lower jaw	Accuracy	Graduation
1291-150	8-150mm	0-150mm	±0.03mm	0.02mm

DIGITAL OUTSIDE NECK CALIPER

DATA OUTPUT

1187-150A





- Non waterproof
- Measure grooves and recesses
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-25** (receiver is needed) depth stop (code **6143**)

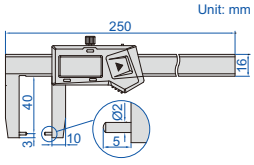
depth stop **6143** (**optional**)

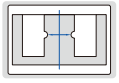
Code	Range	Accuracy
1187-150A	0-150mm/0-6"	±0.04mm

DIGITAL OUTSIDE POINT CALIPER

DATA OUTPUT

1185-150A





- Non waterproof
- Measure wall thickness inside bores and recesses
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-25** (receiver is needed) depth stop (code **6143**)

depth stop **6143** (**optional**)

Code	Range	Accuracy
1185-150A	0-150mm/0-6"	±0.04mm

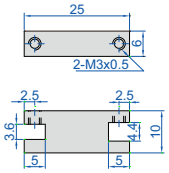
DEPTH STOP FOR CALIPERS

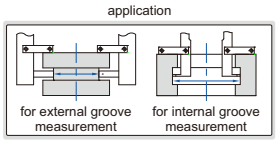
- Supplied in pairs
- Made of stainless steel
- Suitable for caliper series **1124**, **1526**, **1530**, **1520**, **1176**, **1178**, **1120**, **1121**, **1199**, **1129**, **1187**, **1185** and **1376**

Code
6143

6143

Unit: mm





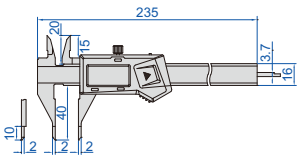
DIGITAL SMALL POINT CALIPER

DATA OUTPUT

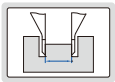
1169-150

- Non waterproof
- Small pointed jaws fit into small grooves and recesses
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-25** (receiver is needed)

Unit: mm



Code	Range	Accuracy
1169-150	0-150mm/0-6"	±0.03mm



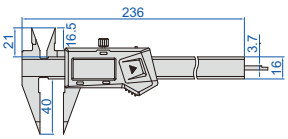
DIGITAL POINT CALIPER

DATA OUTPUT

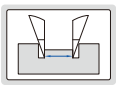
1183-150A

- Non waterproof
- Pointed jaws fit into small grooves and recesses
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-25** (receiver is needed)

Unit: mm



Code	Range	Accuracy
1183-150A	0-150mm/0-6"	±0.03mm



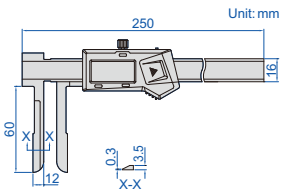
DIGITAL INSIDE KNIFE-EDGE CALIPER

DATA OUTPUT

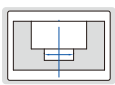
1123-150A

- Non waterproof
- Measure diameter of deep step holes
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-25** (receiver is needed)

Unit: mm



Code	Range	Accuracy
1123-150A	15-150mm/0.6-6"	±0.05mm



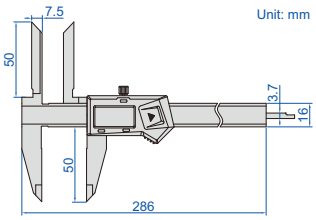
DIGITAL CALIPER WITH LONG UPPER JAWS

DATA OUTPUT

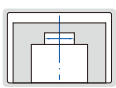
1138-200

- Non waterproof
- Long upper jaws for measuring diameter of deep holes
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-25** (receiver is needed)

Unit: mm



Code	Range	Accuracy
1138-200	0-200mm/0-8"	±0.04mm

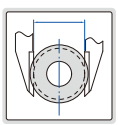


DIGITAL CALIPER WITH KNIFE-EDGE LOWER JAWS

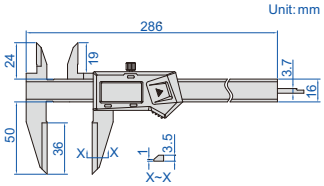
DATA OUTPUT

- Non waterproof
- Measure diameter of narrow grooves
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-25** (receiver is needed)

1532-200



Unit: mm



Code	Range	Accuracy
1532-200	0-200mm/0-8"	±0.03mm

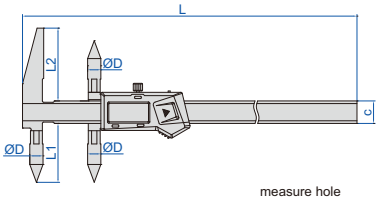
DIGITAL CENTERLINE AND EDGE TO CENTER CALIPERS

DATA OUTPUT

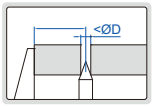
- Non waterproof
- Measure hole center distance or edge to hole center distance
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, set, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel

1525-300

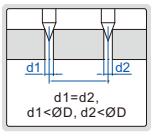
preset buttons



measure edge to hole center distance



measure hole center distance



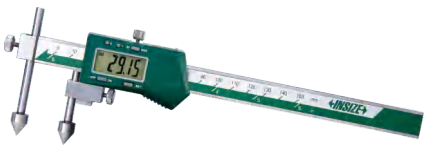
With data interface

Code	Range of upper jaw (edge to center)	Range of lower jaw (center to center)	Accuracy	ØD	L1	L2	c	L	Wireless transmitter (optional)
1525-300	5-300mm/0.2-12"	10-300mm/0.4-12"	±0.08mm	10mm	44.5mm	55mm	17mm	410mm	**7315-25** (receiver is needed)
1525-500	10-500mm/0.4-20"	20-50mm/0.8-20"	±0.09mm	20mm	50mm	60mm	24mm	690mm	**7315-22** (receiver is needed)
1525-1000	15-1000mm/0.6-40"	30-1000mm/1.2-40"	±0.12mm	30mm	70mm	81mm	31mm	1255mm	
1525-1500	15-1500mm/0.6-60"	30-1500mm/1.2-60"	±0.15mm	30mm	70mm	81mm	31mm	1760mm	

DIGITAL OFFSET CENTERLINE CALIPER

DATA OUTPUT

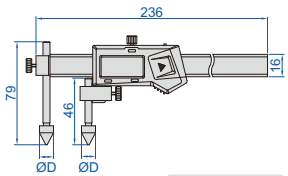
- Non waterproof
- Measure hole center distance in the same or offset planes
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, set, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-25** (receiver is needed)

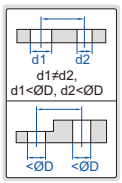


1192-150A

preset buttons

Unit: mm



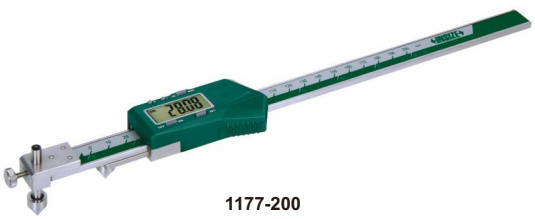


Code	Range	Accuracy	ØD
1192-150A	10-150mm/0.4-6"	±0.05mm	10mm

DIGITAL BACK-JAW CENTERLINE CALIPERS

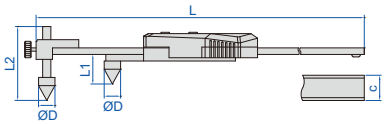
DATA OUTPUT

- Non waterproof
- Measure hole center distance in the same or offset planes
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, set, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel

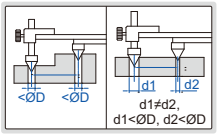


1177-200

preset buttons



back-jaw



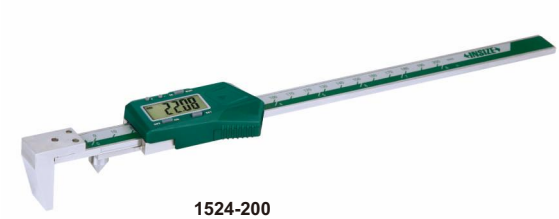
With data interface (mm)

Code	Range	Accuracy	ØD	c	L1	L2	L	Wireless transmitter (optional)
1177-200	10-200mm/0.4-8"	±0.10mm	10	16	18	45	310	**7315-25** (receiver is needed)
1177-300	10-300mm/0.4-12"	±0.10mm	10	16	18	45	410	
1177-500	20-500mm/0.8-20"	±0.10mm	20	24	26	70	692	**7315-22** (receiver is needed)
1177-1000	30-1000mm/1.2-40"	±0.12mm	30	31	39	70	1242	
1177-1500	30-1500mm/1.2-60"	±0.15mm	30	31	39	70	1745	

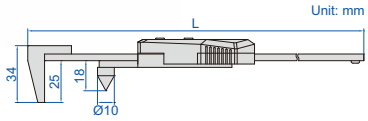
DIGITAL BACK-JAW EDGE TO CENTER CALIPERS

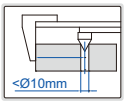
DATA OUTPUT

- Non waterproof
- Measure edge to hole center distance
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, set, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory:
  wireless transmitter code **7315-25** (receiver is needed),
  calibration standard (code **1524-BLOCK**)



1524-200



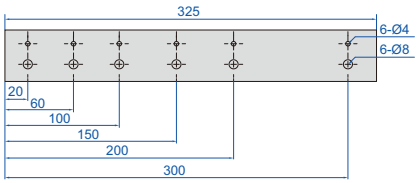


Code	Range	Accuracy	L
1524-200	5-200mm/0.2-8"	±0.1mm	310mm
1524-300	5-300mm/0.2-12"	±0.1mm	410mm

Calibration standard (optional)

Code
1524-BLOCK

1524-BLOCK

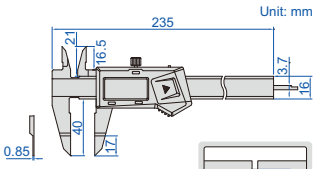


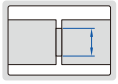
DIGITAL BLADE CALIPER

DATA OUTPUT

- Non waterproof
- The blade jaws fit into small grooves
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory:
  wireless transmitter code **7315-25** (receiver is needed)

1188-150A





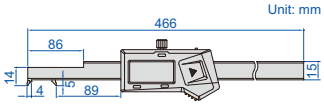
Code	Range	Accuracy
1188-150A	0-150mm/0-6"	±0.03mm

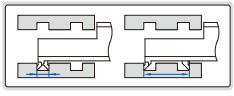
DIGITAL HOOK CALIPER

DATA OUTPUT

- Non waterproof
- Measure width and distance of grooves inside bores
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory:
  wireless transmitter code **7315-25** (receiver is needed)

1122-300





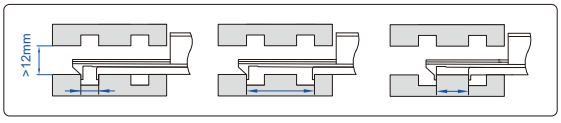
Code	Range	Accuracy
1122-300	4-300mm/0.16-12"	±0.04mm

DIGITAL HOOK CALIPER

DATA OUTPUT

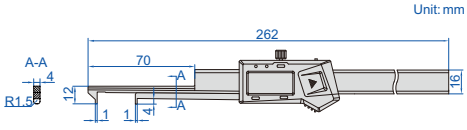
- Non waterproof
- Measure width and distance of grooves inside bores
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, set, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel

1100-60



With data interface
(optional wireless transmitter code 7315-25, receiver is needed)

Code	Range		Accuracy
	External	Internal	
1100-60	0-60mm/0-2.36	2.1-60mm/0.08-2.36"	±0.04mm



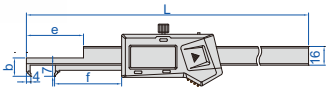
DIGITAL EXTERNAL HOOK CALIPERS

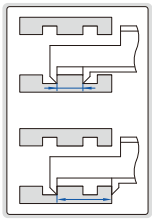
DATA OUTPUT

1164-200

- Non waterproof
- Measure width and distance of grooves inside bores
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel

Unit: mm





With data interface (optional wireless transmitter code 7315-25, receiver is needed)

Code	Range	Accuracy	L	b	e	f
1164-150	0-150mm/0-6"	±0.03mm	275mm	14mm	52mm	50mm
1164-200	0-200mm/0-8"	±0.03mm	325mm	14mm	52mm	50mm
1164-300	0-300mm/0-12"	±0.04mm	460mm	15mm	82mm	80mm

DIGITAL V SHAPE CALIPER

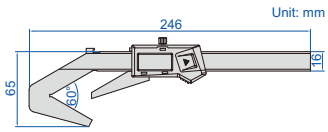
DIRECT READING, CALCULATION IS NOT REQUIRED

DATA OUTPUT

1539-3

- Non waterproof
- Measure outside diameter of three number of flutes (such as taps, reamers, end mills and gears)
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Battery CR2032
- Automatic power off, move the digital unit to turn on power
- Data output
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-25** (receiver is needed)

Unit: mm



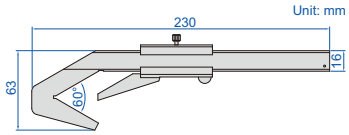
Code	Range	Accuracy
1539-3	Ø4-Ø40mm/0.16"-1.58" DIA	±0.03mm

V SHAPE VERNIER CALIPER

1273-403

- Measure outside diameter of three number of flutes (such as taps, reamers, end mills and gears)
- Made of stainless steel
- Satin chrome plated reading surface

Unit: mm



Code	Range	Graduation	Accuracy
1273-403	Ø4-40mm	0.05mm	±0.05mm

DIGITAL V TYPE CALIPERS

DIRECT READING, CALCULATION IS NOT REQUIRED

DATA OUTPUT

VIDEO

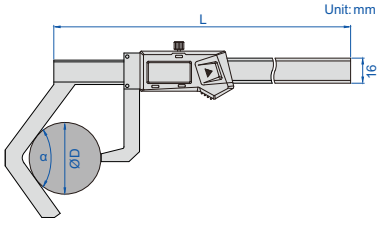
Ø50mm calibration cylinder (code **6316-50**, **optional**)

1529-5

- Non waterproof
- Measure the outside diameter of odd number of flutes (such as taps, reamers, end mills and gears)
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Battery CR2032
- Automatic power off, move the digital unit to turn on power
- Data output
- Made of stainless steel
- Optional accessory: Ø50mm calibration cylinder (code **6316-50**), wireless transmitter code **7315-25** (receiver is needed)

Code	Range (ØD)	Flutes	Accuracy	Angle α	L
1529-3	Ø50-Ø200mm/2-8" DIA	3	±0.06mm	60°	390mm
1529-5	Ø50-Ø200mm/2-8" DIA	5	±0.06mm	108°	318mm
1529-19	Ø50-Ø200mm/2-8" DIA	19	±0.06mm	85°15'47"	336mm
1529-23	Ø50-Ø200mm/2-8" DIA	23	±0.06mm	70°26'5"	362mm
1529-31	Ø50-Ø200mm/2-8" DIA	31	±0.06mm	75°29'2"	355mm

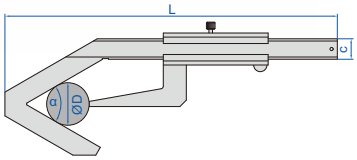
Unit: mm



V SHAPE VERNIER CALIPERS

- Measure outside diameter of odd number of flutes (such as taps, reamers, end mills and gears)
- Made of stainless steel
- Satin chrome plated reading surface
- Optional accessory: 4mm pin gauge (code **4110-4D00**), Ø50mm calibration cylinder (code **6316-50**)

1229-3



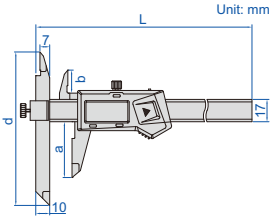
Code	Range (ØD)	Graduation	Accuracy	Flutes	Angle α	L	c
1229-3	Ø4-60mm	0.02mm	±0.04mm	3	60°	260mm	16mm
1229-35	Ø50-200mm	0.02mm	±0.06mm	3	60°	516mm	20mm
1229-5	Ø4-60mm	0.02mm	±0.04mm	5	108°	210mm	16mm
1229-55	Ø50-200mm	0.02mm	±0.06mm	5	108°	360mm	20mm

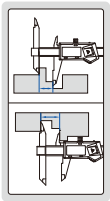
DIGITAL OFFSET CALIPERS

DATA OUTPUT

- Non waterproof
- The left jaw can slide up and down to facilitate measurement of stepped sections
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-25** (receiver is needed)

1186-150A





(mm)

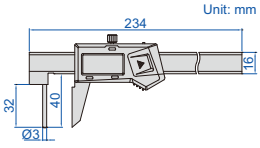
Code	Range	Accuracy	L	a	b	d
1186-150A	0-150mm/0-6"	±0.04mm	249	40	16.5	110
1186-200A	0-200mm/0-8"	±0.04mm	299	50	19.5	120
1186-300A	0-300mm/0-12"	±0.05mm	399	60	20.5	130

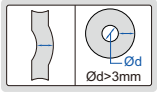
DIGITAL TUBE THICKNESS CALIPER

DATA OUTPUT

- Non waterproof
- Measure wall thickness of tubes
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-25** (receiver is needed)

1161-150A



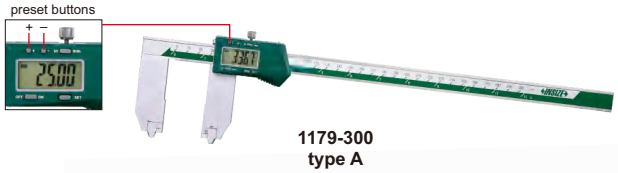


Code	Range	Accuracy
1161-150A	0-150mm/0-6"	±0.05mm

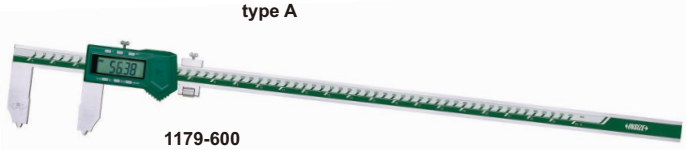
DIGITAL RTJ RING GROOVE CALIPERS

DATA OUTPUT

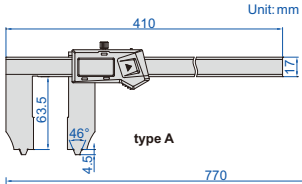
- Non waterproof
- Angle of RTJ ring groove: 23°
- Measure ring grooves of flange
- Resolution: 0.01mm/0.0005"
- Button function: on/off, set, zero, mm/inch, data preset
- Battery CR2032
- Made of stainless steel



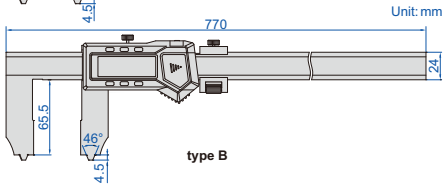
1179-300
type A



1179-600
type B

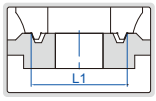


type A

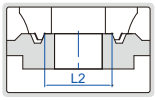


type B

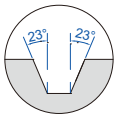
measure outside diameter of RTJ ring groove



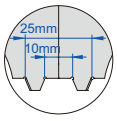
measure inside diameter of RTJ ring groove



applicable for RTJ ring grooves with angle 23°



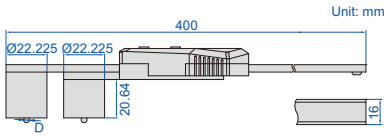
10mm and 25mm need to be added on the reading



Code	Range (inside diameter of RTJ ring groove)	Range (outside diameter of RTJ ring groove)	Angle of RTJ ring groove	Accuracy	Type	Wireless transmitter (optional)
1179-300	10-300mm/0.4-12"	25-300mm/1-12"	23°	±0.06mm	A	**7315-25** (receiver is needed)
1179-600	10-600mm/0.4-24"	25-600mm/1-24"	23°	±0.07mm	B	**7315-22** (receiver is needed)

DIGITAL CALIPER WITH INTERCHANGEABLE BALL TIPS

DATA OUTPUT



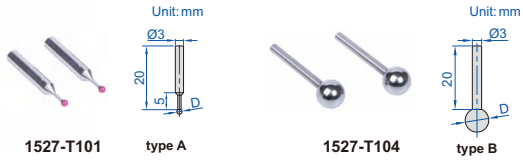
1527-3001

- Non waterproof
- Resolution 0.01mm/.0005"
- Buttons: on/off, set, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-25** (receiver is needed)

Code	Range	Accuracy
1527-3001	(22.22+D)~300mm*	±0.03mm

*"D" is the diameter of ball tips.

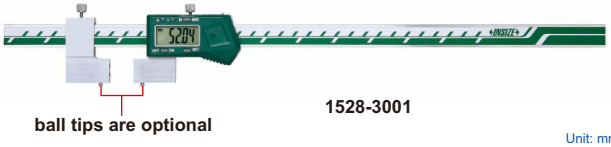
Ball tips (optional, supplied in pair)



Code	Diameter (D)	Accuracy of diameter	Type	Material
1527-T101	1/16" (Ø1.5875mm)	±0.005mm	A	ruby
1527-T102	1/8" (Ø3.175mm)	±0.005mm	B	stainless steel
1527-T103	3/16" (Ø4.7625mm)	±0.005mm	B	stainless steel
1527-T104	1/4" (Ø6.35mm)	±0.005mm	B	stainless steel
1527-T105	3/8" (Ø9.525mm)	±0.005mm	B	stainless steel
1527-T106	1/2" (Ø12.7mm)	±0.005mm	B	stainless steel

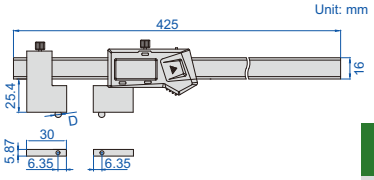
DIGITAL CALIPER WITH INTERCHANGEABLE BALL TIPS

DATA OUTPUT



ball tips are optional

1528-3001

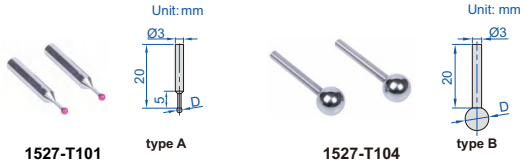


- Non waterproof
- Resolution 0.01mm/0.0005"
- Buttons: on/off, set, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-25** (receiver is needed), ball tips

Code	Range	Accuracy
1528-3001	(12.7+D)~300mm*	±0.03mm

*"D" is the diameter of ball tips.

Ball tips (optional, supplied in pair)



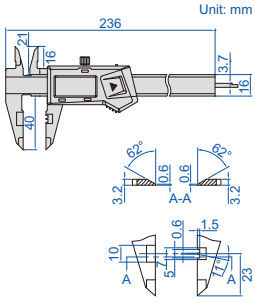
Code	Diameter (D)	Accuracy of diameter	Type	Material
1527-T101	1/16" (Ø1.5875mm)	±0.005mm	A	ruby
1527-T102	1/8" (Ø3.175mm)	±0.005mm	B	stainless steel
1527-T103	3/16" (Ø4.7625mm)	±0.005mm	B	stainless steel
1527-T104	1/4" (Ø6.35mm)	±0.005mm	B	stainless steel
1527-T105	3/8" (Ø9.525mm)	±0.005mm	B	stainless steel
1527-T106	1/2" (Ø12.7mm)	±0.005mm	B	stainless steel

DIGITAL CRIMP HEIGHT CALIPER

DATA OUTPUT

- Non waterproof
- Measure crimp height
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Meet DIN862
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-25** (receiver is needed)

1165-150A



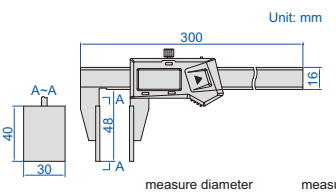
Code	Range	Accuracy
1165-150A	0-150mm/0-6"	±0.03mm

DIGITAL CALIPER WITH LARGE MEASURING FACES

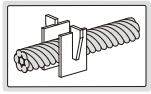
DATA OUTPUT

- Non waterproof
- Measure diameter of wire ropes, and thickness of soft materials like rubber, sponge, etc.
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-25** (receiver is needed)

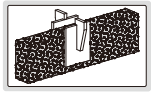
1172-200



measure diameter of wire ropes



measure thickness of rubber, sponge, etc.



Code	Range	Accuracy
1172-200	0-200mm/0-8"	±0.07mm

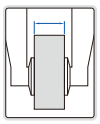
DIGITAL CALIPER WITH DISK FACES

DATA OUTPUT

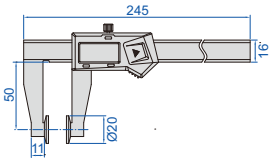
- Non waterproof
- Measure thickness of soft sheets
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-25** (receiver is needed)

1533-150

Code	Range	Accuracy
1533-150	0-150mm/0-6"	±0.04mm



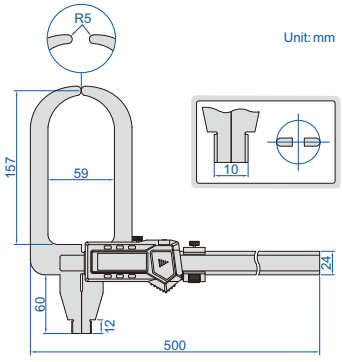
Unit: mm



DIGITAL WALL THICKNESS CALIPER

DATA OUTPUT

- Non waterproof
- Measure wall thickness of helmets, domes and curved pots
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch, ABS, data preset
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-22** (receiver is needed)

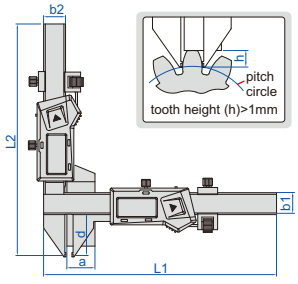


1536-300

Code	Range	Accuracy
1536-300	0-300mm/0-12"	±0.05mm

DIGITAL GEAR TOOTH CALIPERS

DATA OUTPUT



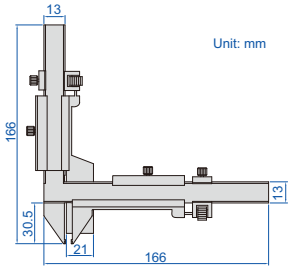
1181-M25A

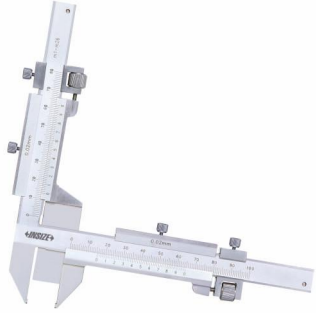
- Non waterproof
- Resolution: 0.01mm/0.0005"
- Accuracy of height measurement: ±0.03mm
- Accuracy of thickness measurement: ±0.03mm
- Carbide tips
- Measure the tooth thickness by positioning the tooth height (for tooth height>1mm)
- Buttons: zero, on/off, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel
- Data output

With data interface
(optional wireless transmitter code 7315-25, receiver is needed) **(mm)**

Code	Range	Total accuracy	L1	L2	a	b1	b2	d
1181-M25A	M1-24mm	±0.04mm	170	165.5	21	16	16	30.5
1181-M50A	M5-45mm	±0.04mm	220	190	50.5	16	16	55

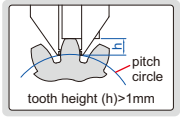
GEAR TOOTH VERNIER CALIPER





1281-M26A

- Graduation: 0.02mm
- Total accuracy: ±0.04mm
- Carbide tips
- Measure the tooth thickness by positioning the tooth height (for tooth height>1mm)
- Made of stainless steel
- Satin chrome plated reading surface



Code	Range	Accuracy of height measurement	Accuracy of thickness measurement
1281-M26A	M1-26mm	±0.03mm	±0.03mm

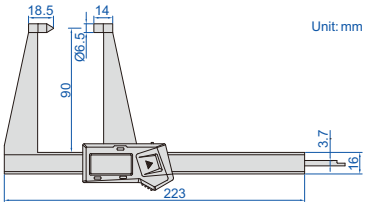
DIGITAL DISK BRAKE CALIPER

RELATIVE PRODUCT: DISK BRAKE MICROMETER (CODE 3288-, 3588-)

DATA OUTPUT

- Non waterproof
- Measure thickness of disk brakes
- Resolution 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-25** (receiver is needed)

1162-125A



Code	Range	Accuracy
1162-125A	0-125mm/0-5"	±0.05mm

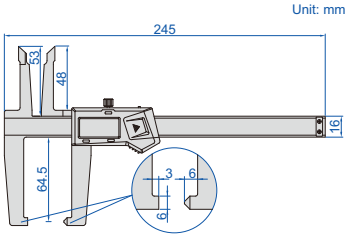
DIGITAL DISK BRAKE AND PAD CALIPER

RELATIVE PRODUCT: DISK BRAKE MICROMETER (CODE 3288-, 3588-)

DATA OUTPUT

- Non waterproof
- Measure thickness of disk brakes and pad wear
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-25** (receiver is needed)

1167-150A



Code	Range	Accuracy
1167-150A	0-150mm/0-6"	±0.07mm

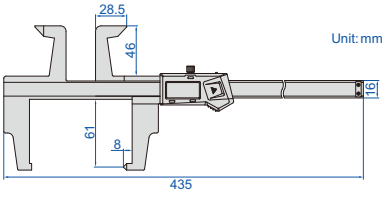
DIGITAL DRUM BRAKE CALIPER

RELATIVE PRODUCT: DISK BRAKE MICROMETER (CODE 3288-, 3588-)

DATA OUTPUT

- Non waterproof
- Measure internal and external diameter of drum brakes
- Resolution 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-25** (receiver is needed)

1168-300A



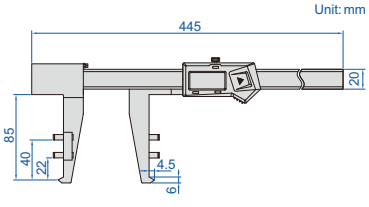
Code	Range	Accuracy
1168-300A	0-300mm/0-12"	±0.07mm

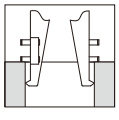
DIGITAL DRUM BRAKE CALIPER

DATA OUTPUT

- Non waterproof
- Measure internal diameter of drum brakes
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-22** (receiver is needed)

1538-300





calibration block (included)

Code	Range	Accuracy
1538-300	30-300mm/1.2-12"	±0.05mm

DIGITAL CALIPER FOR BORES WITH BARRIER INSIDE

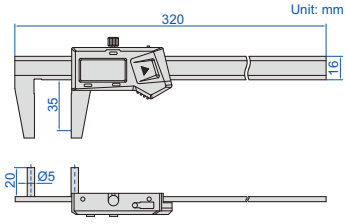
DATA OUTPUT

- Non waterproof
- Measure diameter of bores with barrier inside
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, set, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel

1513-200

application

Unit: mm



With data interface (optional wireless transmitter code 7315-25, receiver is needed)

Code	Range (ØD)*	Diameter of barrier (Ød)	Accuracy
1513-200	10-200mm/0.4-8"	<D-10mm (less than 70mm)	±0.03mm

*For example:
When measuring size (ØD) is 40mm, D-10=30mm, so the diameter of barrier (Ød) should be less than 30mm.
When measuring size (ØD) is 100mm, D-10=90mm, however it should be less than 70mm,
so the diameter of barrier (Ød) should be less than 70mm.

IP67 WATERPROOF DIGITAL DEPTH GAUGES

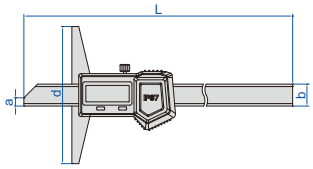
IP67 WATERPROOF

ATTENTION: NO DATA OUTPUT

ATTENTION: IT IS NECESSARY TO SET ZERO AFTER POWER ON EACH TIME

- IP67 dust/waterproof
- Resolution: 0.01mm/0.0005"
- Button function: zero, on/off, mm/inch, ABS/REL, hold
- Meet DIN862
- Battery CR2032
- Made of stainless steel

1149-150



(mm)

Code	Range	Accuracy	L	a	b	d
1149-150	0-150mm/0-6"	±0.03mm	240	6	16	100
1149-200	0-200mm/0-8"	±0.03mm	290	6	16	100
1149-300	0-300mm/0-12"	±0.03mm	390	6	16	150

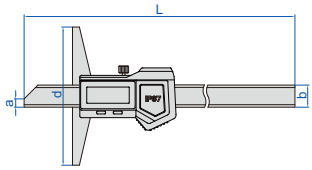
IP67 WATERPROOF DIGITAL DEPTH GAUGES

DATA OUTPUT

IP67 WATERPROOF

- IP67 dust/waterproof
- Resolution: 0.01mm/0.0005"
- Button function: zero, on/off, mm/inch
- Battery CR2032
- Meet DIN862
- Made of stainless steel
- Optional accessory:
  wireless transmitter code **7315-26** (receiver is needed)

1543-150



(mm)

Code	Range	Accuracy	L	a	b	d
1543-150	0-150mm/0-6"	±0.03mm	240	6	16	100
1543-200	0-200mm/0-8"	±0.03mm	290	6	16	100
1543-300	0-300mm/0-12"	±0.03mm	390	6	16	150

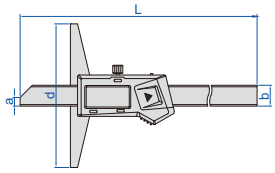
DIGITAL DEPTH GAUGES (STANDARD TYPE)

POPULAR MODEL

DATA OUTPUT

- Non waterproof
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Meet DIN862 (except 0-500mm/0-20")
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory:
  wireless transmitter code **7315-25** (receiver is needed)

1141-150A



(mm)

Code	Range	Accuracy	L	a	b	d
1141-150A	0-150mm/0-6"	±0.03mm	230	6	14.5	100
1141-200A	0-200mm/0-8"	±0.03mm	280	6	14.5	100
1141-300A	0-300mm/0-12"	±0.03mm	380	6	14.5	150
1141-500A	0-500mm/0-20"	±0.05mm	585	7	15	150

DIGITAL DEPTH GAUGES WITH MOUNTING HOLES FOR EXTENSION BASE

DATA OUTPUT

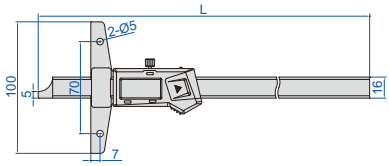
- Non waterproof
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Meet DIN862
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory:
  wireless transmitter code **7315-25** (receiver is needed),
  extension base (code **6141**)

1147-300

extension base (**optional**)

6141 series

Unit: mm



Code	Range	Accuracy	L
1147-150	0-150mm/0-6"	±0.03mm	237mm
1147-200	0-200mm/0-8"	±0.03mm	287mm
1147-300	0-300mm/0-12"	±0.03mm	403mm

DIGITAL HOOK DEPTH GAUGES

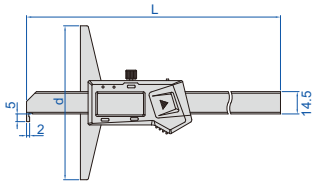
DATA OUTPUT

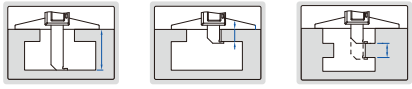
- Non waterproof
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory:
  wireless transmitter code **7315-25** (receiver is needed)

1142-150A

preset buttons

Unit: mm





Code	Range	Accuracy	L	d
1142-150A	0-150mm/0-6"	±0.03mm	230mm	100mm
1142-200A	0-200mm/0-8"	±0.03mm	280mm	100mm

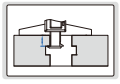
DIGITAL DOUBLE HOOK DEPTH GAUGES

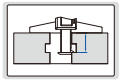
DATA OUTPUT

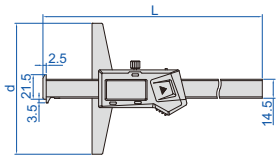
- Non waterproof
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Meet DIN862
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory:
  wireless transmitter code **7315-25** (receiver is needed)

1144-150A

Unit: mm







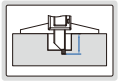
Code	Range	Accuracy	L	d
1144-150A	0-150mm/0-6"	±0.03mm	233mm	100mm
1144-200A	0-200mm/0-8"	±0.03mm	283mm	100mm
1144-300A	0-300mm/0-12"	±0.03mm	383mm	150mm

DIGITAL POINT DEPTH GAUGE

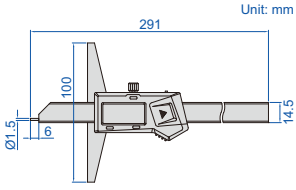
DATA OUTPUT

- Non waterproof
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Meet DIN862
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory:
  wireless transmitter code **7315-25** (receiver is needed)

1143-200A



Unit: mm



Code	Range	Accuracy
1143-200A	0-200mm/0-8"	±0.03mm

DIGITAL DOUBLE HOOK DEPTH GAUGE

DATA OUTPUT

- Non waterproof
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch, ABS/INC, data hold, TOL, set
- ABS/INC is for absolute and incremental measurement
- TOL is for tolerance measurement
- Made of stainless steel
- LR44 battery, data output
- Supplied with gauge block for zero setting
- Optional accessory: extension base, wireless transmitter code **7315-1150** (receiver is needed)

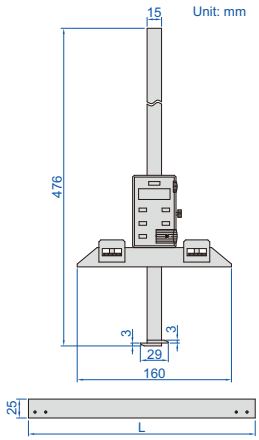
gauge block for zero setting (included)

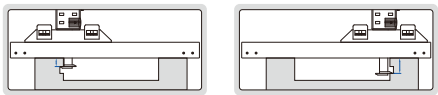
Code	Range	Accuracy
1540-300	0-300mm/0-12"	±0.04mm

Extension base (optional)

Code	L
1540-L300	300mm
1540-L400	400mm
1540-L500	500mm
1540-L600	600mm
1540-L800	800mm

1540-300





DIGITAL DEPTH GAUGES WITH ROUND DEPTH BAR

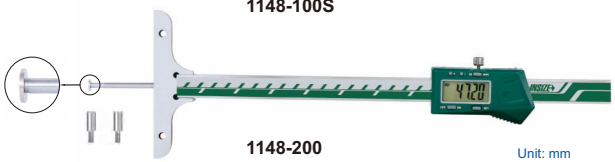
MEASURE DEPTH OF SMALL HOLES (>Ø4mm) | DATA OUTPUT | MEASURE WIDTH AND DEPTH OF GROOVES INSIDE BORE

preset buttons

extension base for **1148-200** (**optional**)

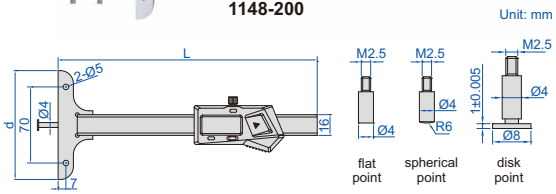
6141 series

1148-100S

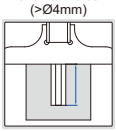


1148-200

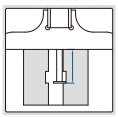
- Non waterproof
- Resolution: 0.01mm/0.0005"
- Supplied with three interchangeable points (flat, spherical, disk)
- Buttons: on/off, set, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory: extension base (code **6141**, for **1148-120**, **1148-200**, **1148-300**)



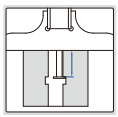
measure depth of small holes (>Ø4mm)



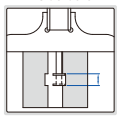
measure depth of grooves inside bore



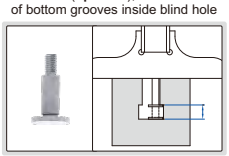
measure depth of grooves inside bore



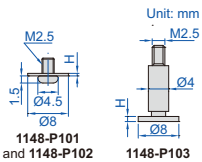
measure width of grooves inside bore



1148-P103 (**optional**), measure width of bottom grooves inside blind hole



1148-P101 (**optional**)



1148-P101 and **1148-P102** | **1148-P103**

With data interface
(optional wireless transmittercode 7315-1148, receiver is needed) **(mm)**

Code	Range*	Accuracy**	L	d	Remark
1148-100S	0-100mm/0-4"	±0.02mm	200	45	
1148-100	0-100mm/0-4"	±0.02mm	200	85	
1148-200	0-200mm/0-8"	±0.03mm	300	101	with mounting holes for extension base

*When disk points are used, the range is reduced by 10mm
**When disk points are used, the accuracy increases by 0.01mm

OPTIONAL DISK POINTS

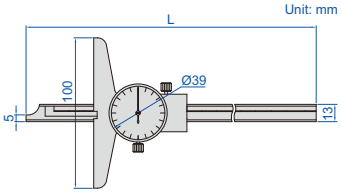
Code	Description	H	Remark
1148-P101	0.5mm disk point	0.5±0.005mm	for narrow grooves
1148-P102	0.7mm disk point	0.7±0.005mm	for narrow grooves
1148-P103	1mm disk point	1±0.005mm	for grooves inside blind hole

DIAL DEPTH GAUGES

SHOCK PROOF

- Shockproof dial indicator
- Made of stainless steel

1340-150



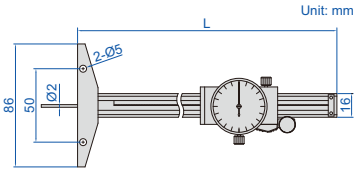
Code	Range	Graduation	Accuracy	L
1340-150	0-150mm	0.02mm	±0.03mm	232mm
1340-200	0-200mm	0.02mm	±0.03mm	282mm
1340-300	0-300mm	0.02mm	±0.04mm	382mm

DIAL DEPTH GAUGES WITH ROUND BAR

SHOCK PROOF

- Shockproof dial indicator
- Dial indicator graduation: 0.02mm
- Made of stainless steel

1341-100

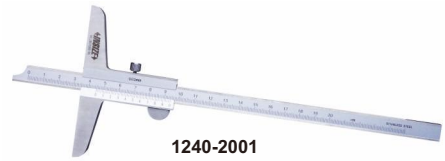


Code	Range	Accuracy	L
1341-100	0-100mm	±0.02mm	181mm
1341-150	0-150mm	±0.03mm	234mm
1341-200	0-200mm	±0.03mm	284mm

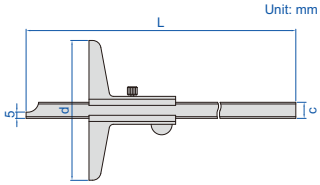
VERNIER DEPTH GAUGES (STANDARD TYPE)

POPULAR MODEL

- Made of stainless steel
- Satin chrome plated reading surface



1240-2001



Graduation 0.05mm (mm)

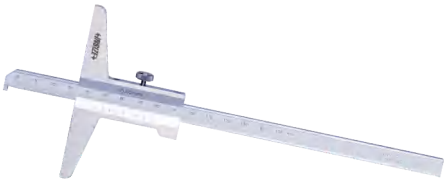
Code	Range	Accuracy	L	d	c
1240-150	0-150mm	±0.05mm	250	100	10
1240-200	0-200mm	±0.05mm	300	100	10
1240-300	0-300mm	±0.08mm	400	100	10
1240-500	0-500mm	±0.09mm	605	150	11

Graduation 0.02mm (mm)

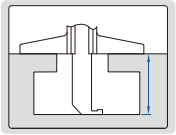
Code	Range	Accuracy	L	d	c
1240-1501	0-150mm	±0.03mm	250	100	10
1240-2001	0-200mm	±0.03mm	300	100	10
1240-3001	0-300mm	±0.04mm	400	100	10
1240-5001	0-500mm	±0.05mm	605	150	11

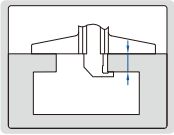
VERNIER HOOK DEPTH GAUGES

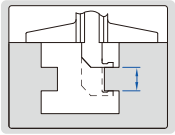
- Made of stainless steel
- Satin chrome plating finish on reading surfac

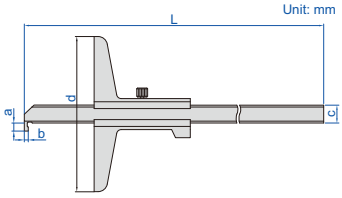


1245-1501









Graduation 0.02mm (mm)

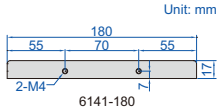
Code	Range	Accuracy	L	d	a	b	c
1245-150	0-150mm	±0.03mm	250	100	2.5	2	10
1245-200	0-200mm	±0.03mm	300	100	2.5	2	10
1245-300	0-300mm	±0.04mm	400	100	2.5	2	10

Graduation 0.05mm (mm)

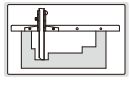
Code	Range	Accuracy	L	d	a	b	c
1245-1501	0-150mm	±0.05mm	250	100	2.5	2	10
1245-2001	0-200mm	±0.05mm	300	100	2.5	2	10
1245-3001	0-300mm	±0.06mm	400	100	2.5	2	10

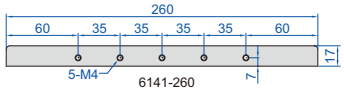
EXTENSION BASES

6141-260

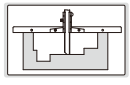


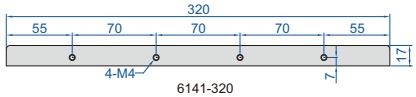
6141-180





6141-260





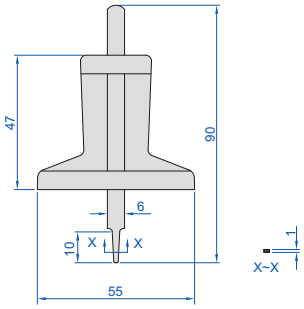
6141-320

Code	Length
6141-180	180mm
6141-260	260mm
6141-320	320mm

- Supplied with two screws
- Made of stainless steel
- Suitable for depth gauges series **1147**, **1148**, **1247**, **1248** and **1249**

MINI VERNIER DEPTH GAUGE

1244-30



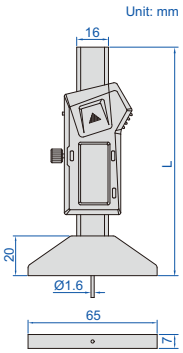
- Graduation: 0.1mm
- Made of stainless steel

Code	Range	Accuracy
1244-30	0-30mm	±0.10mm

MINI DIGITAL DEPTH GAUGES WITH ROUND BAR

DATA OUTPUT

1140-25



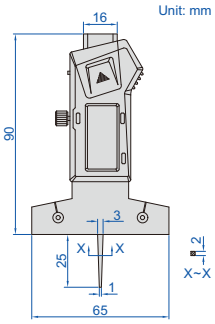
- Non waterproof
- Measure depth of small groove and hole
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, set, mm/inch, preset (+,-)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-25** (receiver is needed)

Code	Range	Accuracy	L
1140-25	0-25mm/0-1"	±0.02mm	114mm
1140-50	0-50mm/0-2"	±0.02mm	140mm
1140-100	0-100mm/0-4"	±0.02mm	190mm
1140-150	0-150mm/0-6"	±0.03mm	236mm

MINI DIGITAL DEPTH GAUGE

DATA OUTPUT

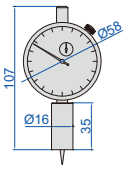
1145-25A



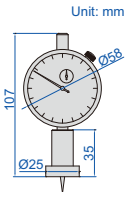
- Non waterproof
- Measure depth of small groove and hole, also measure depth of tire tread
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Supplied with zero set surface
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-25** (receiver is needed)

Code	Range	Accuracy
1145-25A	0-25mm/0-1"	±0.03mm

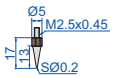
DIAL DEPTH GAUGES



2343-101



2343-102



pointed tip

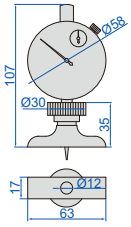
2343-102

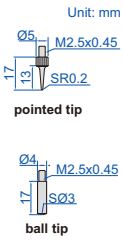
- Accuracy: ±0.017mm
- Stainless steel base
- Pointed tip

Code	Range	Dial indicator stroke	Dial indicator graduation	Base
2343-101	0-10mm	10mm	0.01mm	Ø16mm
2343-102	0-10mm	10mm	0.01mm	Ø25mm

DIAL DEPTH GAUGE

- Dial indicator graduation: 0.01mm
- Stainless steel base
- Supplied with pointed tip and ball tip



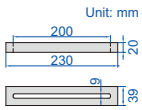


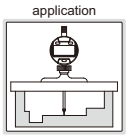
2341-101A

Code	Range	Dial indicator stroke	Accuracy
2341-101A	0-10mm	10mm	±0.017mm

DIAL DEPTH GAUGE

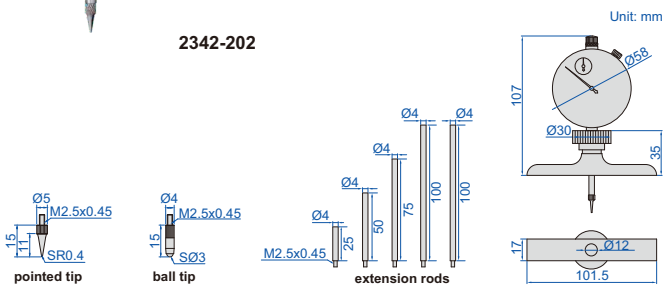
2141-10 (**opitonal**),
can be customized
according to workpieces





2342-202

- Accuracy: ±0.03mm
- Dial indicator stroke: 30mm
- Dial indicator graduation: 0.01mm
- Stainless steel base
- Extension rods: 25mm (1pc), 50mm (1pc), 75mm (1pc), 100mm (2pcs)
- Supplied with pointed tip and ball tip
- Optional accessory: granite extension holder (code **2141-10**)



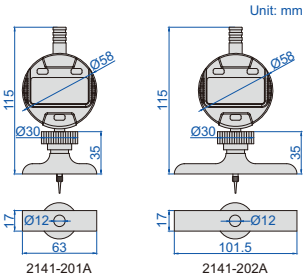
Code	Range	Base
2342-202	0-300mm	101.5×17mm

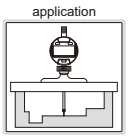
DIGITAL DEPTH GAUGES

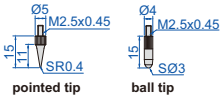
DATA OUTPUT

- Accuracy: ±20μm
- Button function: on/off, zero, mm/inch, ABS, data preset, change measuring direction
- CR2032 battery
- Automatic power off (time is adjustable)
- Data output
- Stainless steel base
- Extension rods: 12.5mm (1pc), 25mm (1pc), 50mm (1pc), 75mm (1pc), 100mm (2pcs)
- Supplied with pointed tip and ball tip
- Optional accessory:
  wireless transmitter code **7315-50M** (receiver is needed),
  granite extension holder (code **2141-10**)

2141-202A

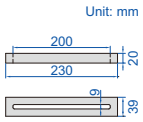


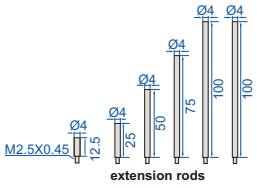




Code	Range	Digital indicator stroke	Digital indicator resolution	Base
2141-201A	0-300mm/0-12"	12.7mm/0.5"	0.01mm/0.0005"	63×17mm
2141-202A	0-300mm/0-12"	12.7mm/0.5"	0.01mm/0.0005"	101.5×17mm

2141-10 (**opitonal**),
can be customized
according to workpieces



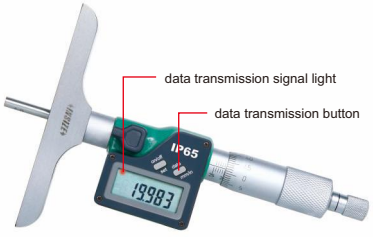


DIGITAL DEPTH MICROMETERS

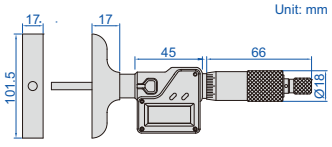
DATA OUTPUT

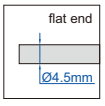
IP65 WATERPROOF

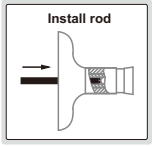
- Resolution: 0.001mm/0.00005"
- Micrometer head accuracy: +/-3μm
- Rod accuracy: +/-(2+L/75)μm, L is the measuring range in mm
- Button function: on/off, set, mm/inch, data transmisson
- IP65 dust/waterproof
- Automatic power off, data output
- Rods with flat end
- Ratchet stop
- Optional accessory:
  wireless transmitter code **7315-31** (receiver is needed)



3540-50

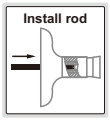






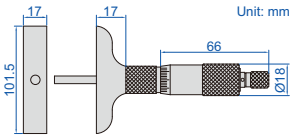
Code	Range	Rods
3540-50	0-50mm/0-2"	2 pcs
3540-100	0-100mm/0-4"	4 pcs
3540-150	0-150mm/0-6"	6 pcs
3540-300	0-300mm/0-12"	12 pcs

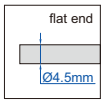
DEPTH MICROMETERS



3240-100

- Graduation: 0.01mm
- Meet DIN863-2
- Micrometer head accuracy: +/-3μm
- Rod accuracy: +/-(2+L/75)μm,
  L is the measuring range in mm
- Rods with flat end
- Ratchet stop



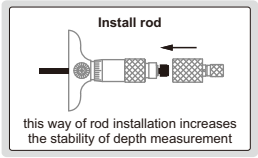


Code	Range	Rods
3240-25	0-25mm	1 pc
3240-50	0-50mm	2 pcs
3240-75	0-75mm	3 pcs
3240-100	0-100mm	4 pcs
3240-150	0-150mm	6 pcs
3240-200	0-200mm	8 pcs
3240-300	0-300mm	12 pcs

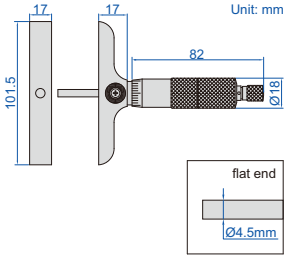
DEPTH MICROMETERS

3241-150

- Graduation: 0.01mm
- Meet DIN863-2
- Micrometer head accuracy: +/-3μm
- Rod accuracy: +/-(2+L/75)μm,
  L is the measuring range in mm
- Rods with flat end
- Ratchet stop



Code	Range	Rods
3241-25	0-25mm	1 pc
3241-50	0-50mm	2 pcs
3241-75	0-75mm	3 pcs
3241-100	0-100mm	4 pcs
3241-150	0-150mm	6 pcs
3241-200	0-200mm	8 pcs
3241-300	0-300mm	12 pcs

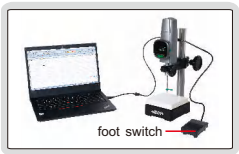


HIGH PRECISION DIGITAL HEIGHT GAUGES

DATA OUTPUT

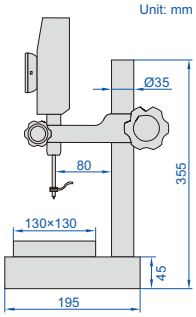
VIDEO

power supplied by charge pal

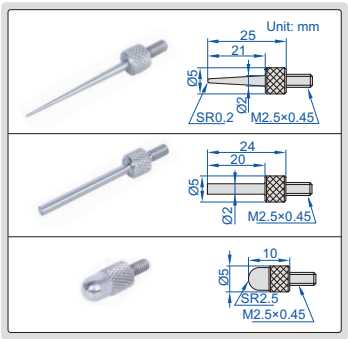


data transmitted to Excel without software; short press the foot switch to transmit data, long press to zero

1155-505



measuring tips (included)



- Range: 0~50mm
- Measuring force: 0.8~1.2N
- Power supply: 5V/1A (adapter or charge pal)
- High stability, high precision, high response speed (5000mm/s)
- High brightness LED display
- Ceramic base flatness: 1μm

Code	Resolution	Accuracy (at 20°C)	Output
1155-505	0.5μm/0.00002" (can switch to: 1μm/0.00005")	1.5μm	USB
1155-510	0.1μm/0.000005" (can switch to: 1μm/0.00005")	1μm	USB

STANDARD DELIVERY

Main unit	1 pc

OPTIONAL ACCESSORY

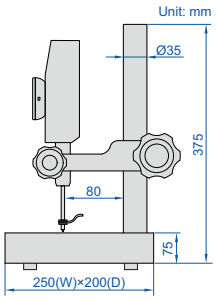
Contact point	code **6282**
Charge pal	**1155-5-POB**
Data output cable (including foot switch)	**1155-5-FOS**

DIGITAL HEIGHT GAUGES

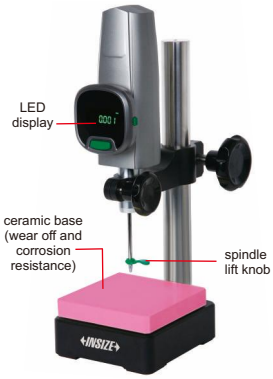
VIDEO

DATA OUTPUT

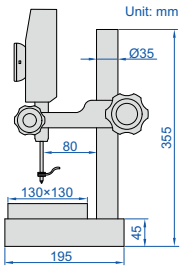
1157-501



1157-501



1157-502



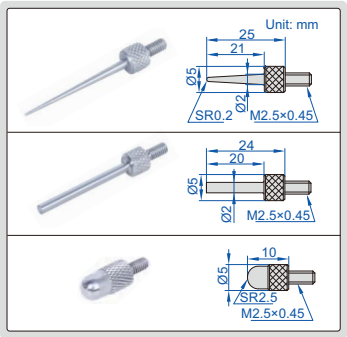
1157-502

- Measuring force: 0.8~1.2N
- Power supply: 5V/1A (adapter or charge pal)
- Buttons: on/off, zero, mm/inch, mix/min/mix-min
- High response speed (5000mm/s)
- High brightness LED display

power supplied by charge pal

data transmitted to Excel without software

measuring tips (included)



Code	Range	Resolution	Accuracy (at 20°C)	Output	Base
1157-501	0~50mm	1μm/0.00005"	3μm	USB	granite (flatness: 2μm)
1157-502	0~50mm	1μm/0.00005"	3μm	USB	ceramic (flatness: 1μm)

STANDARD DELIVERY

Main unit	1 pc

OPTIONAL ACCESSORY

Contact point	code **6282**
Charge pal	**1155-5-POB**
Data output cable (including foot switch)	**1155-5-FOS**

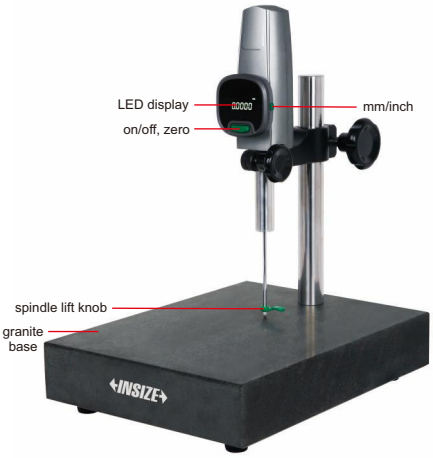
VIDEO

LARGE RANGE DIGITAL HEIGHT GAUGE

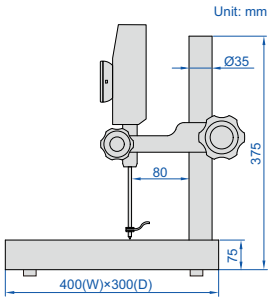
VIDEO

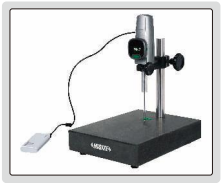
DATA OUTPUT

- Measuring force: 0.8~1.2N
- Power supply: 5V/1A (adapter or charge pal)
- High stability, high precision, high response speed (5000mm/s)
- High brightness LED display
- Granite base flatness: 3μm

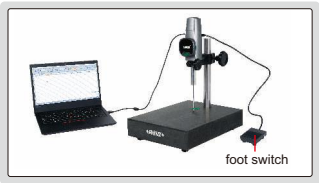


1158-100



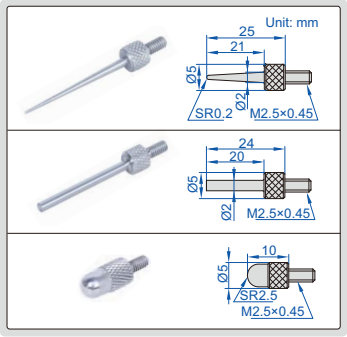


power supplied by charge pal



data transmitted to Excel without software; short press the foot switch to transmit data, long press to zero

measuring tips (included)



Code	Range	Resolution	Accuracy (at 20°C)	Output
1158-100	0~100mm	0.1μm/0.000005" (can switch to: 1μm/0.00005")	3μm	USB

STANDARD DELIVERY

Main unit	1 pc

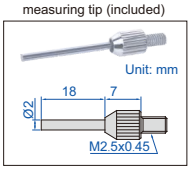
OPTIONAL ACCESSORY

Contact point	code **6282**
Charge pal	**1155-5-POB**
Data output cable (including foot switch)	**1155-5-FOS**

DIGITAL HEIGHT GAUGES

DATA OUTPUT

measuring tip (included)



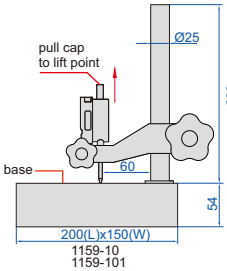
spindle lift knob is included

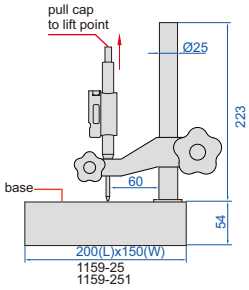
1159-101

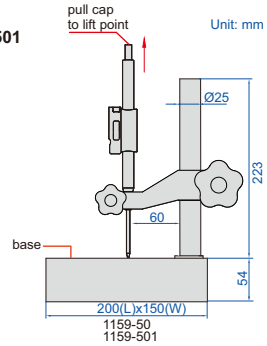
1159-25

1159-501

- Granite base flatness: 2.5μm
- Vertical travel of holder: 170mm
- Battery CR2032, data output
- Button function: on/off, inch/mm, zero, data preset, change measuring direction, absolute/incremental measurement
- Supplied with dust cover
- Optional accessory:
  wireless transmitter code **7315-51** (receiver is needed), contact points



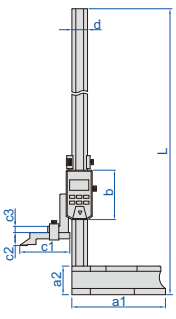




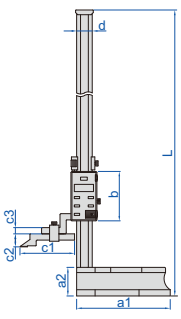
Code	Digital indicator stroke	Resolution	Accuracy	Maximum measuring force
1159-10	12.7mm/0.5"	0.01mm/0.0005"	20μm	1.5N
1159-25	25.4mm/1"	0.01mm/0.0005"	20μm	2.2N
1159-50	50.8mm/2"	0.01mm/0.0005"	30μm	2.5N
1159-101	12.7mm/0.5"	0.001mm/0.00005"	5μm	1.5N
1159-251	25.4mm/1"	0.001mm/0.00005"	5μm	2.2N
1159-501	50.8mm/2"	0.001mm/0.00005"	6μm	2.5N

DIGITAL HEIGHT GAUGES

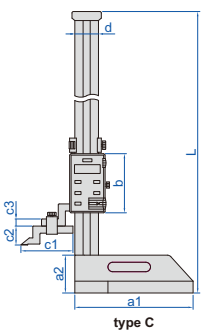
DATA OUTPUT



type A

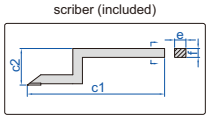


type B

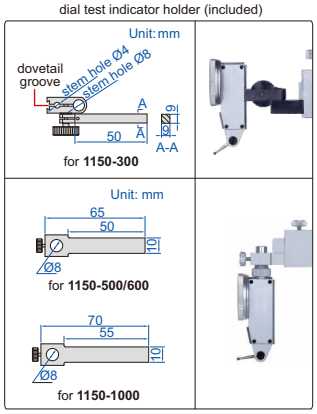


type C

scriber (included)



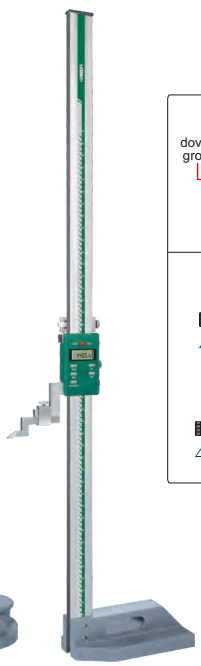
dial test indicator holder (included)



- Non waterproof
- Resolution: 0.01mm/0.0005"
- Buttons:
  Type A: on/off, zero, mm/inch, ABS/INC, data hold, set
  Type B and type C: on/off, zero, mm/inch, ABS/INC, data hold, TOL, set
- ABS/INC is for absolute and incremental measurement
- TOL is for tolerance measurement
- Carbide tipped scriber
- Made of stainless steel (except the base)
- Data output
- Supplied with dial test indicator holder
- Supplied with dust cover
- Power:
  Type A: CR2032
  Type B and type C: LR44
- Optional accessory:
  clamp for protractors (code **2372-CLAMP**, for **1150-300**)

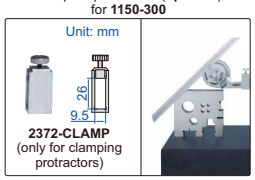
1150-300

1150-500



1150-1000

clamp for protractors (**optional**) for **1150-300**



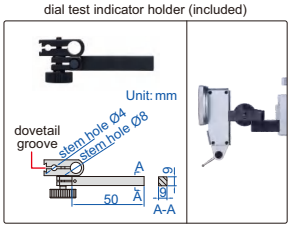
(mm)

Code	Range	Type	Accuracy	L	a1	a2	b	c1	c2	c3	d	e	f	Wireless transmitter (optional)
1150-300	0-300mm/0-12"	A	±0.04mm	485	138	45	100	80	30	10	28	9	9	**7315-22** (receiver is needed)
1150-500	0-500mm/0-20"	B	±0.06mm	720	180	55	95	103	25	12	30	10	12	**7315-1150** (receiver is needed)
1150-600	0-600mm/0-24"	B	±0.06mm	820	180	55	95	103	25	12	30	10	12	
1150-1000	0-1000mm/0-40"	C	±0.08mm	1275	250	80	125	110	39	15	50	10	15	

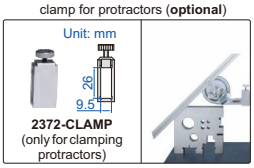
DIGITAL HEIGHT GAUGES WITH DRIVING WHEEL

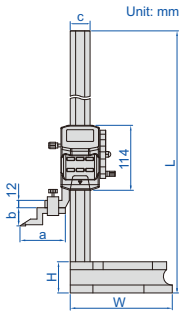
VIDEO · POPULAR MODEL · INSPECTION CERTIFICATE · DATA OUTPUT

dial test indicator holder (included)

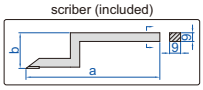


clamp for protractors (**optional**)





scriber (included)



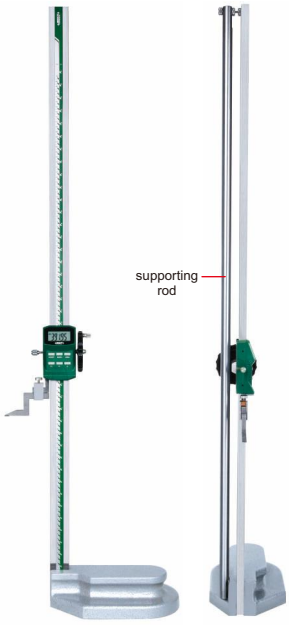
- Non waterproof
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch, preset (+, -), hold
- Automatic power off, move the digital unit to turn on power
- Carbide tipped scriber
- Made of stainless steel (except the base)
- Battery CR2032
- Data output
- Supplied with dust cover
- With dial test indicator holder
- Optional accessory: wireless transmitter code **7315-22** (receiver is needed), clamp for protractors (code **2372-CLAMP**)

(mm)

Code	Range	Accuracy	L	W	H	a	b	c	h
1156-300*	0-300mm/0-12"	±0.03mm	515	180	55	80	30	35	9
1156-600*	0-600mm/0-24"	±0.05mm	815	180	55	80	30	35	9
1156-1000*	0-1000mm/0-40"	±0.07mm	1220	265	70	92	48	40	12

*Supplied with manufacturer inspection certificate

1156-300



front side

1156-1000

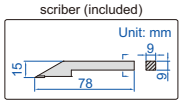
DIGITAL HEIGHT GAUGES

DATA OUTPUT

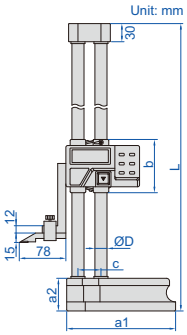
- Non waterproof
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch, data hold, ABS/INC, preset
- ABS/INC is for absolute and incremental measurement
- Automatic power off, move the digital unit to turn on power
- Carbide tipped scriber
- Made of stainless steel (except the base)
- Battery CR2032, data output
- With driving wheel
- With dial test indicator holder
- Supplied with dust cover
- Optional accessory: wireless transmitter code **7315-1151** (receiver is needed), clamp for protractors (code **2372-CLAMP**)

driving wheel on the back

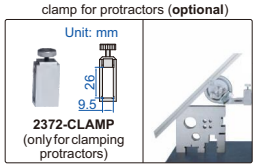
scriber (included)



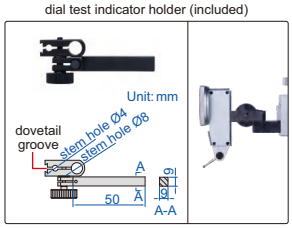
1151-300A



clamp for protractors (**optional**)



dial test indicator holder (included)



(mm)

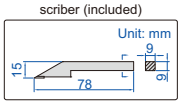
Code	Range	Accuracy	L	a1	a2	b	c	ØD
1151-300A	0-300mm/0-12"	±0.04mm	475	135	43	84	33	15
1151-450A	0-450mm/0-18"	±0.05mm	660	180	54	88	38	20
1151-600A	0-600mm/0-24"	±0.05mm	810	180	54	88	38	20

DIAL HEIGHT GAUGES

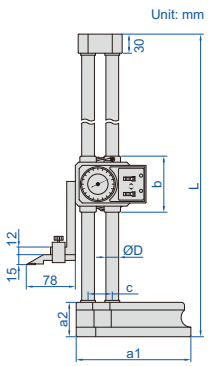
- Dial indicator graduation: 0.01mm
- One counter reads in the plus direction and another in the minus direction, so incremental measurement can be made in either direction
- Carbide tipped scriber
- Made of stainless steel (except the base)
- With driving wheel
- With dial test indicator holder
- Supplied with dust cover
- Optional accessory: clamp for protractors (code **2372-CLAMP**)

driving wheel on the back

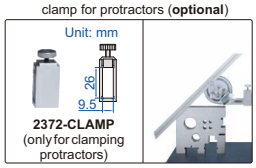
scriber (included)



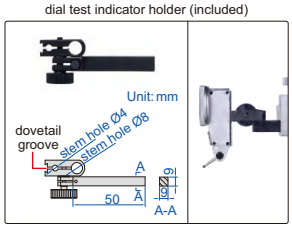
1351-300



clamp for protractors (**optional**)



dial test indicator holder (included)



(mm)

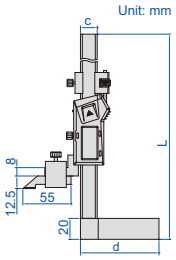
Code	Range	Accuracy	L	a1	a2	b	c	ØD
1351-300	0-300mm	±0.04mm	475	135	43	84	33	15
1351-450	0-450mm	±0.05mm	660	180	54	88	38	20
1351-600	0-600mm	±0.05mm	810	180	54	88	38	20

MINI DIGITAL HEIGHT GAUGES

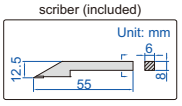
DATA OUTPUT

- Non waterproof
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Carbide tipped scriber
- With fine adjustment
- Made of stainless steel
- Battery CR2032, data output
- Optional accessory:
  wireless transmitter code **7315-22** (receiver is needed),
  dial test indicator holder (code **7151-CL1**)

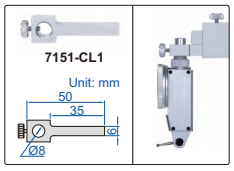
1154-150



scriber (included)



dial test indicator holder (**optional**)



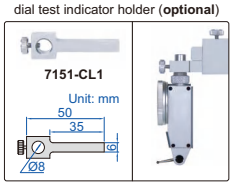
(mm)

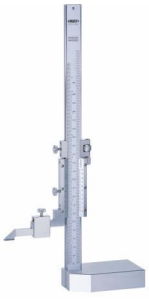
Code	Range	Accuracy	Resolution	L	C	D
1154-150	0-150mm/0-6"	±0.03mm	0.01mm/0.0005"	280	16	75
1154-200	0-200mm/0-8"	±0.03mm	0.01mm/0.0005"	340	20	90

MINI VERNIER HEIGHT GAUGES

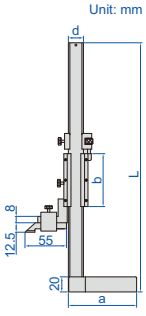
- Graduation 0.02mm/0.001"
- Carbide tipped scriber
- Made of stainless steel (except the base)
- Satin chrome plated scale
- Optional accessory: dial test indicator holder (code **7151-CL1**)

dial test indicator holder (**optional**)

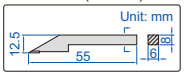




1253-200



scriber (included)

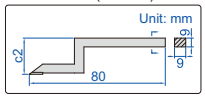


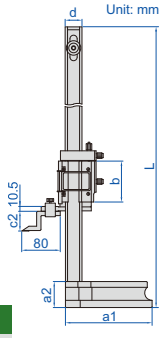
Code	Range	Accuracy	L	a	b	d
1253-150	0-150mm/0-6"	±0.03mm	265mm	75mm	57mm	16mm
1253-200	0-200mm/0-8"	±0.03mm	325mm	90mm	70mm	20mm

VERNIER HEIGHT GAUGES

- Graduation: 0.02mm/0.001"
- Adjustable main scale to set zero
- Carbide tipped scriber
- Made of stainless steel (except the base)
- Satin chrome plated scale
- Supplied with magnifier
- With fine adjustment
- Supplied with dust cover
- Optional accessory:
  dial test indicator holder (code **6293-6**),
  clamp for protractors (code **2372-CLAMP**)

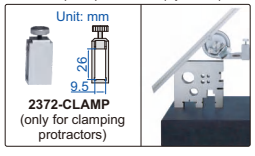
scriber (included)



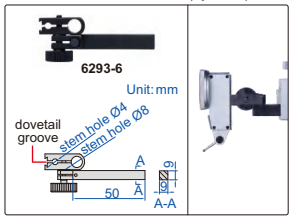


1250-300

clamp for protractors (**optional**)



dial test indicator holder (**optional**)



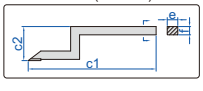
Code	Range	Accuracy	L	a1	a2	b	c2	d
1250-300	0-300mm/0-12"	±0.04mm	545mm	135mm	43mm	75mm	30mm	28mm
1250-450	0-450mm/0-18"	±0.05mm	720mm	180mm	54mm	85mm	41mm	35mm
1250-600	0-600mm/0-24"	±0.05mm	870mm	180mm	54mm	85mm	41mm	35mm

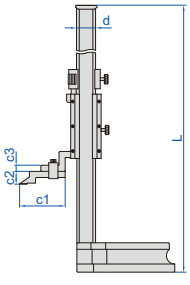
VERNIER HEIGHT GAUGES (BASIC TYPE)

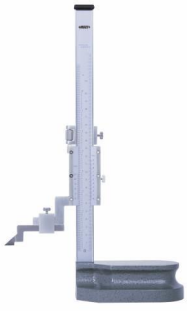
POPULAR MODEL

- Graduation: 0.02mm/0.001"
- Carbide tipped scriber
- Made of stainless steel (except the base)
- Satin chrome plated scale
- With dial test indicator holder
- Supplied with dust cover

scriber (included)

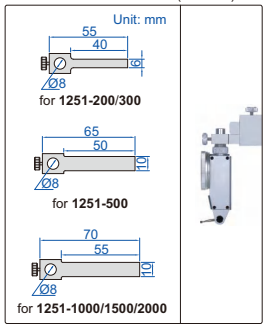






1251-200

dial test indicator holder (included)

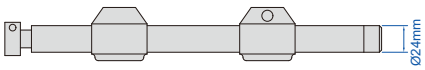


(mm)

Code	Range	Accuracy	L	c1	c2	c3	d	e	f
1251-200	0-200mm/0-8"	±0.03mm	370	76	25	10	23	6	8
1251-300	0-300mm/0-12"	±0.04mm	470	76	25	10	23	6	8
1251-500	0-500mm/0-20"	±0.05mm	720	105	25	12	30	10	12
1251-1000	0-1000mm/0-40"	±0.07mm	1275	110	39	15	50	10	15
1251-1500	0-1500mm/0-60"	±0.11mm	1790	110	39	15	50	10	15
1251-2000	0-2000mm/0-80"	±0.14mm	2290	110	39	15	50	10	15

UNIVERSAL COMPARISON GAUGE

- Measure outer diameter, inside diameter and center-to-center distance
- Movable point stroke: 10mm, effective range of movable point: ±2mm
- Optional accessory: gauge block accessory (code **6881**), gauge block holder (code **6886**) individual steel gauge blocks (code **4112**)



Code	Range of external diameter **	Range of internal diameter **	Accuracy *	Repeatability
2927-M200	0-200mm/0-8"	30-250mm/1.2"-10"	±5μm	2μm

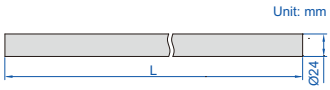
* After set zero, accuracy is ±5μm within range of ±2mm from zero position

** The measuring range will change according to different measuring points

Extension rods (optional)

2927-A1000CF

Code	Length (L)	Material
2927-A200	200mm	steel
2927-A500CF	500mm	carbon fiber
2927-A1000CF	1000mm	carbon fiber

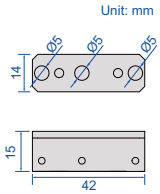


Digital indicator (optional)

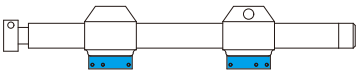
resolution: 0.001mm/0.00005"

Code	Range
2103-10F	12.7mm/0.5"

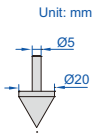
Stands (optional, supplied in pair)

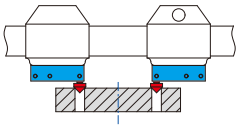


Code
2927-H



Conical points (optional, supplied in pair)

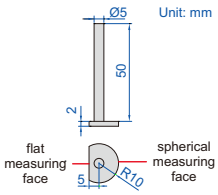


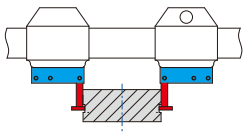


measuring center-to-center distance

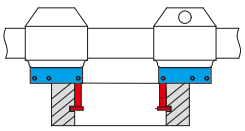
Code
2927-S102

Half disk points (optional, supplied in pair)





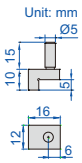
measuring external groove diameter with flat measuring face (depth≤2.5mm)

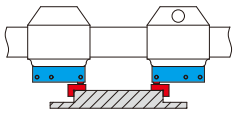


measuring internal groove diameter with spherical measuring face (depth≤7.5mm)

Code
2927-S101

Flat shoulder points (optional, supplied in pair)

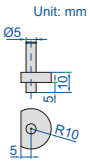


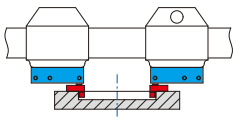


measure outside diameter of low boss

Code
2927-S103

Round shoulder points (optional, supplied in pair)





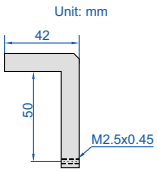
measure inside diameter of shallow hole

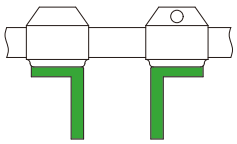
Code
2927-S104

To be continued

Continued from previous page

Measuring jaws (optional, supplied in pair)

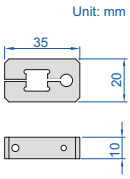


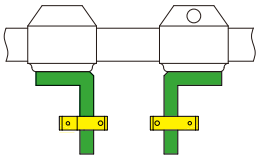


Code	Repeatability *
2927-J50	3μm

* When installing the measuring jaws

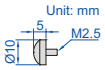
Depth stop (optional, supplied in pair)

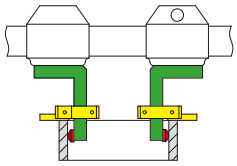




Code
2927-D

Spherical point (optional, supplied in single)

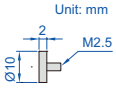


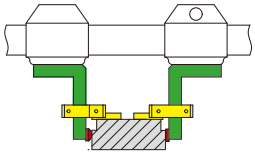


measure inside diameter
(2 spherical points)

Code
2927-S201

Flat point (optional, supplied in single)

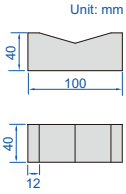




measure outer diameter
(1 spherical point, 1 flat point)

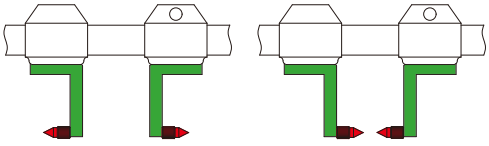
Code
2927-S202

V-shaped placement brackets (optional, supplied in pair)

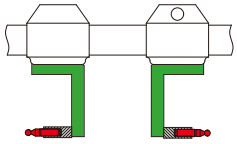


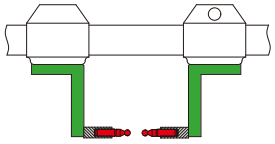
Code
2927-V

Points (optional, supplied in single)



Ball points (optional, supplied in pair)
Code 7391

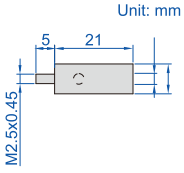




* It is necessary to use point sleeve (code **2927-T101**) for these points

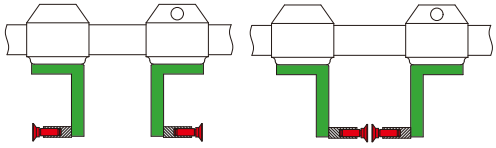
Multifunctional points (optional, supplied in pair)
Code 7392

* It is necessary to use point sleeve (code **2927-T101**) for these points

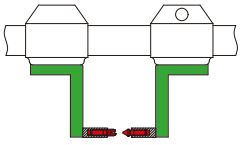


Point sleeve
(optional, supplied in pair)

Code
2927-T101

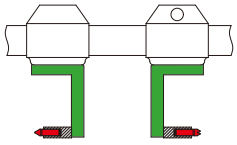


External thread points (optional, supplied in pair)
Code 7381



* It is necessary to use point sleeve (code **2927-T101**) for these points

Internal thread points (optional, supplied in pair)
Code 7321

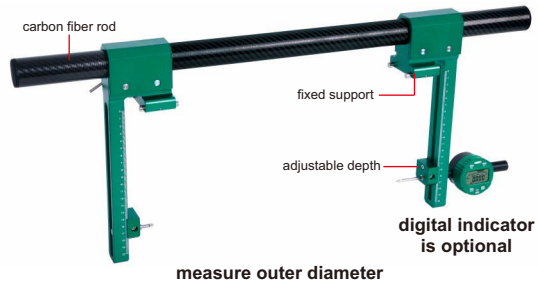


* It is necessary to use point sleeve (code **2927-T101**) for these points

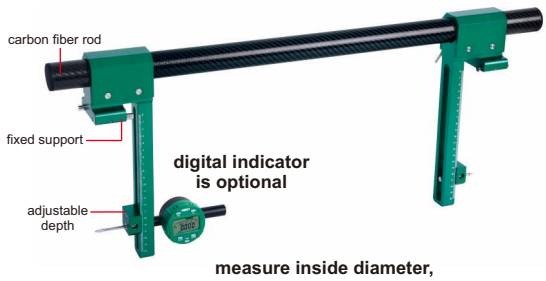
CARBON FIBER COMPARISON GAUGES

CARBON FIBER RODS, LIGHT WEIGHT, NOT EASY TO DEFORM, NO TEMPERATURE EXPAND, SUITABLE FOR THIN-WALL WORKPIECES AND LARGE-SIZE WORKPIECES

VIDEO



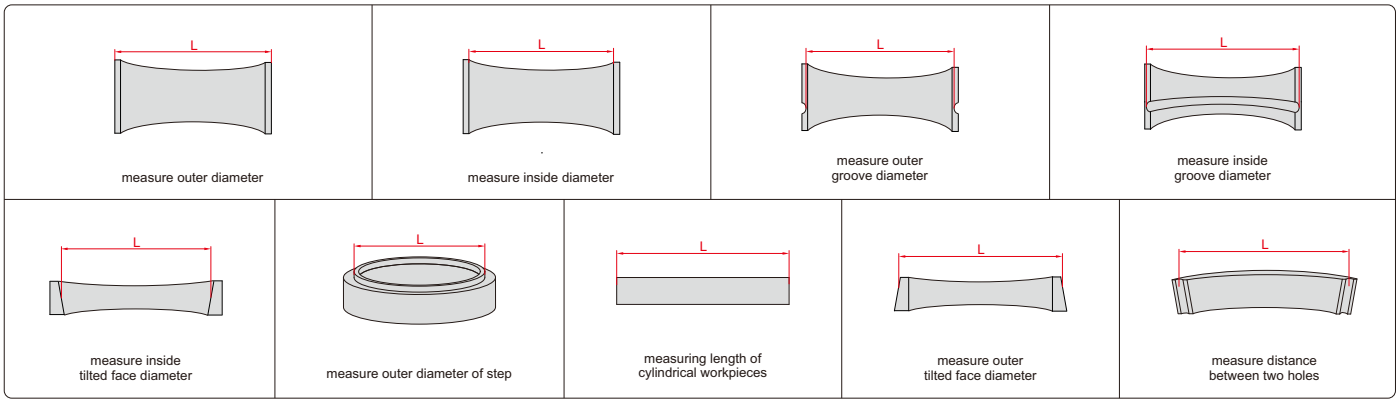
measure outer diameter



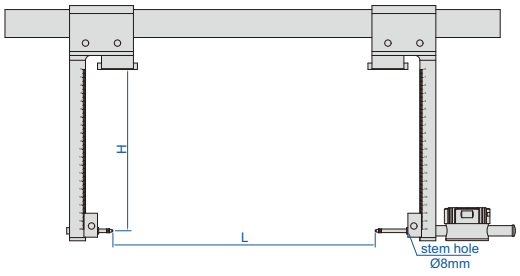
measure inside diameter, minimum diameter is 220mm

2931-D1000B

application



- Measure outer diameter, inside diameter, holes distance and cylindrical workpiece length
- Carbon fiber rods, light weight, not easy to deform, no temperature expand
- Optional accessory: cylinder gauge blocks (code **4001**), digital indicators (code **2138-25SP/2139-25SP/2103-25SP/2104-25SP**)



Code	Maximum measuring range (L)	Measuring depth (H)	Repeatability	Net weight
2931-D1000A	1000mm	0-100mm	5μm	2.0kg
2931-D1000B	1000mm	0-200mm	10μm	2.3kg
2931-D1000C	1000mm	0-300mm	25μm	2.6kg
2931-D1500A	1500mm	0-100mm	8μm	2.3kg
2931-D1500B	1500mm	0-200mm	15μm	2.6kg
2931-D1500C	1500mm	0-300mm	30μm	2.9kg
2931-D2000A	2000mm	0-100mm	10μm	2.6kg
2931-D2000B	2000mm	0-200mm	20μm	2.9kg
2931-D2000C	2000mm	0-300mm	35μm	3.2kg
2931-D2500A	2500mm	0-100mm	12μm	2.9kg
2931-D2500B	2500mm	0-200mm	25μm	3.2kg
2931-D2500C	2500mm	0-300mm	50μm	3.5kg
2931-D3000A	3000mm	0-100mm	14μm	3.2kg
2931-D3000B	3000mm	0-200mm	30μm	3.5kg
2931-D3000C	3000mm	0-300mm	60μm	3.8kg
2931-D4000A	4000mm	0-100mm	16μm	3.8kg
2931-D4000B	4000mm	0-200mm	35μm	4.1kg
2931-D4000C	4000mm	0-300mm	65μm	4.4kg

To be continued

Continued from previous page

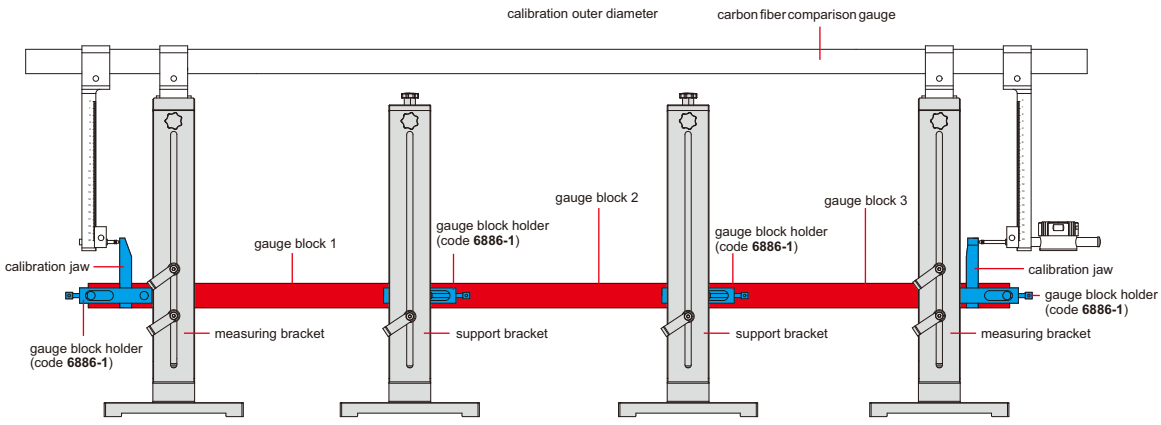
Calibration bracket (optional)

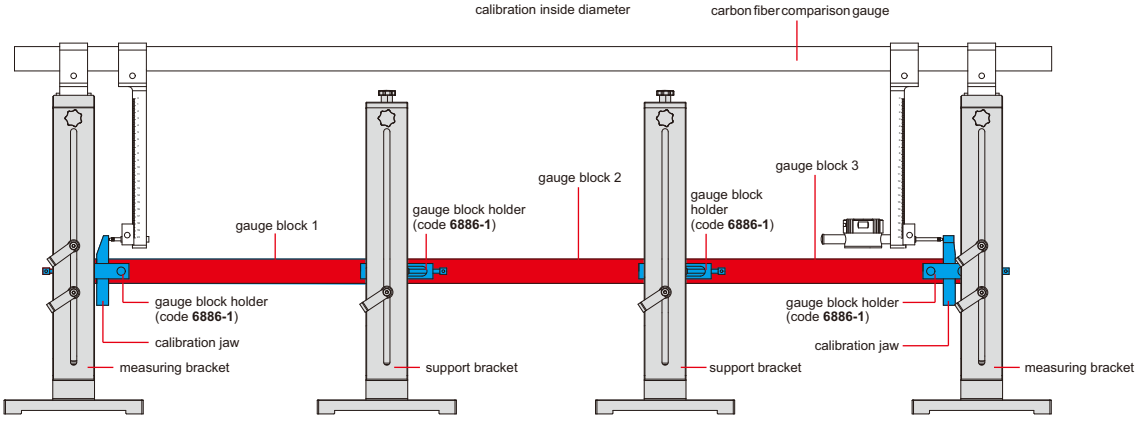
Code	Remark
2931-J□□□□□	can be customized according to carbon fiber comparison gauges, including 2 measuring brackets and multiple support brackets to support gauge blocks

Calibration jaw (optional, supplied in pair)

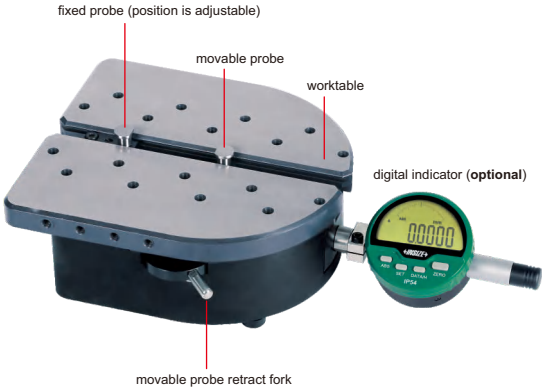
Code	Remark
2931-F	made of carbide

application





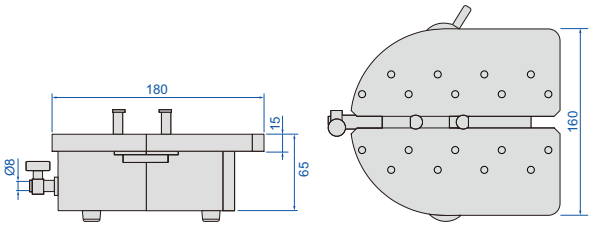
UNIVERSAL COMPARISON MEASURING BENCH



6848-145

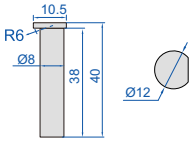
VIDEO

Unit: mm



Probes (included, supplied in pair)

Unit: mm

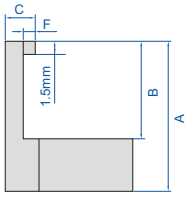


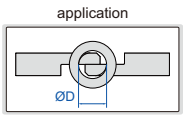
- Switchable measurement direction for measuring internal and external diameter
- Adjustable measuring force: 2-5N
- Movable probe travel: ±10mm
- Optional accessory: digital indicators (code **2138-25F**, **2508-25FWL**, **2136-25**, **2133-25**)

Code	Range of external ** diameter	Range of internal ** diameter	Accuracy (without digital indicator)	Any ±1mm accuracy * (without digital indicator)	Repeatability (without digital indicator)
6848-145	0-100mm	25-120mm	5μm	2μm	2μm

*After set zero, accuracy is 2μm within range of ±1mm from zero position
**The measuring range will change according to different measuring probes

Internal groove probes (optional, supplied in pair)



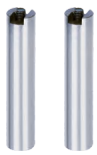


(mm)

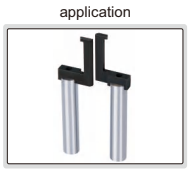
Code	Minimum measuring internal diameter ØD	A	B	C	F
6848-S201 *	6mm	20	13	3.8	1.4
6848-S202 *	8mm	24	18	6	2.2
6848-S203 *	8mm	28	22	6	2

*It is necessary to use internal groove probe holder (code **6848-T201**)

Internal groove probe holders (optional, supplied in pair)



Unit: mm

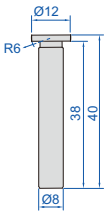


Code
6848-T201

Disk probes (optional, supplied in pair)

Code
6848-S101

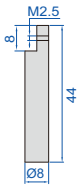
Unit: mm



Probe holders (optional, supplied in pair)

Code
6848-T401

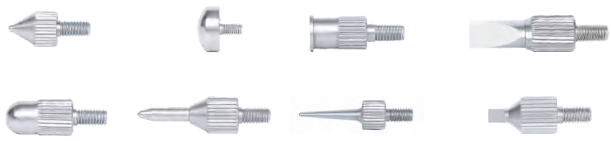
Unit: mm

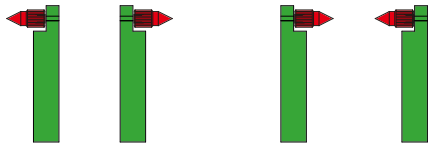


To be continued

Continued from previous page

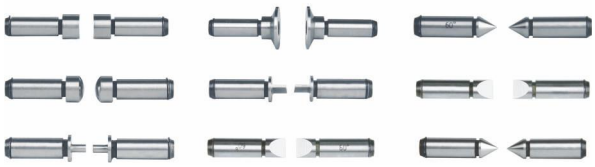
Probes (optional, supplied in single)
Code 6282*



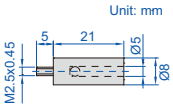


*It is necessary to use probe holders (code **6848-T401**) for these probes

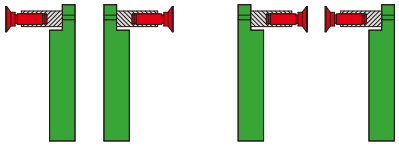
Multifunctional probes (optional, supplied in pair)
Code 7392*



Probe sleeve (optional, supplied in pair)

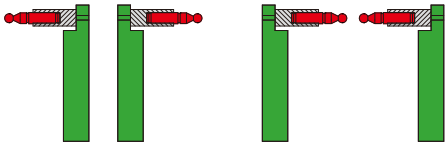


Code
2927-T101



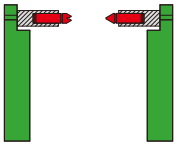
*It is necessary to use probe holders (code **6848-T401**) and probe sleeve (code **2927-T101**) for these probes

Ball probes (optional, supplied in pair)
Code 7391*



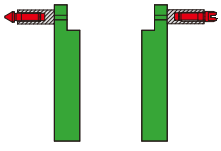
* It is necessary to use probe holders (code **6848-T401**) and probe sleeve (code **2927-T101**) for these probes

External thread probes (optional, supplied in pair)
Code 7381*



* It is necessary to use probe holders (code **6848-T401**) and probe sleeve (code **2927-T101**) for these probes

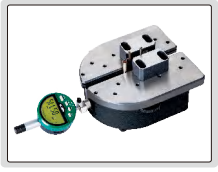
Internal thread probes (optional, supplied in pair)
Code 7321*

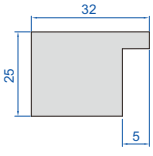


*It is necessary to use probe holders (**code 6848-T401**) and probe sleeve (**code 2927-T101**) for these probes

Spacer blocks (optional, supplied in pair)

application

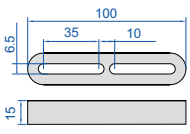




Code
6848-B10

Stop block (optional)

application



Code
6848-A10

HORIZONTAL MEASURING BENCH

ATTENTION: DIGITAL INDICATOR USES RECHARGEABLE BATTERY, FOR 24 HOURS CONTINUOUS WORKING

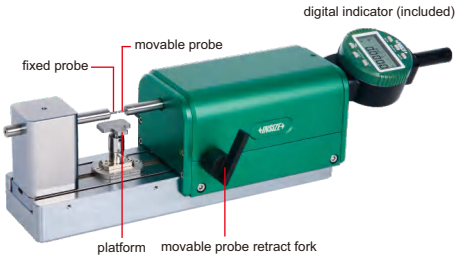
PROBE AND PLATFORM CAN BE CUSTOMIZED

DATA OUTPUT

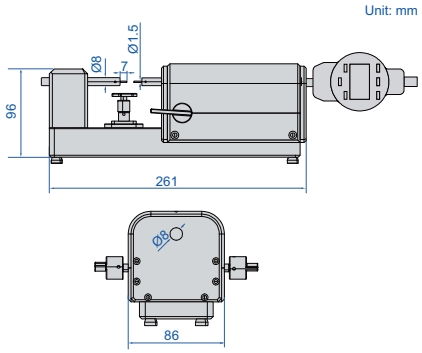
MEASURING FORCE CAN BE CUSTOMIZED, MINIMUM MEASURING FORCE IS 2N

DIGITAL INDICATOR USES ABSOLUTE ENCODER, THE ORIGINAL DATA REMAINS AFTER POWER OFF

VIDEO



6849-60



- Quickly measure outside diameters
- The platform can move horizontally and the height is adjustable
- For left and right hand operation
- Carbide probes
- Digital indicator uses linear ball bearings and can be used ten million times
- Digital indicator uses absolute encoder, the original data remains after power off
- Digital indicator reading in digital and analog
- Data output
- Digital indicator button function: data output, tolerance, data preset, data hold, measuring direction change, max./min./TIR, power off time, on/off, mm/inch, resolution adjustment
- Digital indicator uses rechargeable battery, for 24 hours continuous working
- Optional accessory: wireless transmitter code **7315-60** (receiver is needed)

Code	Range	Movable probe travel	Resolution	Accuracy	Any ±1mm accuracy*	Repeatability	Measuring force	Net weight
6849-60	0-50mm	20mm	0.0002mm/0.00001"	5μm	1μm	0.4μm	4N	6.4kg

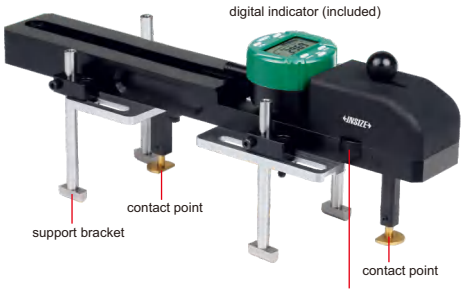
*After set zero at any position, accuracy is 1μm within ±1mm from zero position

DIGITAL COMPARISON GAUGE

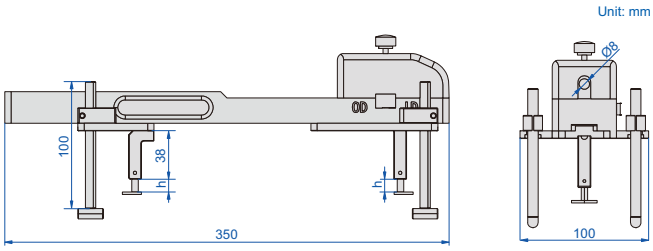
VIDEO

CAN BE CUSTOMIZED

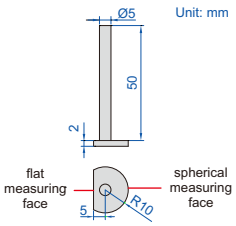
DATA OUTPUT



2514-300



Contact points (included, supplied in pair)



- Measure internal diameter and external diameter
- Measuring force: 3-4N, point height is adjustable (h): 10-40mm
- Digital indicator display can be rotated by 320°
- Digital indicator button function: on/off, zero setting, tolerance Go and No-Go display, measuring direction change, max./min./TIR measurement, data preset, inch/metric conversion, data output, absolute/incremental measurement
- Digital indicator can keep preset data and tolerance data in memory after restart
- Battery CR2032
- Optional accessory: gauge blocks (code **4101**), gauge block accessory (code **6881**)

With data interface (optional wireless transmitter code 7315-50M, receiver is needed)

Code	Range of internal/ external diameter	Contact point stroke	Accuracy	Repeatability	Indicator
2514-300	100-300mm	10mm	5μm	2μm	digital indicator, code **2138-10F**, range 12.7mm/0.5", resolution 0.001mm/0.00005"

COMPARISON GAUGES

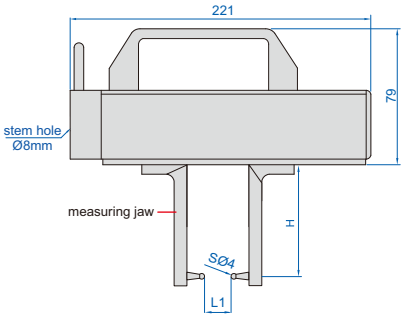
CUSTOMIZABLE MEASURING JAWS AND POINTS

VIDEO

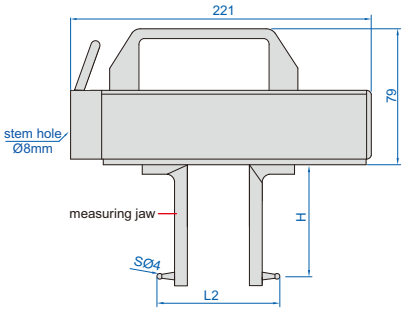
measure external diameter
2252-120

measure internal diameter
2252-220

Unit: mm



2252-102, 2252-120



2252-202, 2252-220

- Measure external diameter, internal diameter and over-pin diameter of gears
- Total range of movable point: 8mm, effective range of movable point: ±1mm
- Optional accessory: digital indicator (code **2138-10F**), gauge block grade 1 (**4101-B** series)

Measure external diameter

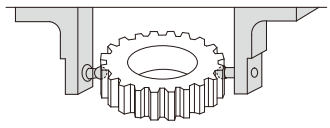
Code	Range of external diameter (L1)	Accuracy*	Repeatability	H
2252-102	0-90mm/0-3.54"	±5μm	2μm	40mm
2252-120	0-80mm/0-3.15"	±5μm	2μm	70mm

Measure internal diameter

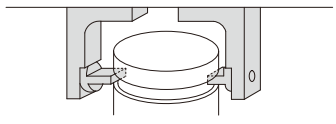
Code	Range of internal diameter (L2)	Accuracy*	Repeatability	H
2252-202	40-145mm/1.58-5.71"	±5μm	2μm	40mm
2252-220	55-150mm/2.17-5.91"	±5μm	2μm	70mm

*Within ±1mm effective range

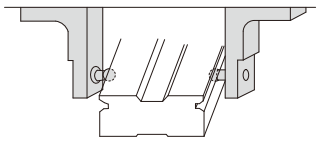
external diameter measurement application



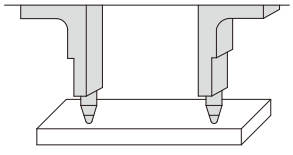
measure over-pin diameter of gears



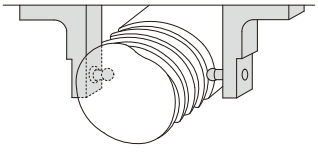
measure external groove diameter



measure distance of V-slot grooves



measure distance between two holes

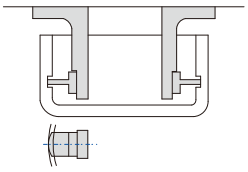


two-point measurement of ball screws

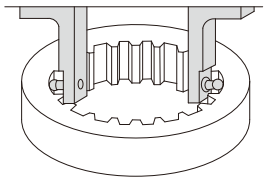
To be continued

Continued from previous page

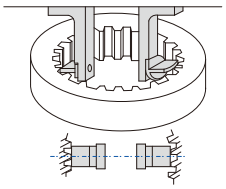
internal diameter measurement application



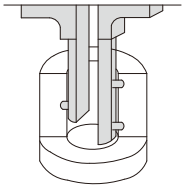
measure internal groove diameter



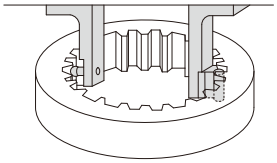
measure major diameter at the missing teeth of internal spline



measure minor diameter of internal odd teeth

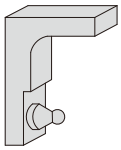


three-point measurement of ball splines and ball nuts

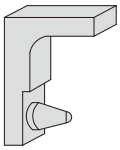


ball/cylinder points measurement of internal spline over-pin diameter

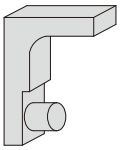
customizable points



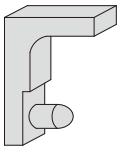
ball point



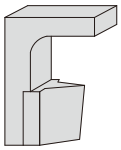
ball point



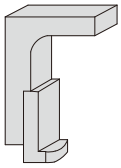
flat point



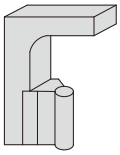
shell type point



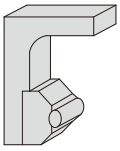
external thread minor diameter point



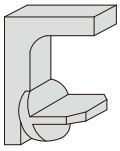
shallow hole point



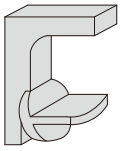
cylindrical point for gear



cylindrical point for gear

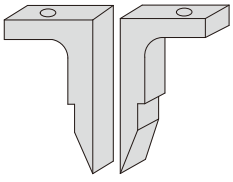


external groove point

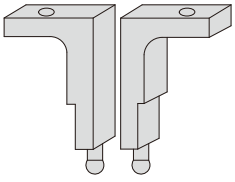


internal groove point

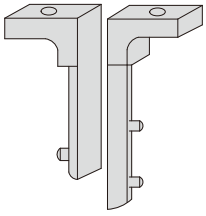
customizable measuring jaws



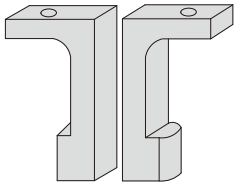
width measuring jaws



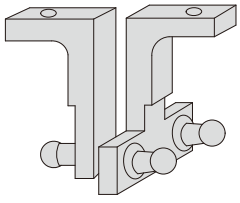
shallow hole distance measuring jaws



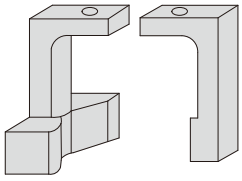
ball splines/nuts measuring jaws



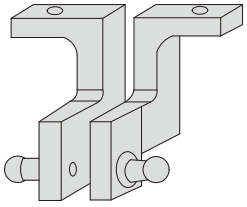
one-piece measuring jaws



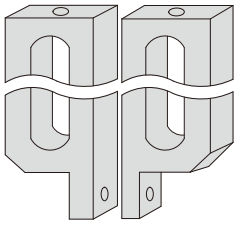
three-point measuring jaws



major diameter measuring jaws of odd teeth



eccentric measuring jaws



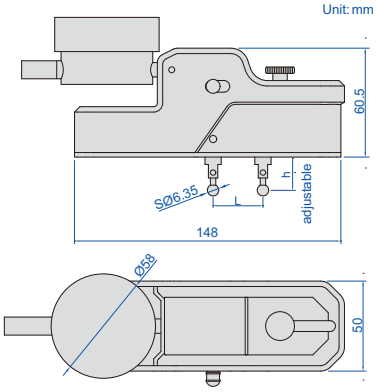
special shaped measuring jaws

DIGITAL INTERNAL MEASURING GAUGES

VIDEO

DATA OUTPUT

2932-451



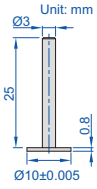
- Measure internal dimensions
- Resolution: 0.001mm/0.00005"
- Accuracy: 5μm
- Repeatability: 1μm
- Movable point stroke: 5mm/0.02"
- Point height is adjustable, h=2-25mm
- CR2032 battery, automatic power off (time is adjustable)
- Data output

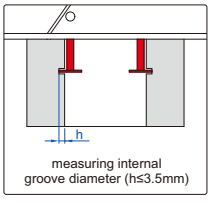
Code	Measuring range (L)*	Indicator	Wireless transmitter (optional)
2932-45	24-50mm/0.95-2"	button function: on/off, inch/mm, zero, data preset, change measuring direction, absolute/incremental measurement	**7315-50M** (receiver is needed)
2932-451	24-50mm/0.95-2"	with transmission button and signal light; reading in digital and analog; display can be rotated by 320°; button function: on/off, inch/mm, zero, data preset, change measuring direction, absolute/incremental measurement, max./min./TIR measurement, tolerance Go and No-Go display	**7315-51** (receiver is needed)

* The measuring range will change accordingly for different measuring points

Disk points (optional, supplied in pair)

2932-S101

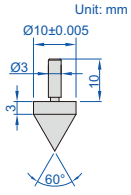


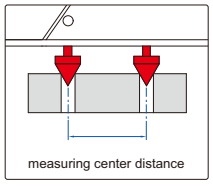


Code	Measuring range	Material
2932-S101	30-55mm/1.2-2.2"	stainless steel

Conical points (optional, supplied in pair)

2932-S102

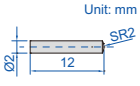


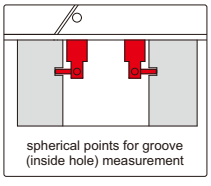


Code	Measuring range	Material
2932-S102	20-45mm/0.8-1.8"	stainless steel

Spherical points (optional, supplied in pair)

2932-S103

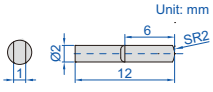


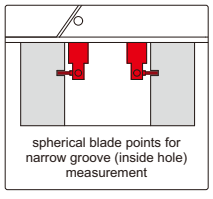


Code	Measuring range	Material
2932-S103	30-60mm/1.2-2.4"	stainless steel

Spherical blade points (optional, supplied in pair)

2932-S104





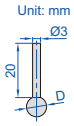
Code	Measuring range	Material
2932-S104	30-60mm/1.2-2.4"	stainless steel

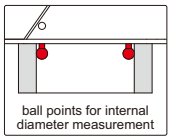
To be continued

Continued from previous page

Ball points (optional, supplied in pair)

1527-T104

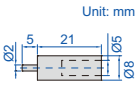




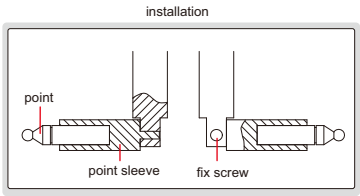
Code	Diameter (D)	Accuracy of diameter	Material
1527-T102	1/8" (Ø3.175mm)	±0.005mm	stainless steel
1527-T103	3/16" (Ø4.7625mm)	±0.005mm	stainless steel
1527-T104	1/4" (Ø6.35mm)	±0.005mm	stainless steel
1527-T105	3/8" (Ø9.525mm)	±0.005mm	stainless steel
1527-T106	1/2" (Ø12.7mm)	±0.005mm	stainless steel

Point sleeve (optional, supplied in pair)

1526-T101



Code
1526-T101



Multifunctional points (optional, supplied in pair)

7392-T1

7392-T2

7392-T3

7392-T4

7392-T5

7392-T6

7392-T7

7392-T8

7392-T9

Code	Type
7392-T1*	flat
7392-T2*	spherical
7392-T3*	spline

Code	Type
7392-T4*	disk
7392-T5*	blade
7392-T6*	knife-edge

Code	Type
7392-T7*	point
7392-T8*	knife-edge
7392-T9*	point

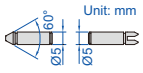
Measuring range**
80-105mm/3.2-4.2"

**After installing points and point sleeve

*It is necessary to use point sleeve (code **1526-T101**) for these points

Screw thread points (optional, supplied in pair)

7321-T16



Internal thread (60° thread angle)

Code	Pitch
7321-T11*	0.4-0.5mm/64-48TPI
7321-T12*	0.6-0.9mm/44-28TPI
7321-T13*	1-1.75mm/24-14TPI
7321-T14*	2-3mm/13-9TPI
7321-T15*	3.5-5mm/8-5TPI
7321-T16*	5.5-7mm/4.5-3.5TPI
7321-T1S*	6 pairs/set, including all above points

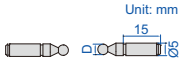
Measuring range**
80-105mm/3.2-4.2"

**After installing points and point sleeve

*It is necessary to use point sleeve (code **1526-T101**) for these points

Ball points (optional, supplied in pair)

7391-T5



Code	Ball dia. (D)
7391-T2*	SØ1.5mm
7391-T3*	SØ2.0mm
7391-T4*	SØ2.5mm
7391-T5*	SØ3.0mm
7391-T6*	SØ3.5mm
7391-T7*	SØ4.0mm
7391-T8*	SØ4.5mm
7391-T9*	SØ5.0mm
7391-T10*	SØ6.0mm

Measuring range**
80-105mm/3.2-4.2"

**After installing points and point sleeve

*It is necessary to use point sleeve (code **1526-T101**) for these points

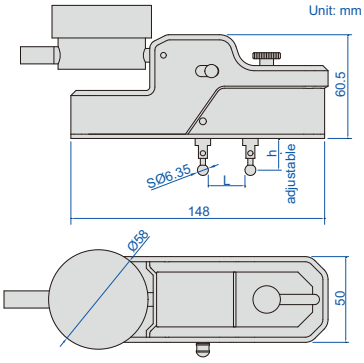
DIGITAL EXTERNAL MEASURING GAUGE

VIDEO

DATA OUTPUT

- Measure external dimensions
- Resolution: 0.001mm/0.00005"
- Accuracy: 5μm
- Repeatability: 1μm
- Movable point stroke: 5mm/0.2"
- Point height is adjustable, h=2-25mm
- CR2032 battery, automatic power off (time is adjustable)
- Data output

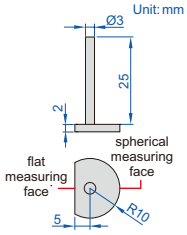
2934-401

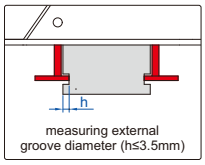


Code	Measuring range (L)*	Indicator	Wireless transmitter (optional)
2934-401	13-38mm/0.51-1.5"	With transmission button and signal light Reading in digital and analog Display can be rotated by 320° Button function: on/off, inch/mm, zero, data preset, change measuring direction, absolute/incremental measurement, max./min./TIR measurement, tolerance Go and No-Go display	**7315-51** (receiver is needed)

*The measuring range will change according to different measuring points

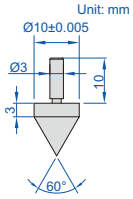
Disk points (optional, supplied in pair)

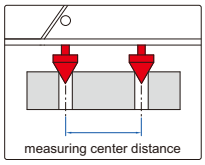




Code	Measuring range	Material
2934-S101	10-35mm/0.4-1.4"	stainless steel

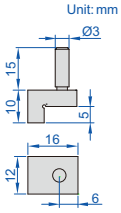
Conical points (optional, supplied in pair)

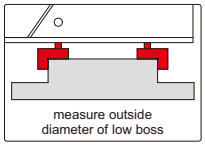




Code	Measuring range	Material
2932-S102	20-45mm/0.8-1.8"	stainless steel

Flat shoulder points (optional, supplied in pair)

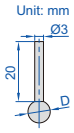


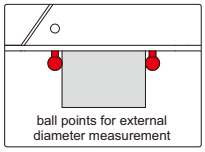


Code	Measuring range	Material
2934-S102	30-55mm/1.2-2.2"	stainless steel

Ball points (optional, supplied in pair)

1527-T104



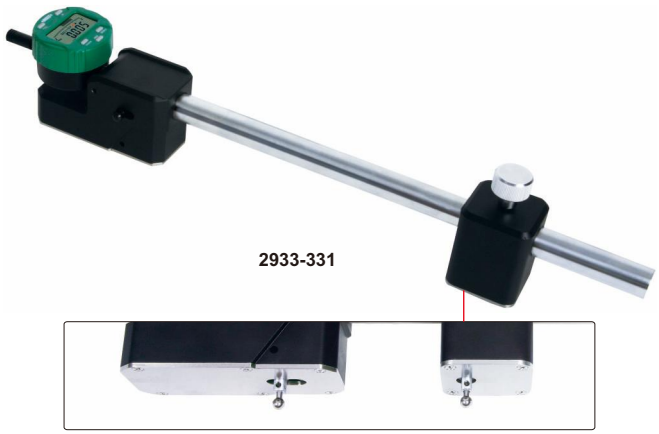


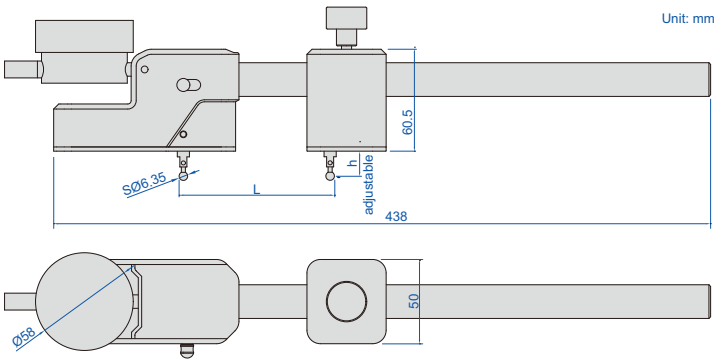
Code	Diameter (D)	Accuracy of diameter	Material
1527-T102	1/8" (Ø3.175mm)	±0.005mm	stainless steel
1527-T103	3/16" (Ø4.7625mm)	±0.005mm	stainless steel
1527-T104	1/4" (Ø6.35mm)	±0.005mm	stainless steel
1527-T105	3/8" (Ø9.525mm)	±0.005mm	stainless steel
1527-T106	1/2" (Ø12.7mm)	±0.005mm	stainless steel

LARGE RANGE DIGITAL INTERNAL MEASURING GAUGES

VIDEO

DATA OUTPUT



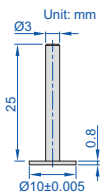


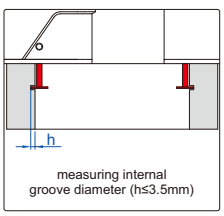
- Measure internal dimensions
- Resolution: 0.001mm/0.00005"
- Accuracy: 5μm
- Repeatability: 1μm
- Movable point stroke: 5mm/0.2"
- Point height is adjustable, h=2-25mm
- CR2032 battery, automatic power off (time is adjustable)
- Data output

Code	Measuring range (L) *	Indicator	Wireless transmitter (optional)
2933-330	48-330mm/1.89-13"	Button function: on/off, inch/mm, zero, data preset, change measuring direction, absolute/incremental measurement	**7315-50M** (receiver is needed)
2933-331	48-330mm/1.89-13"	With transmission button and signal light Reading in digital and analog Display can be rotated by 320° Button function: on/off, inch/mm, zero, data preset, change measuring direction, absolute/incremental measurement, max./min./TIR measurement, tolerance Go and No-Go display	**7315-51** (receiver is needed)

* The measuring range will change according to different measuring points

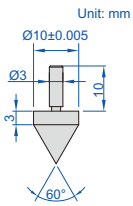
Disk points (optional, supplied in pair)

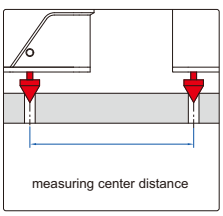




Code	Measuring range	Material
2932-S101	52-330mm/2.05-13"	stainless steel

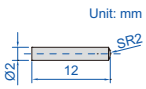
Conical points (optional, supplied in pair)

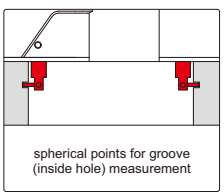




Code	Measuring range	Material
2932-S102	42-320mm/1.65-12.6"	stainless steel

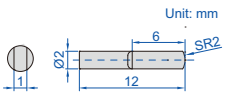
Spherical points (optional, supplied in pair)

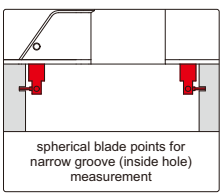




Code	Measuring range	Material
2932-S103	55-330mm/2.16-13"	stainless steel

Spherical blade points (optional, supplied in pair)





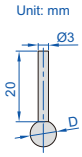
Code	Measuring range	Material
2932-S104	55-330mm/2.16-13"	stainless steel

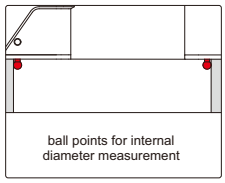
To be continued

Continued from previous page

Ball points (optional, supplied in pair)

1527-T104

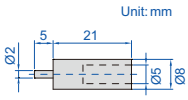


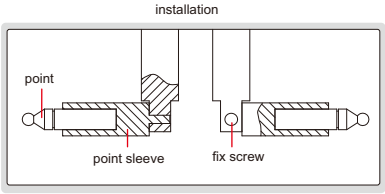


Code	Diameter (D)	Accuracy of diameter	Material
1527-T102	1/8" (Ø3.175mm)	±0.005mm	stainless steel
1527-T103	3/16" (Ø4.7625mm)	±0.005mm	stainless steel
1527-T104	1/4" (Ø6.35mm)	±0.005mm	stainless steel
1527-T105	3/8" (Ø9.525mm)	±0.005mm	stainless steel
1527-T106	1/2" (Ø12.7mm)	±0.005mm	stainless steel

Point sleeve (optional, supplied in pair)

Code
1526-T101





Multifunctional points (optional, supplied in pair)

7392-T1

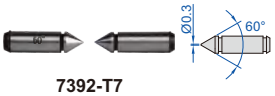
7392-T2

7392-T3

7392-T4

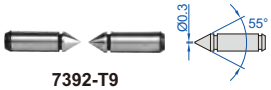
7392-T5

7392-T6



7392-T7

7392-T8



7392-T9

Measuring range**
100-370mm/3.94-14.5"

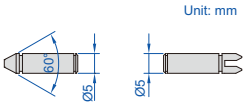
**After installing points and point sleeve

Code	Type
7392-T1*	flat
7392-T2*	spherical
7392-T3*	spline
7392-T4*	disk
7392-T5*	blade
7392-T6*	knife-edge
7392-T7*	point
7392-T8*	knife-edge
7392-T9*	point

*It is necessary to use point sleeve (code **1526-T101**) for these points

Screw thread points (optional, supplied in pair)

7321-T16



Measuring range**
100-370mm/3.94-14.5"

**After installing points and point sleeve

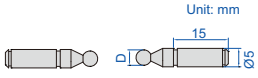
Internal thread (60° thread angle)

Code	Pitch
7321-T11*	0.4-0.5mm/64-48TPI
7321-T12*	0.6-0.9mm/44-28TPI
7321-T13*	1-1.75mm/24-14TPI
7321-T14*	2-3mm/13-9TPI
7321-T15*	3.5-5mm/8-5TPI
7321-T16*	5.5-7mm/4.5-3.5TPI
7321-T1S*	6 pairs/set, including all above points

*It is necessary to use point sleeve (code **1526-T101**) for these points

Ball points (optional, supplied in pair)

7391-T5



Measuring range**
100-370mm/3.94-14.5"

**After installing points and point sleeve

Code	Ball dia. (D)
7391-T2*	SØ1.5mm
7391-T3*	SØ2.0mm
7391-T4*	SØ2.5mm
7391-T5*	SØ3.0mm
7391-T6*	SØ3.5mm
7391-T7*	SØ4.0mm
7391-T8*	SØ4.5mm
7391-T9*	SØ5.0mm
7391-T10*	SØ6.0mm

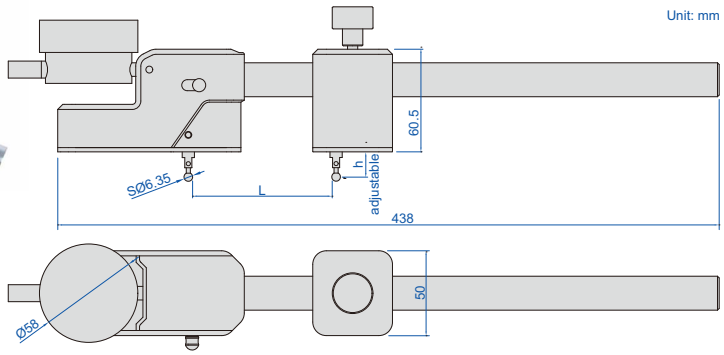
*It is necessary to use point sleeve (code **1526-T101**) for these points

LARGE RANGE DIGITAL EXTERNAL MEASURING GAUGE

DATA OUTPUT

VIDEO

2935-321

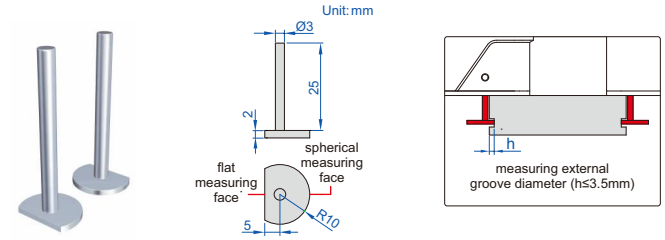


- Measure external dimensions
- Resolution: 0.001mm/0.00005"
- Accuracy: 5μm
- Repeatability: 1μm
- Movable point stroke: 5mm/0.2"
- Point height is adjustable, h=2-25mm
- CR2032 battery, automatic power off (time is adjustable)
- Data output

Code	Measuring range (L)*	Indicator	Wireless transmitter (optional)
2935-321	35-320mm/1.4-12.6"	With transmission button and signal light Reading in digital and analog Display can be rotated by 320° Button function: on/off, inch/mm, zero, data preset, change measuring direction, absolute/incremental measurement, max./min./TIR measurement, tolerance Go and No-Go display	**7315-51** (receiver is needed)

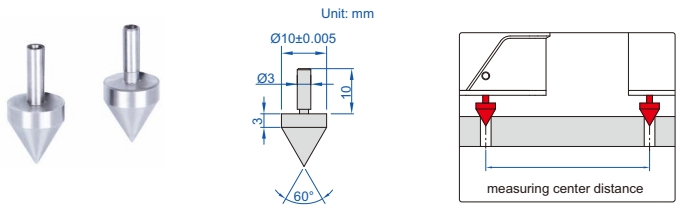
*The measuring range will change according to different measuring points

Disk points (optional, supplied in pair)



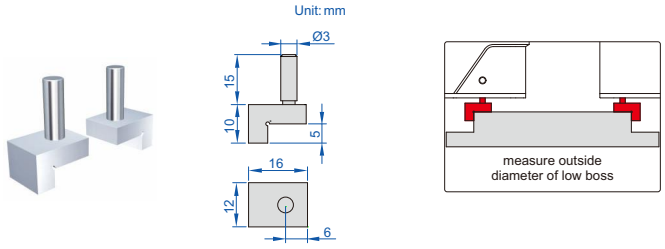
Code	Measuring range	Material
2934-S101	32-320mm/1.26-12.6"	stainless steel

Conical points (optional, supplied in pair)



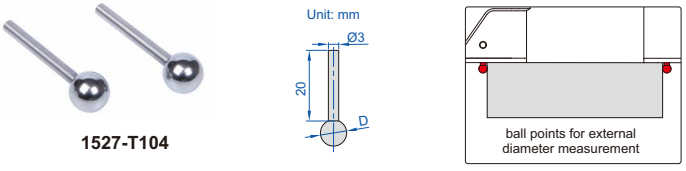
Code	Measuring range	Material
2932-S102	42-320mm/1.65-12.6"	stainless steel

Flat shoulder points (optional, supplied in pair)



Code	Measuring range	Material
2934-S102	52-320mm/2.05-12.6"	stainless steel

Ball points (optional, supplied in pair)



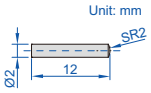
1527-T104

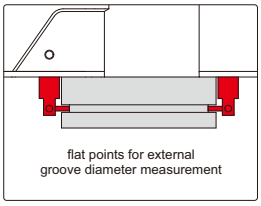
Code	Diameter (D)	Accuracy of diameter	Material
1527-T102	1/8" (Ø3.175mm)	±0.005mm	stainless steel
1527-T103	3/16" (Ø4.7625mm)	±0.005mm	stainless steel
1527-T104	1/4" (Ø6.35mm)	±0.005mm	stainless steel
1527-T105	3/8" (Ø9.525mm)	±0.005mm	stainless steel
1527-T106	1/2" (Ø12.7mm)	±0.005mm	stainless steel

To be continued

Continued from previous page

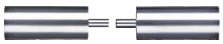
Spherical/flat points (optional, supplied in pair)

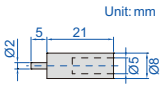


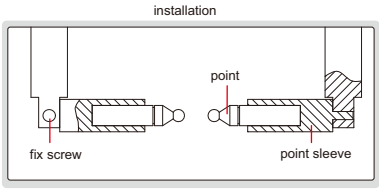


Code	Measuring range	Material
2932-S103	30-320mm/1.2-12.6"	stainless steel

Point sleeve (optional, supplied in pair)





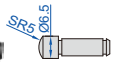


Code
1526-T101

Multifunctional points (optional, supplied in pair)

Unit: mm

7392-T1



7392-T2

7392-T3

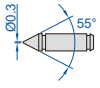
7392-T4

7392-T5

7392-T6

7392-T7

7392-T8



7392-T9

Measuring range**
0-300mm/0-11.8"

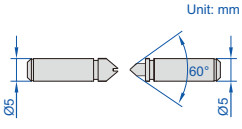
**After installing points and point sleeve

Code	Type
7392-T1*	flat
7392-T2*	spherical
7392-T3*	spline
7392-T4*	disk
7392-T5*	blade
7392-T6*	knife-edge
7392-T7*	point
7392-T8*	knife-edge
7392-T9*	point

*It is necessary to use point sleeve (code **1526-T101**) for these points

Screw thread points (optional, supplied in pair)

7381-T16



Measuring range**
0-300mm/0-11.8"

**After installing points and point sleeve

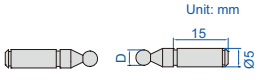
External thread (60° thread angle)

Code	Pitch
7381-T11*	0.4-0.5mm/64-48TPI
7381-T12*	0.6-0.9mm/44-28TPI
7381-T13*	1-1.75mm/24-14TPI
7381-T14*	2-3mm/13-9TPI
7381-T15*	3.5-5mm/8-5TPI
7381-T16*	5.5-7mm/4.5-3.5TPI
7381-TS*	6 pairs/set, including all above points

*It is necessary to use point sleeve (code **1526-T101**) for these points

Ball points (optional, supplied in pair)

7391-T5



Measuring range**
0-300mm/0-11.8"

**After installing points and point sleeve

Code	Ball dia. (D)
7391-T2*	SØ1.5mm
7391-T3*	SØ2.0mm
7391-T4*	SØ2.5mm
7391-T5*	SØ3.0mm
7391-T6*	SØ3.5mm
7391-T7*	SØ4.0mm
7391-T8*	SØ4.5mm
7391-T9*	SØ5.0mm
7391-T10*	SØ6.0mm

*It is necessary to use point sleeve (code **1526-T101**) for these points

HIGH PRECISION DIGITAL MICROMETERS/SNAP GAUGES

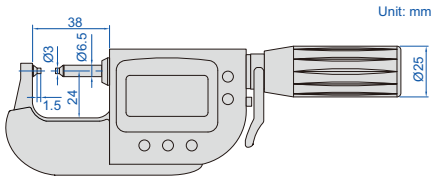
NON-ROTATING SPINDLE | ONE TURN OF SLEEVE MAKES 5MM SPINDLE FEED, PRESS THE FORK, THE SPINDLE RETRACTS 3MM

INSPECTION CERTIFICATE | DATA OUTPUT | IP65 WATERPROOF | MEASUREMENT ACCURACY IS NOT AFFECTED BY THE USE OF SLEEVE | ABSOLUTE ENCODER, THE ORIGINAL DATA REMAINS AFTER POWER OFF | ATTENTION: RECHARGEABLE BATTERY, FOR 24 HOURS CONTINUOUS WORKING

VIDEO

- Absolute encoder, the original data remains after power off
- Accuracy: ±0.5μm, repeatability: 0.3μm
- Resolution: 0.0001mm/0.00001"
- One turn of sleeve makes 10mm spindle feed
- Measurement accuracy is not affected by the use of sleeve
- Press the fork, the spindle retracts 3mm
- Carbide measuring faces
- Measuring force 5-10N
- Button function: data output, tolerance, data preset, data hold, measuring direction change, max./min./TIR, power off time, on/off, zero, mm/inch
- Power: rechargeable battery, for 24 hours continuous working

3359-25



With data interface (optional wireless transmitter code 7315-3350, receiver is needed)

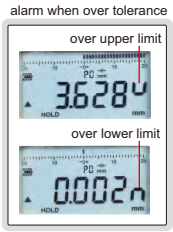
Code	Range	Measuring faces	
		flatness	parallelism
3359-25*	0-25mm/0-1"	0.3μm	0.6μm

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is needed)

Code	Range	Measuring faces	
		flatness	parallelism
3359-25AWL*	0-25mm/0-1"	0.3μm	0.6μm

*Supplied with manufacturer inspection certificate

alarm when over tolerance



DIGITAL MICROMETERS/SNAP GAUGES (BASIC TYPE)

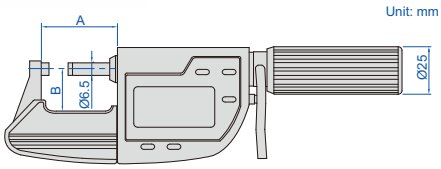
DATA OUTPUT | IP65 WATERPROOF | MEASUREMENT ACCURACY IS NOT AFFECTED BY THE USE OF SLEEVE | ATTENTION: RECHARGEABLE BATTERY, FOR 24 HOURS CONTINUOUS WORKING

POPULAR MODEL | INSPECTION CERTIFICATE | NON-ROTATING SPINDLE | ONE TURN OF SLEEVE MAKES 10MM SPINDLE FEED, PRESS THE FORK, THE SPINDLE RETRACTS 3MM | ABSOLUTE ENCODER, THE ORIGINAL DATA REMAINS AFTER POWER OFF

VIDEO

- Absolute encoder, the original data remains after power off
- Resolution: 0.001mm/0.00005"
- One turn of sleeve makes 10mm spindle feed
- Measurement accuracy is not affected by the use of sleeve
- Press the fork, the spindle retracts 3mm
- Carbide measuring faces
- Measuring force 5-10N
- Button function: data output, tolerance, data preset, data hold, measuring direction change, max./min./TIR, power off time, on/off, zero, mm/inch
- Supplied with gauge blocks for zero setting (except 0-25mm/0-1")
- Power: rechargeable battery, for 24 hours continuous working

3358-25



With data interface (optional wireless transmitter code 7315-3350, receiver is needed)

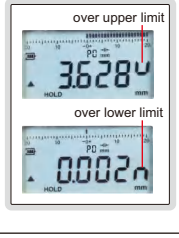
Code	Range	Accuracy	Repeatability	Measuring faces		A	B
				flatness	parallelism		
3358-25 *	0-25mm/0-1"	2μm	1μm	0.5μm	1.2μm	38mm	24mm
3358-50 *	25-50mm/1-2"	2μm	1μm	0.5μm	1.2μm	64mm	32.5mm
3358-75 *	50-75mm/2-3"	3μm	1μm	0.5μm	1.8μm	89mm	46mm
3358-100 *	75-100mm/3-4"	3μm	1μm	0.5μm	1.8μm	114mm	60mm

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is needed)

Code	Range	Accuracy	Repeatability	Measuring faces		A	B
				flatness	parallelism		
3358-25AWL*	0-25mm/0-1"	2μm	1μm	0.5μm	1.2μm	38mm	24mm
3358-50AWL*	25-50mm/1-2"	2μm	1μm	0.5μm	1.2μm	64mm	32.5mm
3358-75AWL*	50-75mm/2-3"	3μm	1μm	0.5μm	1.8μm	89mm	46mm
3358-100AWL*	75-100mm/3-4"	3μm	1μm	0.5μm	1.8μm	114mm	60mm

*Supplied with manufacturer inspection certificate

alarm when over tolerance



DIGITAL MICROMETERS/SNAP GAUGES

INSPECTION CERTIFICATE

ABSOLUTE ENCODER, THE ORIGINAL DATA REMAINS AFTER POWER OFF

IP65 WATERPROOF

MEASUREMENT ACCURACY IS NOT AFFECTED BY THE USE OF SLEEVE

ONE TURN OF SLEEVE MAKES 5MM SPINDLE FEED, PRESS THE FORK, THE SPINDLE RETRACTS 3MM

- Absolute encoder, the original data remains after power off
- Adjustable resolution: 0.0002mm/0.00001"
  0.001mm/0.00005"
  0.01mm/0.0005"
- One turn of sleeve makes 5mm spindle feed
- Measurement accuracy is not affected by the use of sleeve
- Press the fork, the spindle retracts 3mm
- Carbide measuring faces
- Measuring force 7-10N
- Customizable measuring force range 2-12N
  Attention: small measuring force will reduce the dustproof and waterproof level
- Button function: data output, tolerance, data preset, data hold, measuring direction change, max./min./TIR, power off time, on/off, zero, mm/inch, adjust resolution
- Supplied with gauge blocks for zero setting (except 0-25mm/0-1")
- Power: rechargeable battery, for 24 hours continuous working

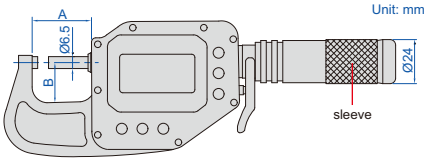
3350-25

ATTENTION: RECHARGEABLE BATTERY, FOR 24 HOURS CONTINUOUS WORKING

NON-ROTATING SPINDLE

DATA OUTPUT

VIDEO

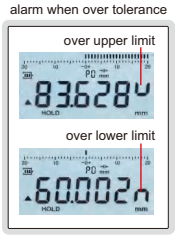


With data interface (optional wireless transmitter code 7315-3350, receiver is needed)

Code	Range	Accuracy	Repeatability	Measuring faces		A	B
				flatness	parallelism		
3350-25*	0-25mm/0-1"	1.4μm	0.6μm	0.5μm	1μm	38mm	24mm
3350-50*	25-50mm/1-2"	1.6μm	1μm	0.5μm	1μm	63mm	28mm
3350-75*	50-75mm/2-3"	1.8μm	1μm	0.5μm	1μm	88mm	45mm
3350-100*	75-100mm/3-3.95"	2μm	1μm	0.5μm	1μm	113mm	57mm

*Supplied with manufacturer inspection certificate

alarm when over tolerance



DIGITAL MICROMETERS/SNAP GAUGES

ONE TURN OF SLEEVE MAKES 5MM SPINDLE FEED, PRESS THE FORK, THE SPINDLE RETRACTS 3MM

ABSOLUTE ENCODER, THE ORIGINAL DATA REMAINS AFTER POWER OFF

IP65 WATERPROOF

MEASUREMENT ACCURACY IS NOT AFFECTED BY THE USE OF SLEEVE

NON-ROTATING SPINDLE

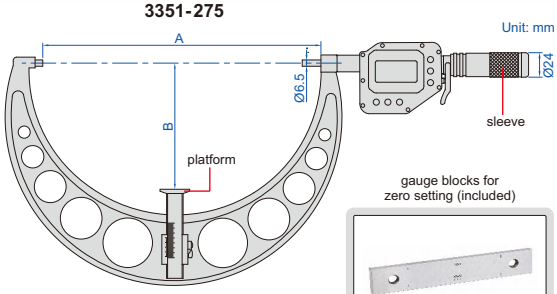
DATA OUTPUT

VIDEO

ATTENTION: RECHARGEABLE BATTERY, FOR 24 HOURS CONTINUOUS WORKING

3351-275

- Absolute encoder, the original data remains after power off
- Adjustable resolution: 0.0002mm/0.00001"
  (when the reading exceeds 100mm, the resolution is automatically switched to 0.001mm)
  0.001mm/0.00005"
  0.01mm/0.0005"
- One turn of sleeve makes 5mm spindle feed
- Measurement accuracy is not affected by the use of sleeve
- Press the fork, the spindle retracts 3mm
- Carbide measuring faces
- Measuring force 5-10N
- Customizable measuring force range 2-12N
  Attention: small measuring force will reduce the dustproof and waterproof level
- Button function: data output, tolerance, data preset, data hold, measuring direction change, max./min./TIR, power off time, on/off, zero, mm/inch, adjust resolution
- Supplied with gauge blocks for zero setting
- Power: rechargeable battery, for 24 hours continuous working



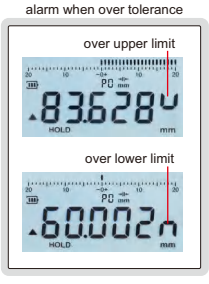
gauge blocks for zero setting (included)

With data interface (optional wireless transmitter code 7315-3350, receiver is needed)

Code	Range	Accuracy	Repeatability	Measuring faces		A	B
				flatness	parallelism		
3351-125 *	100-125mm/4-5"	3μm	1μm	0.5μm	2μm	128mm	62.5mm
3351-150 *	125-150mm/5-6"	3μm	1μm	0.5μm	2μm	153mm	75mm
3351-175 *	150-175mm/6-7"	4μm	1μm	0.5μm	2.5μm	178mm	87.5mm
3351-200 *	175-200mm/7-8"	4μm	1μm	0.5μm	2.5μm	203mm	100mm
3351-225 *	200-225mm/8-9"	5μm	1μm	0.5μm	3μm	228mm	112.5mm
3351-250 *	225-250mm/9-10"	5μm	1μm	0.5μm	3μm	253mm	125mm
3351-275 *	250-275mm/10-11"	6μm	1μm	0.5μm	3.5μm	278mm	137.5mm
3351-300 *	275-300mm/11-12"	6μm	1μm	0.5μm	3.5μm	303mm	150mm

*Supplied with manufacturer inspection certificate

alarm when over tolerance

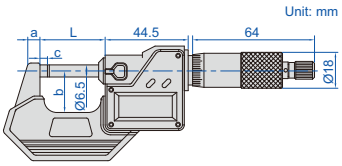


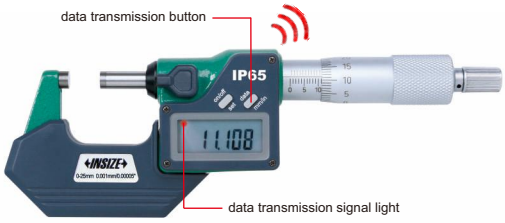
BUILT-IN WIRELESS WATERPROOF DIGITAL OUTSIDE MICROMETERS

DATA OUTPUT

IP65 WATERPROOF

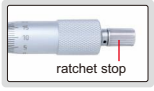
INSPECTION CERTIFICATE



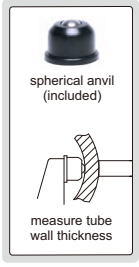


3112-25WL

- IP65 dust/waterproof
- Built-in wireless data transmission module
- Transmission distance is 10 meter (under the condition of no obstruction and no electromagnetic interference)
- Button function: on/off, set, mm/inch, data transmisson
- Automatic power off
- Carbide measuring faces
- Supplied with spherical anvil
- Setting standards are included (except 0-25mm/0-1")
- Built-in rechargeable lithium battery
- Optional accessory: receiver (code **7315-2/3/6/7/8/9**)


ratchet stop

friction thimble for one hand operation


spherical anvil (included)

measure tube wall thickness

receiver (**optional**)

Metric/Inch type (ratchet stop) **(mm)**

Code	Range	Resolution	Accuracy	L	a	b	c
3112-25WL*	0-25mm/0-1"	0.001mm/0.00005"	±2μm	34.5	6	25	3
3112-50WL*	25-50mm/1-2"	0.001mm/0.00005"	±2μm	59.5	8	32	3
3112-75WL*	50-75mm/2-3"	0.001mm/0.00005"	±3μm	84.5	8	44.5	3
3112-100WL*	75-100mm/3-4"	0.001mm/0.00005"	±3μm	109.5	8	57	3
3112-125WL	100-125mm/4-5"	0.001mm/0.00005"	±3μm	135	10	70	3
3112-150WL	125-150mm/5-6"	0.001mm/0.00005"	±3μm	160.5	10	82	3
3112-175WL	150-175mm/6-7"	0.001mm/0.00005"	±4μm	186	12	94.5	5.5
3112-200WL	175-200mm/7-8"	0.001mm/0.00005"	±4μm	211.5	12	107	5.5
3112-225WL	200-225mm/8-9"	0.001mm/0.00005"	±4μm	236	23	129.5	5.5
3112-250WL	225-250mm/9-10"	0.001mm/0.00005"	±4μm	261.5	23	142.5	5.5
3112-275WL	250-275mm/10-11"	0.001mm/0.0001"	±5μm	287	23	155	5.5
3112-300WL	275-300mm/11-12"	0.001mm/0.0001"	±5μm	312.5	23	167.5	5.5

Metric/Inch type (friction thimble) **(mm)**

Code	Range	Resolution	Accuracy	L	a	b	c
3112-25FWL*	0-25mm/0-1"	0.001mm/0.00005"	±2μm	34.5	6	25	3

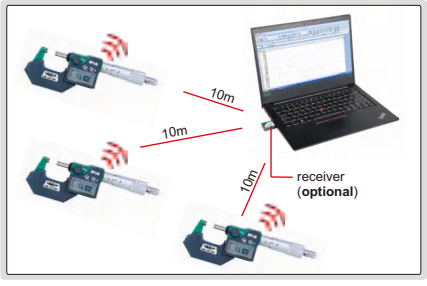
Metric type (ratchet stop) **(mm)**

Code	Range	Resolution	Accuracy	L	a	b	c
3112-25JWL*	0-25mm	0.001mm	±2μm	34.5	6	25	3
3112-50JWL*	25-50mm	0.001mm	±2μm	59.5	8	32	3
3112-75JWL*	50-75mm	0.001mm	±3μm	84.5	8	44.5	3
3112-100JWL*	75-100mm	0.001mm	±3μm	109.5	8	57	3

Set (ratchet stop type)

Code	Range	Micrometers included	Packaging
3112-753WL*	0-75mm/0-3"	3112-25WL, 3112-50WL, 3112-75WL	blow mould case
3112-1004WL*	0-100mm/0-4"	3112-25WL, 3112-50WL, 3112-75WL, 3112-100WL	blow mould case
3112-1506WL	0-150mm/0-6"	3112-25WL, 3112-50WL, 3112-75WL, 3112-100WL, 3112-125WL, 3112-150WL	aluminum box
3112-3006WL	150-300mm/6-12"	3112-175WL, 3112-200WL, 3112-225WL, 3112-250WL, 3112-275WL, 3112-300WL	aluminum box

application



*Supplied with manufacturer inspection certificate

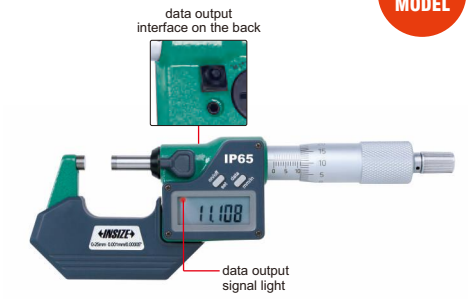
WATERPROOF DIGITAL OUTSIDE MICROMETERS (WITH DATA OUTPUT)

POPULAR MODEL

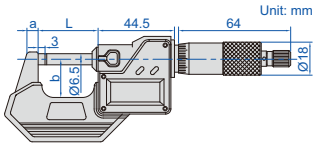
INSPECTION CERTIFICATE

IP65 WATERPROOF

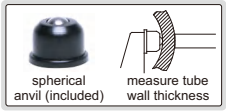
DATA OUTPUT



3101-25A



- Resolution 0.001mm/0.00005"
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, data transmisson
- Data output
- Automatic power off
- Carbide measuring faces
- Ratchet stop
- Supplied with spherical anvil
- Setting standards are included (except 0-25mm/0-1")
- Optional accessory: wireless transmitter code **7315-31** (receiver is needed)



(mm)

Code	Range	Accuracy	L	a	b
3101-25A*	0-25mm/0-1"	±2μm	34.5	6	25
3101-50A*	25-50mm/1-2"	±2μm	59.5	8	32
3101-75A*	50-75mm/2-3"	±3μm	84.5	8	44.5
3101-100A*	75-100mm/3-4"	±3μm	109.5	8	57
3101-125A	100-125mm/4-5"	±3μm	135	10	70
3101-150A	125-150mm/5-6"	±3μm	160.5	10	82

*Supplied with manufacturer inspection certificate

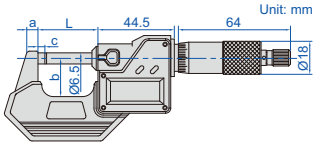
WATERPROOF DIGITAL OUTSIDE MICROMETERS (WITHOUT DATA OUTPUT)

INSPECTION CERTIFICATE

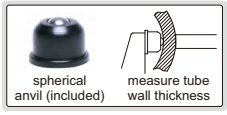
ATTENTION: NO DATA OUTPUT

IP65 WATERPROOF

3108-25A



- Resolution 0.001mm/0.00005"
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, ABS/INC
- No data output
- Automatic power off
- Carbide measuring faces
- Ratchet stop
- Supplied with spherical anvil
- Setting standards are included (except 0-25mm/0-1")



(mm)

Code	Range	Accuracy	L	a	b	c
3108-25A*	0-25mm/0-1"	±2μm	34.5	6	25	3
3108-50A*	25-50mm/1-2"	±2μm	59.5	8	32	3
3108-75A*	50-75mm/2-3"	±3μm	84.5	8	44.5	3
3108-100A*	75-100mm/3-4"	±3μm	109.5	8	57	3
3108-125A	100-125mm/4-5"	±3μm	135	10	70	3
3108-150A	125-150mm/5-6"	±3μm	160.5	10	82	3

*Supplied with manufacturer inspection certificate

QUICK FEEDING DIGITAL OUTSIDE MICROMETERS

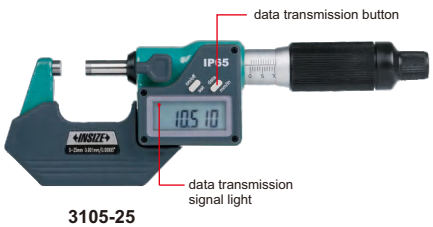
QUICK MEASUREMENT 2MM FEEDING OF EACH TURN

IP65 WATERPROOF

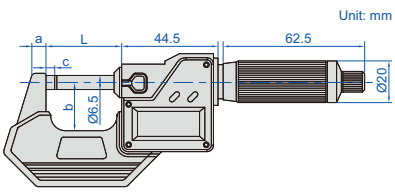
DATA OUTPUT

INSPECTION CERTIFICATE

- 2mm feeding of each turn
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, data transmission
- Automatic power off
- Carbide measuring faces, friction thimble
- Supplied with spherical anvil
- Supplied with setting standards (except 0-25mm/0-1")
- Battery CR2032

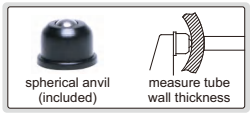


3105-25



With data interface (optional wireless transmitter code 7315-31, receiver is needed) (mm)

Code	Range	Resolution	Accuracy	L	a	b	c
3105-25*	0-25mm/0-1"	0.001mm/0.00005"	±2μm	34.5	6	25	3
3105-50*	25-50mm/1-2"	0.001mm/0.00005"	±2μm	59.5	8	32	3
3105-75*	50-75mm/2-3"	0.001mm/0.00005"	±3μm	84.5	8	44.5	3
3105-100*	75-100mm/3-4"	0.001mm/0.00005"	±3μm	109.5	8	57	3
3105-125	100-125mm/4-5"	0.001mm/0.00005"	±3μm	135	10	70	3
3105-150	125-150mm/5-6"	0.001mm/0.00005"	±3μm	160.5	10	82	3



*Supplied with manufacturer inspection certificate

DIGITAL OUTSIDE MICROMETERS (BASIC TYPE, WITHOUT DATA OUTPUT)

INSPECTION CERTIFICATE

ATTENTION: NO DATA OUTPUT

POPULAR MODEL

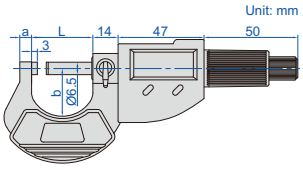
- Resolution 0.001mm/0.00005"
- Button function: on/off, set, mm/inch, ABS/INC
- No data output
- Automatic power off
- Carbide measuring faces
- Friction thimble
- Supplied with spherical anvil
- Setting standards are included (except 0-25mm/0-1")

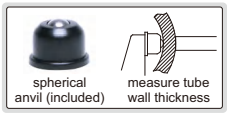
3109-25A

(mm)

Code	Range	Accuracy	L	a	b
3109-25A*	0-25mm/0-1"	±2μm	32	6	28
3109-50A*	25-50mm/1-2"	±2μm	57	8	37
3109-75A*	50-75mm/2-3"	±3μm	82	8	50
3109-100A*	75-100mm/3-4"	±3μm	107	10	61
3109-125A	100-125mm/4-5"	±3μm	132	10	73
3109-150A	125-150mm/5-6"	±3μm	157	10	85

*Supplied with manufacturer inspection certificate





DIGITAL VERTICAL MICROMETER

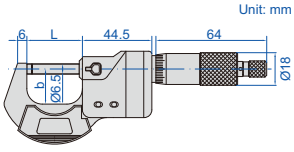
INSPECTION CERTIFICATE

IP65 WATERPROOF

DATA OUTPUT

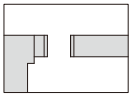
- Measure the thickness of plates for easy reading
- Resolution 0.001mm/0.00005"
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, ABS/INC
- Data output
- Automatic power off
- Carbide spindle tip
- Ratchet stop
- Optional accessory:
  wireless transmitter code **7315-30** (receiver is needed)

3565-25A



Code	Range	Accuracy	L	b
3565-25A*	0-25mm/0-1"	±2μm	34.5mm	25mm

*Supplied with manufacturer inspection certificate



OUTSIDE MICROMETERS

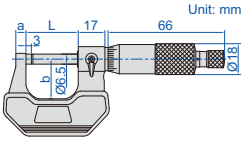
INSPECTION CERTIFICATE

3202-25A

Individual (mm)

Code	Range	Accuracy	L	a	b
3202-25A*	0-25mm	4μm	32	6	24
3202-50A*	25-50mm	4μm	57	8	32
3202-75A*	50-75mm	5μm	82	8	45
3202-100A*	75-100mm	5μm	107	8	57

- Graduation 0.01mm
- Carbide measuring faces
- Meet DIN863-1
- Supplied with setting standards (except 0-25mm)



Set

Code	Range	Micrometers included
3202-1004A*	0-100mm	3202-25A, 3202-50A, 3202-75A, 3202-100A
3202-1506A	0-150mm	3202-25A, 3202-50A, 3202-75A, 3202-100A, 3202-125A, 3202-150A

*Supplied with manufacturer inspection certificate

OUTSIDE MICROMETERS

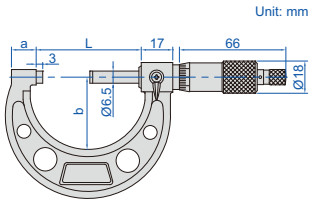
POPULAR MODEL

INSPECTION CERTIFICATE

3203-25A

3203-50A

- Graduation: 0.01mm
- Carbide measuring faces
- Meet DIN863-1
- Ratchet stop
- Supplied with setting standards (except 0-25mm)



3203-1004A

3203-3006A

Individual (mm)

Code	Range	Accuracy	L	a	b
3203-25A*	0-25mm	±2μm	32	9	28
3203-50A*	25-50mm	±2μm	57	14	38
3203-75A*	50-75mm	±2μm	82	15	49
3203-100A*	75-100mm	±3μm	107	15	60
3203-125A	100-125mm	±3μm	133	16.5	73
3203-150A	125-150mm	±3μm	158	16.5	85
3203-175A	150-175mm	±4μm	183	19.4	104
3203-200A	175-200mm	±4μm	209	19.4	117
3203-225A	200-225mm	±4μm	234	19.4	130
3203-250A	225-250mm	±5μm	260	19.4	142
3203-275A	250-275mm	±5μm	285	19.4	155
3203-300A	275-300mm	±5μm	310	19.4	168

Set

Code	Range	Micrometers included	Packaging
3203-1004A*	0-100mm	3203-25A, 3203-50A, 3203-75A, 3203-100A	blow mould case
3203-1506A	0-150mm	3203-25A, 3203-50A, 3203-75A, 3203-100A, 3203-125A, 3203-150A	blow mould case
3203-3006A	150-300mm	3203-175A, 3203-200A, 3203-225A, 3203-250A, 3203-275A, 3203-300A	plastic case

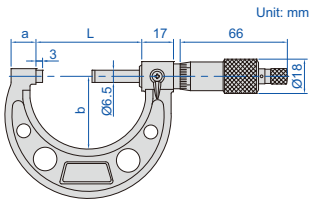
*Supplied with manufacturer inspection certificate

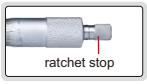
1μm GRADUATION OUTSIDE MICROMETERS

INSPECTION CERTIFICATE

- Graduation: 0.001mm
- Carbide measuring faces
- Meet DIN863-1
- Ratchet stop
- Supplied with setting standards (except 0-25mm)

3210-25A





Individual (mm)

Code	Range	Accuracy	L	a	b
3210-25A*	0-25mm	4μm	32	9	28
3210-50A*	25-50mm	4μm	57	14	38
3210-75A*	50-75mm	5μm	82	15	49
3210-100A*	75-100mm	5μm	107	15	60

Set

Code	Range	Micrometers included
3210-1004A*	0-100mm	3210-25A, 3210-50A, 3210-75A, 3210-100A
3210-1506A	0-150mm	3210-25A, 3210-50A, 3210-75A, 3210-100A, 3210-125A, 3210-150A

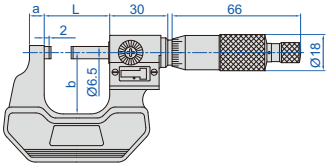
*Supplied with manufacturer inspection certificate

OUTSIDE MICROMETERS WITH COUNTER

INSPECTION CERTIFICATE

- Counter resolution: 0.01mm
- Thimble graduation: 0.01mm
- Carbide measuring faces
- Meet DIN863-1
- Ratchet stop
- Supplied with setting standards (except 0-25mm)

3400-25

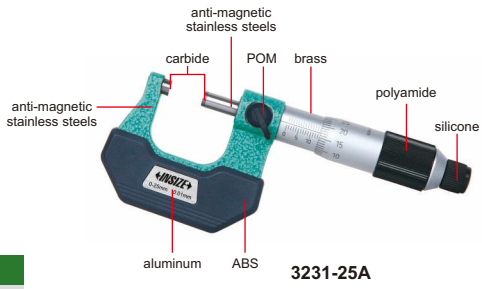


Code	Range	Accuracy	L	a	b
3400-25*	0-25mm	4μm	32mm	6mm	26mm
3400-50*	25-50mm	4μm	57mm	8mm	32mm
3400-75*	50-75mm	5μm	82mm	8mm	44.5mm
3400-100*	75-100mm	5μm	107mm	8mm	57mm

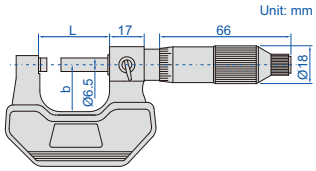
*Supplied with manufacturer inspection certificate

NON MAGNETIC MICROMETERS

- Suitable for magnetic materials
- Graduation: 0.01mm
- Non magnetic carbide measuring faces
- Ratchet stop



3231-25A

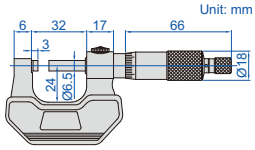


Code	Range	Accuracy	L	b
3231-25A	0-25mm	4μm	32mm	24mm
3231-50A	25-50mm	4μm	57mm	32mm
3231-75A	50-75mm	5μm	82mm	45mm
3231-100A	75-100mm	5μm	105mm	57mm

OUTSIDE MICROMETER FOR LEFT OR RIGHT HANDERS

- Graduation 0.01mm
- Graduations on two sides
- Ratchet stop
- Carbide measuring faces
- Meet DIN863-1

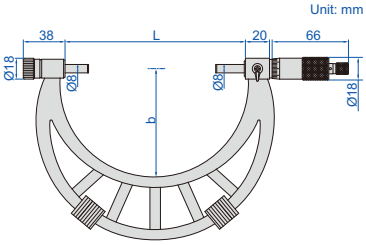
3236-25B

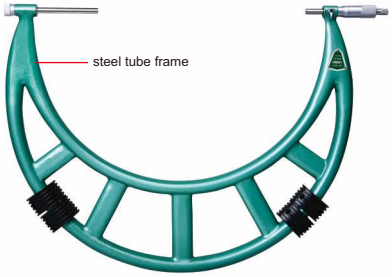


Code	Range	Accuracy
3236-25B	0-25mm	4μm

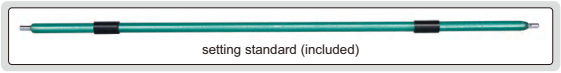
OUTSIDE MICROMETERS WITH INTERCHANGEABLE ANVILS

- Graduation 0.01mm
- Ratchet stop
- Meet DIN863-3
- Carbide measuring faces
- Supplied with setting standards



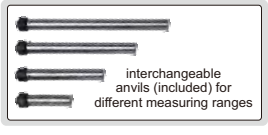


3206-400



(mm)

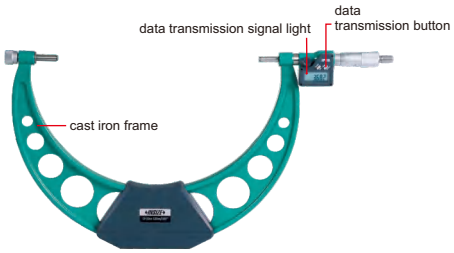
Code	Range	Accuracy	L	b	Setting standard (included)
3206-400	300-400mm	11μm	409	224	325, 375
3206-500	400-500mm	13μm	509	275	425, 475
3206-600	500-600mm	14μm	609	321	525, 575
3206-700	600-700mm	16μm	709	371	625, 675
3206-800	700-800mm	18μm	809	426	725, 775
3206-900	800-900mm	20μm	909	476	825, 875
3206-1000	900-1000mm	22μm	1009	576	925, 975



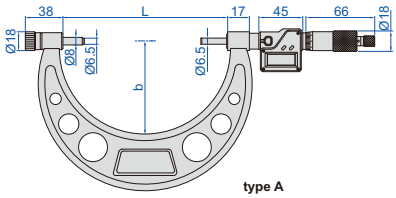
DIGITAL OUTSIDE MICROMETERS WITH INTERCHANGEABLE ANVILS

IP65 WATERPROOF

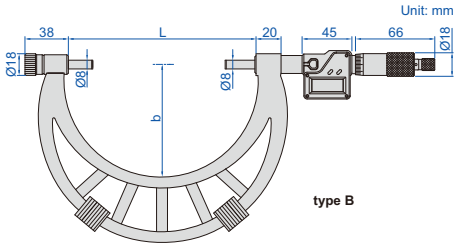
DATA OUTPUT



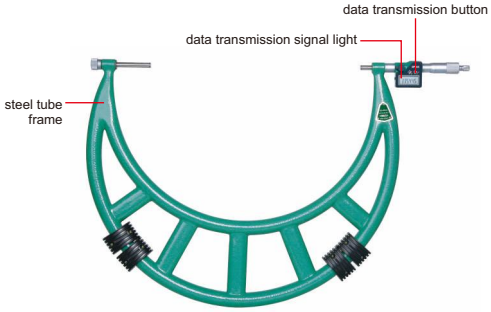
3506-300A



type A

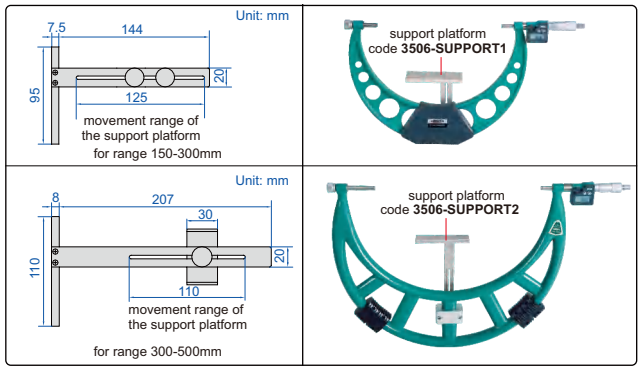


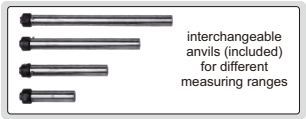
type B

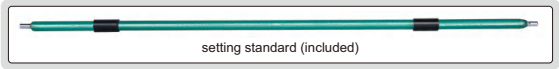


3506-400A

support platform (**optional**)





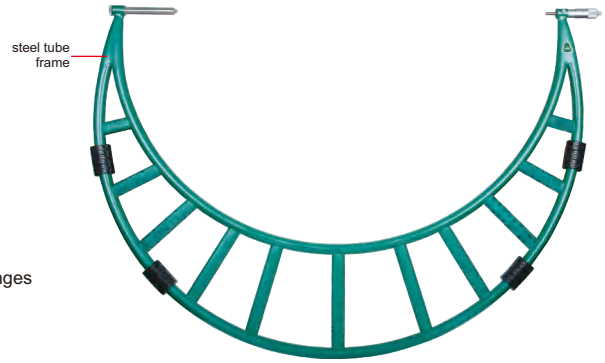


- Resolution 0.001mm/0.0001"
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, data transmisson
- Data output
- Automatic power off
- Ratchet stop
- Carbide measuring faces
- Supplied with setting standards
- Battery CR2032

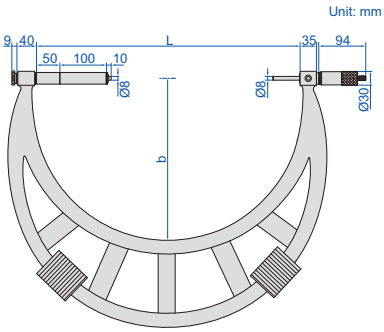
With data interface (optional wireless transmitter code 7315-31, receiver is needed) **(mm)**

Code	Range	Type	Accuracy	L	b	Setting standard (included)	Support platform (optional)
3506-300A	150-300mm/6-12"	A	±8μm	305	165	150, 175, 200, 225, 250, 275	code **3506-SUPPORT1**
3506-301A	200-300mm/8-12"	A	±8μm	305	165	200, 225, 250, 275	
3506-400A	300-400mm/12-16"	B	±9μm	405	224	325, 375	code **3506-SUPPORT2**
3506-500A	400-500mm/16-20"	B	±11μm	505	275	425, 475	

OUTSIDE MICROMETERS WITH EXTENSION ANVIL COLLAR



3205-1400



- Graduation 0.01mm
- Adjust collars for different measuring ranges
- Ratchet stop
- Carbide measuring faces
- Supplied with setting standards

(mm)

Code	Range	Accuracy	L	b	Setting standard (included)
3205-1200	1000-1200mm	22μm	1210	645	1050, 1150
3205-1400	1200-1400mm	24μm	1410	745	1250, 1350
3205-1600	1400-1600mm	28μm	1610	845	1450, 1550
3205-1800	1600-1800mm	31μm	1810	945	1650, 1750
3205-2000	1800-2000mm	34μm	2010	1045	1850, 1950

adjust collars for different measuring ranges

BUILT-IN BLUETOOTH DIGITAL INDICATING MICROMETERS

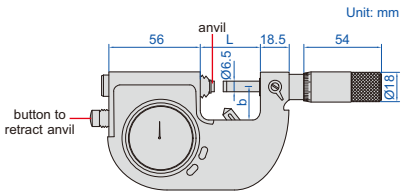
ABSOLUTE ENCODER, THE ORIGINAL DATA REMAINS AFTER POWER OFF

ATTENTION: SETTING STANDARDS ARE NOT INCLUDED

IP54 WATERPROOF

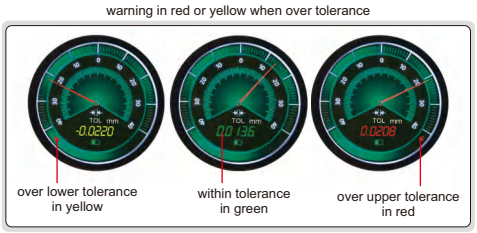
BUILT-IN BLUETOOTH

3507-25



- Meet DIN863-3
- Absolute encoder, the original data remains after power off
- Measuring stroke of anvil: >1mm
- Reading in digital and analog
- Button function: on/off, zero setting, mm/inch, tolerance, display setting, bluetooth, signal mode setting, data output
- Android and iPhone APP, USB type-C cable are included
- Carbide measuring faces
- Power: rechargeable Li-battery, for 20 hours continuous working (bluetooth transmission reduces working hours)
- Optional accessory: gauge blocks grade 0 (**4101-A** series), for zero setting

warning in red or yellow when over tolerance



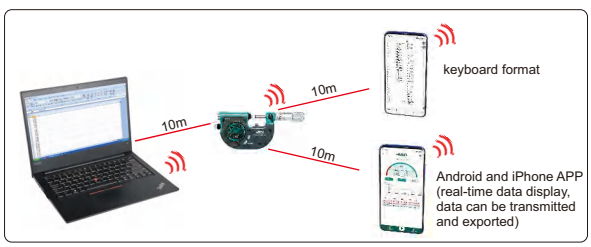
(mm)

Code	Micrometer head			Digital indicator			Repeatability	L	b	Remarks
	range	graduation	accuracy	range	resolution	accuracy				
3507-25	0-25mm	0.002mm	3μm	±0.04mm	0.1μm	±1μm	0.3μm	35.5	15	includes charge pal
3507-50	25-50mm	0.002mm	3μm	±0.04mm	0.1μm	±1μm	0.3μm	60.5	25	includes charge pal
3507-75	50-75mm	0.002mm	3μm	±0.04mm	0.1μm	±1μm	0.3μm	86	37.5	includes charge pal
3507-100	75-100mm	0.002mm	3μm	±0.04mm	0.1μm	±1μm	0.3μm	111	50	includes charge pal
3507-25B	0-25mm	0.002mm	3μm	±0.04mm	0.2μm	±1μm	0.3μm	35.5	15	—
3507-50B	25-50mm	0.002mm	3μm	±0.04mm	0.2μm	±1μm	0.3μm	60.5	25	—
3507-75B	50-75mm	0.002mm	3μm	±0.04mm	0.2μm	±1μm	0.3μm	86	37.5	—
3507-100B	75-100mm	0.002mm	3μm	±0.04mm	0.2μm	±1μm	0.3μm	111	50	—

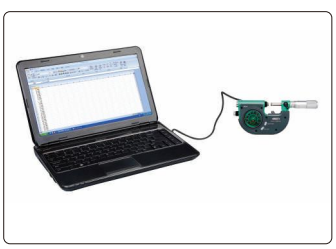
Data output

Data output with bluetooth (transmission distance is 10 meters)	keyboard format	data can be transmitted to Excel, Word, txt, etc.	single transmission
	virtual com port	data can be transmitted to Android and iPhone APP	real-time display, data can be transmitted and exported
Data output with USB cable (cable length 1.8 meters)	keyboard format	data can be transmitted to Excel, Word, txt, etc.	single transmission
	virtual com port	data can be transmitted to serial communication software	single transmission

charge pal



data output with bluetooth (included)



data output with USB cable (included)

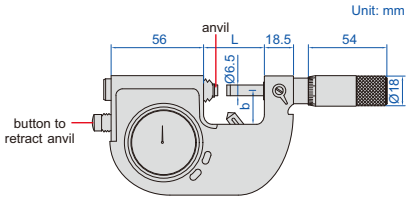
DIGITAL INDICATING MICROMETERS (WITHOUT DATA OUTPUT)

IP54 WATERPROOF

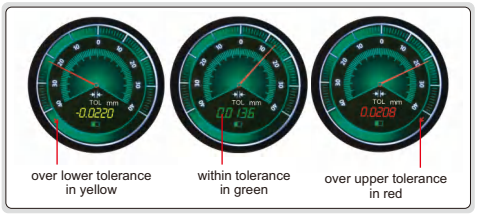
ABSOLUTE ENCODER, THE ORIGINAL DATA REMAINS AFTER POWER OFF

ATTENTION: SETTING STANDARDS ARE NOT INCLUDED

3508-25



warning in red or yellow when over tolerance



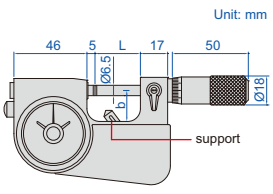
- Meet DIN863-3
- Absolute encoder, the original data remains after power off
- Measuring stroke of anvil: >1mm
- Reading in digital and analog
- Button function: on/off, zero setting, mm/inch, tolerance, display setting
- Carbide measuring faces
- Power: rechargeable Li-battery, for 20 hours continuous working
- Optional accessory: gauge blocks grade 0 (**4101-A** series), for zero setting

(mm)

Code	Micrometer head			Digital indicator			Repeatability	L	b
	range	graduation	accuracy	range	resolution	accuracy			
3508-25	0-25mm	0.002mm	3μm	±0.04mm	0.2μm	±1μm	0.3μm	35.5	15
3508-50	25-50mm	0.002mm	3μm	±0.04mm	0.2μm	±1μm	0.3μm	60.5	25
3508-75	50-75mm	0.002mm	3μm	±0.04mm	0.2μm	±1μm	0.3μm	86	37.5
3508-100	75-100mm	0.002mm	3μm	±0.04mm	0.2μm	±1μm	0.3μm	111	50
3508-25B	0-25mm	0.002mm	3μm	±0.04mm	0.5μm	±1μm	0.3μm	35.5	15
3508-50B	25-50mm	0.002mm	3μm	±0.04mm	0.5μm	±1μm	0.3μm	60.5	25
3508-75B	50-75mm	0.002mm	3μm	±0.04mm	0.5μm	±1μm	0.3μm	86	37.5
3508-100B	75-100mm	0.002mm	3μm	±0.04mm	0.5μm	±1μm	0.3μm	111	50

INDICATING MICROMETERS

ATTENTION: SETTING STANDARDS ARE NOT INCLUDED



3332-25

- Meet DIN863-3
- Micrometer head graduation: 0.002mm
- Dial indicator: range ±0.04mm, graduation 0.001mm, accuracy 0.001mm
- Carbide measuring faces
- Optional accessory: gauge blocks grade 0 (**4101-A** series), for zero setting

(mm)

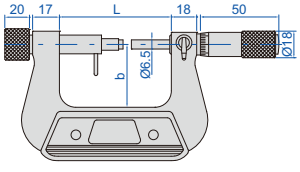
Code	Micrometer head range	Micrometer head accuracy	L	b	Remark
3332-25	0-25mm	4μm	28.5	19	with support
3332-50	25-50mm	4μm	53.5	30	with support
3332-75	50-75mm	5μm	78.5	45	without support
3332-100	75-100mm	5μm	103.5	57	without support

MICROMETER WITH DIAL INDICATOR

ATTENTION: NOT SUITABLE FOR 0.001MM DIAL INDICATORS

digital indicator is optional

3331-25A



- Meet DIN863-3
- Micrometer head graduation 0.01mm
- Anvil retracting range: 8mm
- Carbide measuring faces
- Optional accessory: dial indicators (graduation 0.01mm), digital indicators (resolution 0.01mm/0.0005")

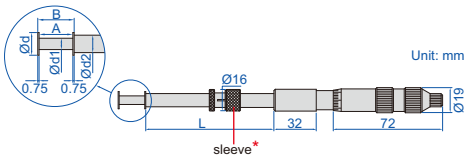
(mm)

Code	Micrometer head range	Micrometer head accuracy	L	b
3331-25A	0-25mm	4μm	67	38

GROOVE MICROMETERS

- Measure width of grooves inside bores
- Graduation 0.01mm
- Two graduations for inside and outside measurements
- Non-rotating spindle
- Two-directional ratchet stop

3287-25B

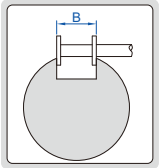


(mm)

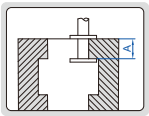
Code	Range (outside A)	Range (inside B)	Accuracy	L	Ød	Ød1	Ød2
3287-25B	0-25mm	1.6-26.5mm	10μm	102	13	6.5	10
3287-251B*	0-25mm	1.6-26.5mm	10μm	90	6.5	3	5

*3287-251B does not have sleeve

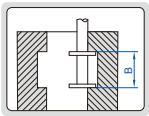
measure width of keyway



measure position of groove



measure width of groove

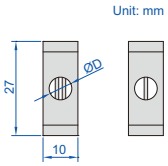


3-WIRES

INSPECTION CERTIFICATE

VIDEO

7382-29



- Used with standard outside micrometers to measure pitch diameter of screw threads
- Diameter accuracy: ±0.5μm
- Cylindricity: 1μm
- Hardness: HRC60
- Supplied with manufacturer inspection certificate
- Scope of application: outside diameter of thread ≤50mm

application

For outside micrometers with spindle Ø6.50mm (ØD)

Code	Pin gauge diameter	Applicable pitch
7382-21	Ø0.170mm	0.2mm, 0.25mm, 0.3mm
7382-22	Ø0.195mm	0.35mm
7382-23	Ø0.220mm	0.4mm
7382-24	Ø0.250mm	0.45mm
7382-25	Ø0.290mm	0.5mm
7382-26	Ø0.335mm	0.6mm
7382-27	Ø0.390mm	0.7mm
7382-28	Ø0.455mm	0.75mm, 0.8mm
7382-29	Ø0.530mm	0.9mm
7382-210	Ø0.620mm	1.0mm
7382-211	Ø0.725mm	1.25mm
7382-212	Ø0.895mm	1.5mm
7382-213	Ø1.100mm	1.75mm, 2.0mm
7382-214	Ø1.350mm	2.5mm
7382-215	Ø1.650mm	3.0mm
7382-216	Ø2.050mm	3.5mm
7382-217	Ø2.550mm	4mm, 4.5mm
7382-218	Ø3.200mm	5mm, 5.5mm, 6mm
7382-2S	18 pairs/set, including all above 3-wires	

3-WIRES

INSPECTION CERTIFICATE

CUSTOMIZABLE DIAMETER Ød

7394-75A

- Ød≤0.3mm, made of alloy steel, hardness HRC60; Ød>0.3mm, made of carbide, hardness HRA90
- Diameter accuracy: ±0.5μm
- Cylindricity: 0.5μm
- Supplied with manufacturer inspection certificate

Code	Diameter (Ød)	Applicable pitch
7394-60A*	0.170mm	0.2mm, 0.25mm, 0.3mm
7394-61A*	0.195mm	0.35mm
7394-62A*	0.220mm	0.4mm
7394-63A*	0.250mm	0.45mm
7394-64A*	0.290mm	0.5mm
7394-65A	0.335mm	0.6mm
7394-66A	0.390mm	0.7mm
7394-67A	0.455mm	0.75mm, 0.8mm
7394-68A	0.530mm	0.9mm
7394-69A	0.620mm	1.0mm
7394-70A	0.725mm	1.25mm
7394-71A	0.895mm	1.5mm
7394-72A	1.100mm	1.75mm, 2.0mm
7394-73A	1.350mm	2.5mm
7394-74A	1.650mm	3.0mm
7394-75A	2.050mm	3.5mm
7394-76A	2.550mm	4mm, 4.5mm
7394-77A	3.200mm	5mm, 5.5mm, 6mm

*Made of alloy steel

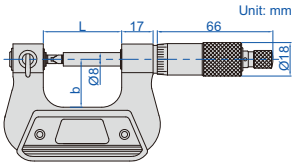
SCREW THREAD MICROMETERS

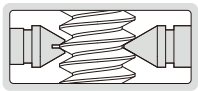
NON-ROTATING SPINDLE

accuracy of micrometers with tips (mm)

Pitch	Range					
	0-25	25-50	50-75	75-100	100-125	125-150
0.4~0.5	±0.01	-	-	-	-	-
0.6~0.8	±0.01	±0.013	-	-	-	-
1~1.25	±0.012	±0.015	±0.017	±0.017	-	-
1.5~2.0	±0.014	±0.017	±0.019	±0.019	±0.020	±0.023
2.5~3.5	±0.016	±0.019	±0.021	±0.021	±0.023	±0.025
4.0~7.0	-	±0.021	±0.023	±0.023	±0.025	±0.028

3281-25A
(measuring tips are optional)

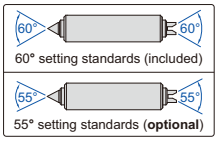




(mm)

Code	Range	L	b	55° setting standard (optional)
3281-25A	0-25mm	42	26	-
3281-50A	25-50mm	67	38	3281-SP1
3281-75A	50-75mm	92	50	3281-SP2
3281-100A	75-100mm	117.6	62	3281-SP3
3281-125A	100-125mm	143	70	3281-SP4
3281-150A	125-150mm	168.2	82	3281-SP5

- Measure pitch diameter of screw threads
- Graduation 0.01mm
- Non-rotating spindle
- Ratchet stop
- Supplied with 60° setting standards (except 0-25mm)
- Optional accessary: 55° setting standards

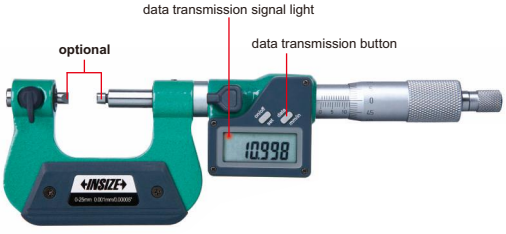


DIGITAL SCREW THREAD MICROMETERS

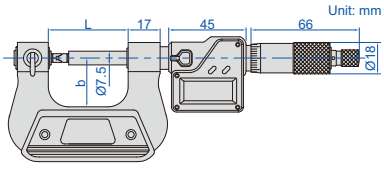
NON-ROTATING SPINDLE

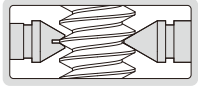
DATA OUTPUT

- Measure pitch diameter of screw threads
- Resolution 0.001mm/0.00005" (for range 0-250mm), 0.001mm/0.0001" (for range 250-300mm)
- Button function: on/off, set, mm/inch, data transmisson
- Data output
- Automatic power off
- Non-rotating spindle
- Ratchet stop
- Supplied with 60° setting standards (except 0-25mm/0-1")
- Battery CR2032
- Optional accessory: 55° setting standards



3581-25A
(measuring tips are optional)



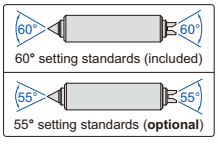


Measuring tips are optional, with data interface
(optional wireless transmitter code 7315-31, receiver is needed) (mm)

Code	Range	L	b	55° setting standard (optional)
3581-25A	0-25mm/0-1"	42	26	-
3581-50A	25-50mm/1-2"	67	38	3281-SP1
3581-75A	50-75mm/2-3"	92	50	3281-SP2
3581-100A	75-100mm/3-4"	117.6	62	3281-SP3

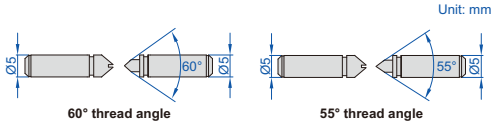
accuracy of micrometers with tips (mm)

Pitch	Range			
	0-25	25-50	50-75	75-100
0.4~0.5	±0.01	-	-	-
0.6~0.8	±0.01	±0.013	-	-
1~1.25	±0.012	±0.015	±0.017	±0.017
1.5~2.0	±0.014	±0.017	±0.019	±0.019
2.5~3.5	±0.016	±0.019	±0.021	±0.021
4.0~7.0	-	±0.021	±0.023	±0.023



MEASURING TIPS FOR SCREW THREAD MICROMETERS

7381-T13



60° thread angle

55° thread angle

- Supplied in pairs
- Suitable for **3281**, **3581** series micrometers

Whitworth thread (55° thread angle)

Code	Pitch
7381-T2S	10 pairs/set: 60-48TPI, 48-40TPI, 40-32TPI, 32-24TPI, 24-18TPI, 18-14TPI, 14-10TPI, 10-7TPI, 7-4.5TPI, 4.5-3.5TPI, including all above tips

Metric and unified thread (60° thread angle)

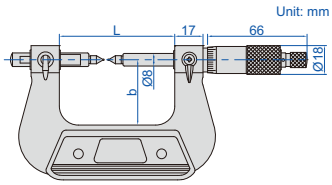
Code	Pitch
7381-T11	0.4-0.5mm/64-48TPI
7381-T12	0.6-0.9mm/44-28TPI
7381-T13	1-1.75mm/24-14TPI
7381-T14	2-3mm/13-9TPI
7381-T15	3.5-5mm/8-5TPI
7381-T16	5.5-7mm/4.5-3.5TPI
7381-TS	6 pairs/set, including all above tips

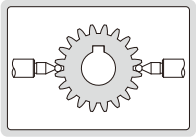
GEAR TOOTH MICROMETERS

- Meet DIN863-3
- Measure over-pin diameter of gears
- Graduation 0.01mm
- Ratchet stop
- Supplied with setting standards (except 0-25mm)
- Optional accessory: ball tips (code **7391**)

ball tips are optional

3291-25





(mm)

Code	Range	Accuracy	L	b
3291-25	0-25mm	4μm	67	38
3291-50	25-50mm	4μm	92.4	50
3291-75	50-75mm	5μm	117.6	62
3291-100	75-100mm	5μm	143	70

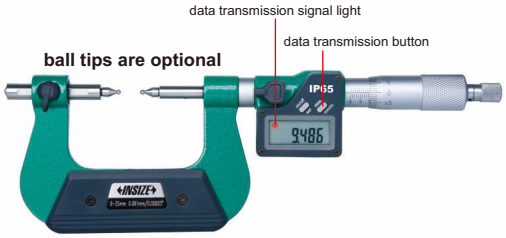
DIGITAL GEAR TOOTH MICROMETERS

IP65
WATERPROOF

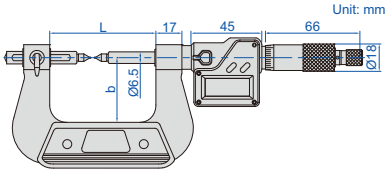
DATA OUTPUT

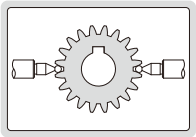
- Measure over-pin diameter of gears
- Resolution 0.001mm/0.00005"
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, data transmisson
- Data output
- Automatic power off
- Ratchet stop
- Supplied with setting standards (except 0-25mm/0-1")
- Optional accessory: ball tips (code **7391**)
- Battery CR2032

ball tips are optional



3591-25A





With data interface (optional wireless transmitter code 7315-31, receiver is needed)

(mm)

Code	Range	Accuracy	L	b
3591-25A	0-25mm/0-1"	±4μm	67	38
3591-50A	25-50mm/1-2"	±4μm	92.4	50
3591-75A	50-75mm/2-3"	±5μm	117.6	62
3591-100A	75-100mm/3-4"	±5μm	143	70

BALL TIPS FOR GEAR TOOTH MICROMETERS

BALL TIPS DIAMETER SØD CAN BE CUSTOMIZED WITH SIZES BETWEEN 1.50-6.00MM

- Supplied in pair
- Suitable for **3291, 3591** series micrometers

7391-T5

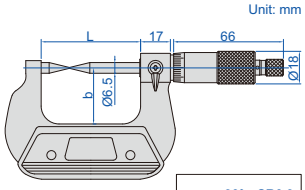
Code	Ball dia. (D)
7391-T2	SØ1.5mm
7391-T3	SØ2.0mm
7391-T4	SØ2.5mm
7391-T5	SØ3.0mm
7391-T6	SØ3.5mm

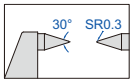
Code	Ball dia. (D)
7391-T7	SØ4.0mm
7391-T8	SØ4.5mm
7391-T9	SØ5.0mm
7391-T10	SØ6.0mm

POINT MICROMETERS

- Graduation 0.01mm
- Measure the web thickness of drills, small grooves and keyways
- Ratchet stop
- Carbide tips
- Supplied with setting standards (except 0-25mm)

3230-25A



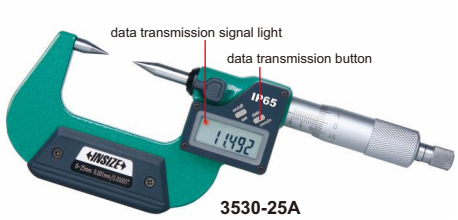


Code	Range	Accuracy	L	b
3230-25A	0-25mm	4μm	57mm	32mm
3230-50A	25-50mm	4μm	82mm	44.5mm
3230-75A	50-75mm	5μm	107mm	57mm
3230-100A	75-100mm	5μm	132.6mm	69.5mm

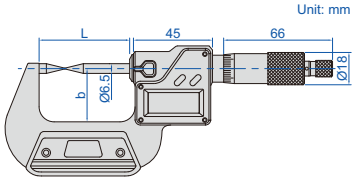
DIGITAL POINT MICROMETERS

DATA OUTPUT | IP65 WATERPROOF

- Measure the web thickness of drills, small grooves and keyways
- Resolution 0.001mm/0.00005"
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, data transmisson
- Data output
- Automatic power off
- Ratchet stop
- Carbide tips
- Supplied with setting standards (except 0-25mm/0-1")
- Battery CR2032

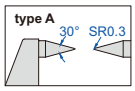


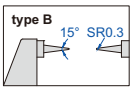
3530-25A



With data interface (optional wireless transmitter code 7315-31, receiver is needed)

Code	Range	Type	Accuracy	L	b
3530-25A	0-25mm/0-1"	A	±4μm	57mm	32mm
3530-50A	25-50mm/1-2"	A	±4μm	82mm	44.5mm
3530-25BA	0-25mm/0-1"	B	±4μm	57mm	32mm
3530-50BA	25-50mm/1-2"	B	±4μm	82mm	44.5mm



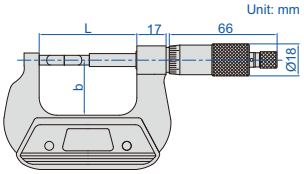


BLADE MICROMETERS

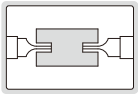
NON-ROTATING SPINDLE

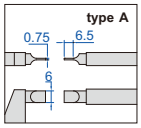
- Meet DIN863-3
- Measure the groove diameter of shafts and keyways
- Graduation: 0.01mm
- Non-rotating spindle
- Ratchet stop
- Supplied with setting standards (except 0-25mm)

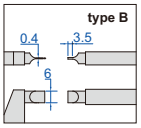
3232-25A



Code	Range	Type	Accuracy	L	b
3232-25A	0-25mm	A	4μm	57mm	32mm
3232-50A	25-50mm	A	4μm	82mm	44.5mm
3232-75A	50-75mm	A	5μm	107mm	57mm
3232-100A	75-100mm	A	5μm	132.6mm	69.5mm
3232-25BA	0-25mm	B	4μm	57mm	32mm



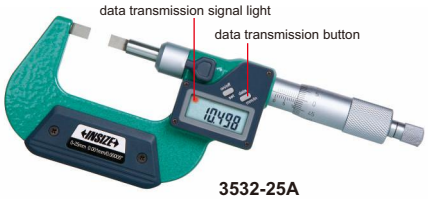




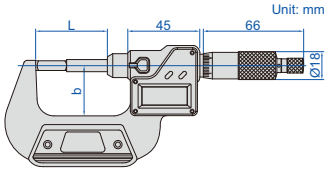
DIGITAL BLADE MICROMETERS

DATA OUTPUT | NON-ROTATING SPINDLE

- Measure the groove diameter of shafts and keyways
- Resolution 0.001mm/0.00005"
- Non-rotating spindle
- Button function: on/off, set, mm/inch, data transmisson
- Data output, automatic power off
- Ratchet stop
- Supplied with setting standards (except 0-25mm/0-1")
- Battery CR2032

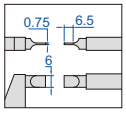


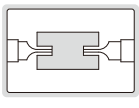
3532-25A



With data interface (optional wireless transmitter code 7315-31, receiver is needed) **(mm)**

Code	Range	Accuracy	L	b
3532-25A	0-25mm/0-1"	±4μm	57	32
3532-50A	25-50mm/1-2"	±4μm	82	44.5





DIGITAL BLADE MICROMETERS/SNAP GAUGES

INSPECTION CERTIFICATE

ABSOLUTE ENCODER, THE ORIGINAL DATA REMAINS AFTER POWER OFF

MEASUREMENT ACCURACY IS NOT AFFECTED BY THE USE OF SLEEVE

IP65 WATERPROOF

DATA OUTPUT

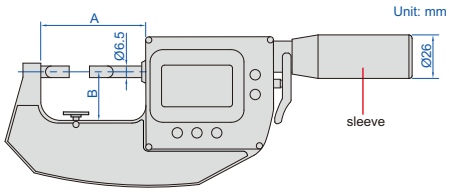
NON-ROTATING SPINDLE

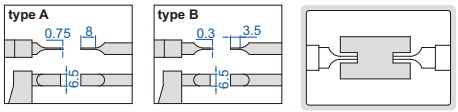
ONE TURN OF SLEEVE MAKES 10MM SPINDLE FEED, PRESS THE FORK, THE SPINDLE RETRACTS 3MM

ATTENTION: RECHARGEABLE BATTERY, FOR 24 HOURS CONTINUOUS WORKING

- Measure the groove diameter of shafts and keyways
- Absolute encoder, the original data remains after power off
- Resolution: 0.001mm/0.00005"
- One turn of sleeve makes 10mm spindle feed
- Measurement accuracy is not affected by the use of sleeve
- Press the fork, the spindle retracts 3mm
- Carbide measuring faces
- Measuring force 5-10N
- Customizable measuring force range 3-11N
- Attention: small measuring force will reduce the dustproof and waterproof level
- Button function: data output, tolerance, data preset, data hold, measuring direction change, max./min./TIR, power off time, on/off, zero, mm/inch
- Supplied with gauge blocks for zero setting (except 0-25mm/0-1")
- Power: rechargeable battery, for 24 hours continuous working

3352-251





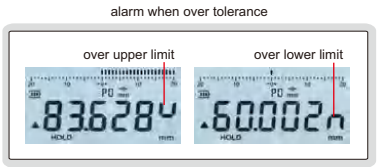
With data interface
(optional wireless transmitter code 7315-3350, receiver is needed)

Code	Range	Type	Accuracy	Repeatability	A	B
3352-251*	0-25mm/0-1"	A	2μm	1μm	64mm	32.5mm
3352-501*	25-50mm/1-2"	A	2μm	1μm	89mm	46mm
3352-751*	50-75mm/2-3"	A	3μm	1μm	114mm	60mm
3352-252*	0-25mm/0-1"	B	2μm	1μm	64mm	32.5mm
3352-502*	25-50mm/1-2"	B	2μm	1μm	89mm	46mm
3352-752*	50-75mm/2-3"	B	3μm	1μm	114mm	60mm

Built-in wireless (receiver code 7315-2/3/6/7/8/9 is needed)

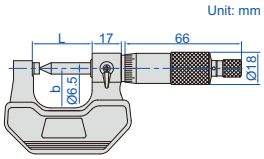
Code	Range	Type	Accuracy	Repeatability	A	B
3352-251WL*	0-25mm/0-1"	A	2μm	1μm	64mm	32.5mm
3352-501WL*	25-50mm/1-2"	A	2μm	1μm	89mm	46mm
3352-751WL*	50-75mm/2-3"	A	3μm	1μm	114mm	60mm
3352-252WL*	0-25mm/0-1"	B	2μm	1μm	64mm	32.5mm
3352-502WL*	25-50mm/1-2"	B	2μm	1μm	89mm	46mm
3352-752WL*	50-75mm/2-3"	B	3μm	1μm	114mm	60mm

*Supplied with manufacturer inspection certificate

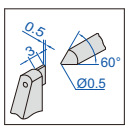


CRIMP HEIGHT MICROMETER

3266-25BA



- Measure the height of crimp contact
- Graduation 0.01mm
- Ratchet stop



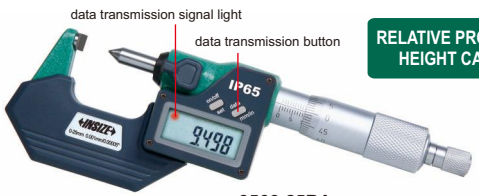
Code	Range	Accuracy	L	b
3266-25BA	0-25mm	4μm	34mm	24mm

DIGITAL CRIMP HEIGHT MICROMETER

IP65 WATERPROOF

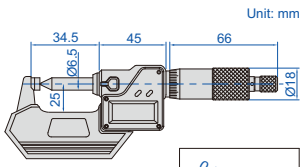
RELATIVE PRODUCT: DIGITAL CRIMP HEIGHT CALIPER (CODE 1165-)

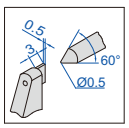
DATA OUTPUT



3566-25BA

- Measure the height of crimp contact
- Resolution 0.001mm/0.00005"
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, data transmisson
- Data output, automatic power off
- Ratchet stop
- Battery CR2032





With data interface (optional wireless transmitter code 7315-31, receiver is needed)

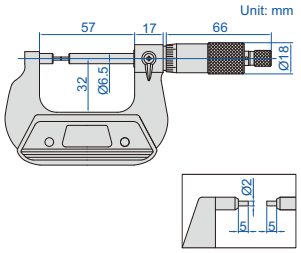
Code	Range	Accuracy
3566-25BA	0-25mm/0-1"	±4μm

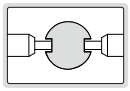
SPLINE MICROMETER

- Meet DIN863-3
- Measure splined shafts, slots and keyways
- Graduation 0.01mm
- Ratchet stop
- Carbide measuring faces

Code	Range	Accuracy
3233-25A	0-25mm	4μm

3233-25A





DIGITAL SPLINE MICROMETER

DATA OUTPUT

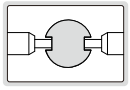
IP65 WATERPROOF

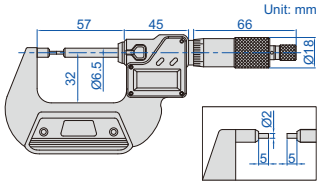
- Measure splined shafts, slots and keyways
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, data transmisson
- Data output
- Automatic power off
- Ratchet stop
- Carbide measuring faces
- Battery CR2032

With data interface (optional wireless transmitter code 7315-31, receiver is needed)

Code	Range	Accuracy	Resolution
3533-25A	0-25mm/0-1"	±4μm	0.001mm/0.00005"

3533-25A



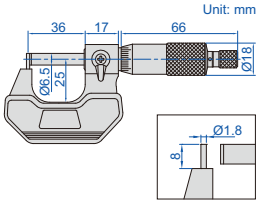


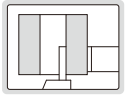
CYLINDRICAL ANVIL TUBE MICROMETER

- Measure wall thickness of tubes
- Graduation 0.01mm
- Ratchet stop
- Carbide spindle tip

Code	Range	Accuracy
3261-25A	0-25mm	6μm

3261-25A





DIGITAL CYLINDRICAL ANVIL TUBE MICROMETER

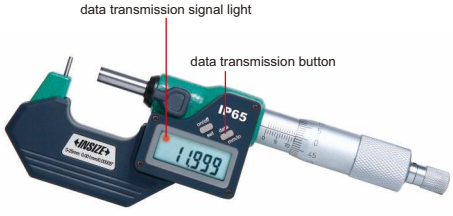
DATA OUTPUT

IP65 WATERPROOF

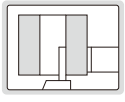
- Measure wall thickness of tubes
- Resolution 0.001mm/0.00005"
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, data transmisson
- Data output, automatic power off
- Ratchet stop
- Carbide spindle tip
- Battery CR2032

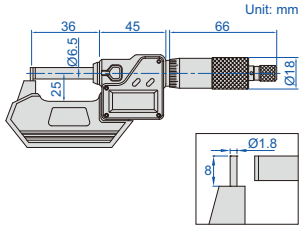
With data interface (optional wireless transmitter code 7315-31, receiver is needed)

Code	Range	Accuracy
3561-25A	0-25mm/0-1"	±6μm



3561-25A



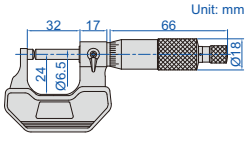


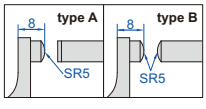
SPHERICAL ANVIL TUBE MICROMETERS

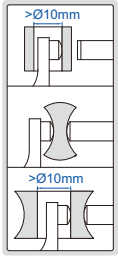
- Meet DIN863-3
- Measure wall thickness of tubes
- Graduation: 0.01mm
- Ratchet stop
- Carbide measuring faces

Code	Range	Type	Accuracy
3260-25A	0-25mm	A	4μm
3260-25SA	0-25mm	B	4μm

3260-25A





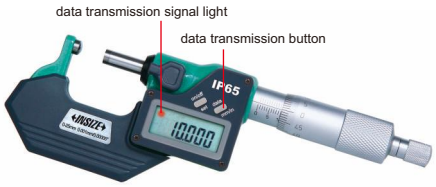


DIGITAL SPHERICAL ANVIL TUBE MICROMETERS

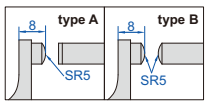
DATA OUTPUT

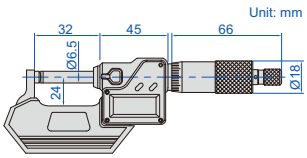
IP65 WATERPROOF

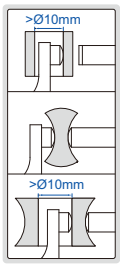
- Measure wall thickness of tubes
- Resolution 0.001mm/0.00005"
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, data transmisson
- Data output, automatic power off
- Ratchet stop
- Carbide measuring faces
- Battery CR2032



3560-25A



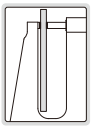




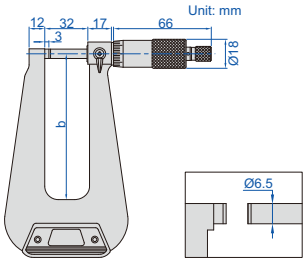
Code	Range	Type	Accuracy
3560-25A	0-25mm/0-1"	A	±4µm
3560-25SA	0-25mm/0-1"	B	±4µm

SHEET METAL MICROMETER

- Deep frame suitable for sheet metal, paper and plastic
- Graduation 0.01mm
- Ratchet stop
- Carbide measuring faces



3239-253

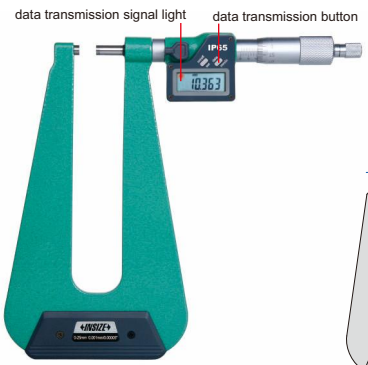


Code	Range	Accuracy	b
3239-253	0-25mm	7µm	155mm

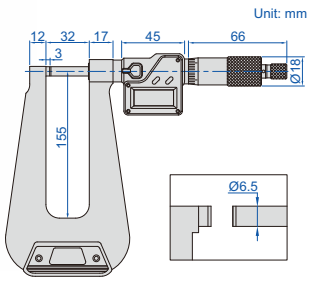
DIGITAL SHEET METAL MICROMETER

DATA OUTPUT

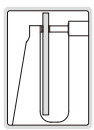
IP65 WATERPROOF



3539-253A



- Deep frame suitable for sheet metal, paper and plastic
- Resolution 0.001mm/0.00005"
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, data transmisson
- Automatic power off, data output
- Ratchet stop
- Carbide measuring faces
- Battery CR2032

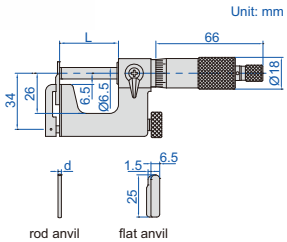


With data interface (optional wireless transmitter code 7315-31, receiver is needed)

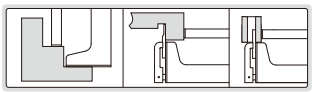
Code	Range	Accuracy
3539-253A	0-25mm/0-1"	±7µm

INTERCHANGEABLE ANVIL MICROMETERS

3262-25A



- Measure tube thickness, shoulder edge distance, rivet head height, etc.
- Supplied with flat anvil and rod anvil
- Graduation 0.01mm
- Ratchet stop
- Carbide spindle tip
- Setting standards are included (except 0-25mm)



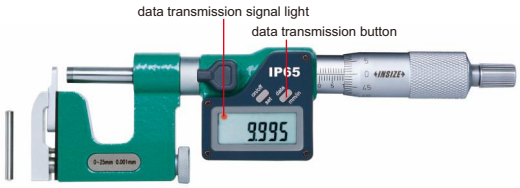
Code	Range	Accuracy	L	d
3262-25A	0-25mm	4µm	28.5mm	Ø3mm
3262-50A	25-50mm	4µm	53.5mm	Ø5mm

DIGITAL INTERCHANGEABLE ANVIL MICROMETERS

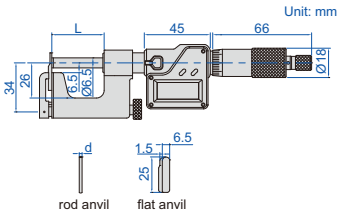
IP65 WATERPROOF

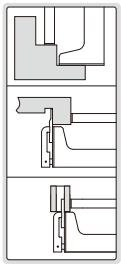
DATA OUTPUT

- Measure tube thickness, shoulder edge distance, rivet head height, etc.
- Supplied with flat anvil and rod anvil
- Resolution 0.001mm/0.00005"
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, data transmisson
- Data output, automatic power off
- Ratchet stop
- Carbide spindle tip
- Setting standards are included (except 0-25mm/0-1")
- Battery CR2032



3562-25A



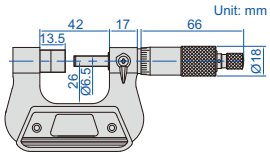


With data interface (optional wireless transmitter code 7315-31, receiver is needed)

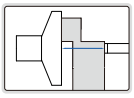
Code	Range	Accuracy	L	d
3562-25A	0-25mm/0-1"	±4μm	28.5mm	Ø3mm
3562-50A	25-50mm/1-2"	±4μm	53.5mm	Ø5mm

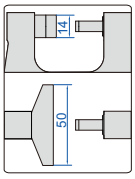
LARGE ANVIL MICROMETER

3234-25A



- Graduation 0.01mm
- Ratchet stop



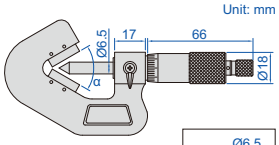


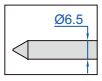
Code	Range	Accuracy
3234-25A	0-25mm	4μm

V-ANVIL MICROMETER

3290-153A

- Measure the diameter of parts or cutting tools with odd grooves, such as taps, reamers and end mills
- Graduation 0.01mm
- Ratchet stop
- Carbide measuring faces
- Supplied with setting standards



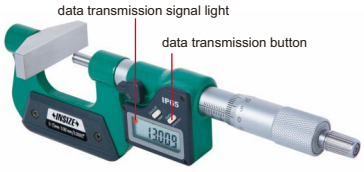


Code	Range	Flutes	Accuracy	α
3290-153A	1-15mm	3	4μm	60°

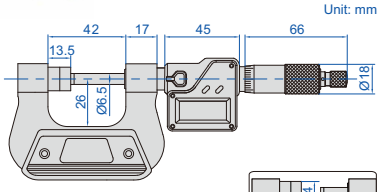
DIGITAL LARGE ANVIL MICROMETER

IP65 WATERPROOF

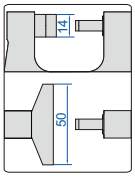
DATA OUTPUT

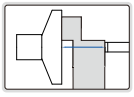


3534-25A



- Resolution 0.001mm/0.00005"
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, data transmisson
- Data output
- Automatic power off
- Ratchet stop
- Battery CR2032





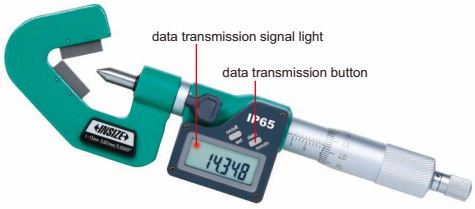
With data interface (optional wireless transmitter code 7315-31, receiver is needed)

Code	Range	Accuracy
3534-25A	0-25mm/0-1"	±4μm

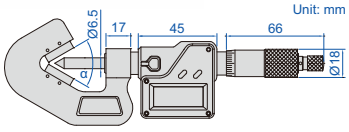
DIGITAL V-ANVIL MICROMETER

IP65 WATERPROOF

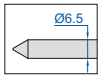
DATA OUTPUT



3590-153A



- Measure the diameter of parts or cutting tools with odd grooves, such as taps, reamers and end mills
- Resolution 0.001mm/0.00005"
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, data transmisson
- Data output, automatic power off
- Ratchet stop
- Carbide measuring faces
- Supplied with setting standards
- Battery CR2032



With data interface (optional wireless transmitter code 7315-31, receiver is needed)

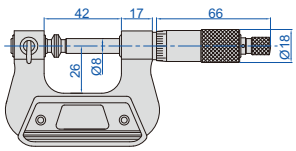
Code	Range	Flutes	Accuracy	α
3590-153A	1-15mm/0.04-0.6"	3	±4μm	60°

NON-ROTATING SPINDLE UNIVERSAL MICROMETER

NON-ROTATING SPINDLE

- Meet DIN863-3
- Graduation 0.01mm
- Non-rotating spindle
- Ratchet stop
- Supplied with 7 pairs of anvil/spindle tip
- Optional accessory: 55° anvil/spindle tip (code **3280-SP1** and **3280-SP2**)

3280-25A



55°anvil/spindle tip (**optional**) Unit: mm

Code **3280-SP1** Knife-edge	0.35 55°	
Code **3280-SP2** Point	Ø0.3 55°	

Anvil/spindle tip (included) Unit: mm

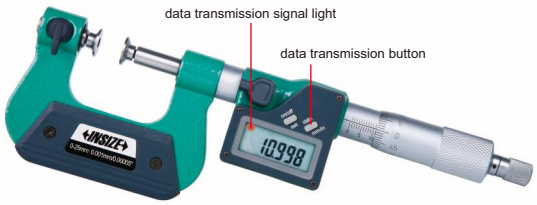
Flat	Ø6.5	
Spherical	SR5 Ø6.5	
Spline	Ø2 3	
Disk	Ø12	
Blade	0.7 3	
Knife-edge	0.35 60°	
Point	Ø0.3 60°	

Code	Range	Accuracy
3280-25A	0-25mm	4μm

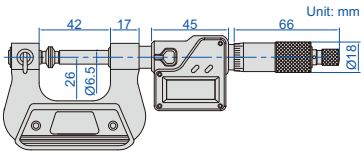
DIGITAL UNIVERSAL MICROMETER

DATA OUTPUT NON-ROTATING SPINDLE

- Accuracy: ±4μm
- Resolution 0.001mm/0.00005"
- Non-rotating spindle
- Button function: on/off, set, mm/inch, data transmisson
- Data output, automatic power off
- Ratchet stop
- Supplied with 7 pairs of anvil/spindle tip
- Optional accessory: 55° anvil/spindle tip code **3280-SP1** and **3280-SP2**, wireless transmitter code **7315-31** (receiver is needed)
- Battery CR2032



3580-25A



55°anvil/spindle tip (**optional**) Unit: mm

Code **3280-SP1** Knife-edge	0.35 55°	
Code **3280-SP2** Point	Ø0.3 55°	

Anvil/spindle tip (included) Unit: mm

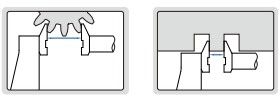
Flat	Ø6.5	
Spherical	SR5 Ø6.5	
Spline	Ø2 3	
Disk	Ø12	
Blade	0.7 3	
Knife-edge	0.35 60°	
Point	Ø0.3 60°	

Code	Range
3580-25A	0-25mm/0-1"

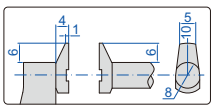
JAW TYPE MICROMETER

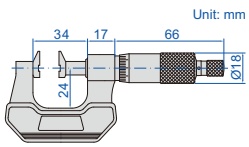
NON-ROTATING SPINDLE

- Graduation 0.01mm
- Non-rotating spindle
- Ratchet stop



3283-25A



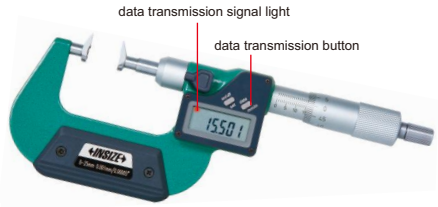


Code	Range	Accuracy
3283-25A	0-25mm	4μm

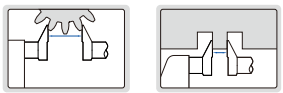
DIGITAL JAW TYPE MICROMETER

NON-ROTATING SPINDLE DATA OUTPUT

- Resolution 0.001mm/0.00005"
- Non-rotating spindle
- Button function: on/off, set, mm/inch, data transmisson
- Data output
- Automatic power off
- Ratchet stop
- Battery CR2032

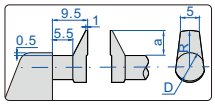


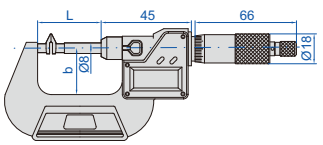
3583-25A



With data interface (optional wireless transmitter code 7315-31, receiver is needed) (mm)

Code	Range	Accuracy	L	a	b	R	D
3583-25A	0-25mm/0-1"	±4μm	43	6.5	32	10	8

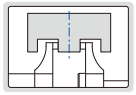




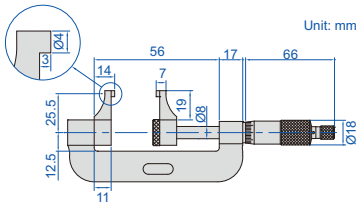
CALIPER TYPE MICROMETER

- Graduation 0.01mm
- Non-rotating spindle
- Ratchet stop
- Carbide measuring faces

Code	Range	Accuracy
3238-25	0-25mm	10μm



3238-25

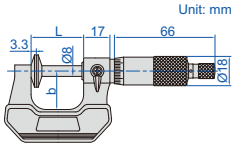


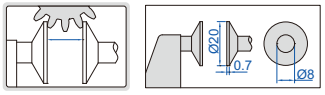
DISK MICROMETERS

- Measure root tangent length of gear
- Graduation 0.01mm
- Ratchet stop
- Supplied with setting standards

Code	Range	Accuracy	Parallelism	L	b
3282-25	0-25mm	4μm	5μm	34mm	24mm
3282-50	25-50mm	4μm	5μm	59mm	32mm
3282-75	50-75mm	5μm	5μm	85mm	45mm
3282-100	75-100mm	5μm	5μm	110mm	57mm

3282-25





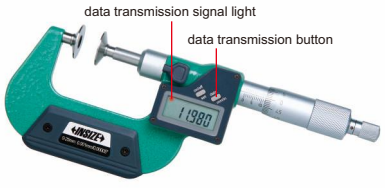
DIGITAL NON-ROTATING SPINDLE DISK MICROMETERS

DATA OUTPUT | NON-ROTATING SPINDLE

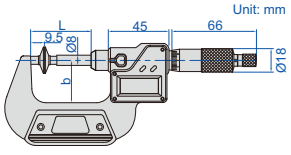
- Measure root tangent length of gear
- Resolution 0.001mm/0.00005"
- Non-rotating spindle
- Button function: on/off, set, mm/inch, data transmisson
- Data output
- Automatic power off
- Ratchet stop
- Supplied with setting standards
- Battery CR2032

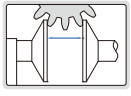
With data interface (optional wireless transmitter code 7315-31, receiver is needed)

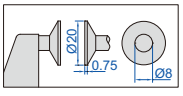
Code	Range	Accuracy	Parallelism	L	b
3594-25A	0-25mm/0-1"	±4μm	5μm	43mm	32mm
3594-50A	25-50mm/1-2"	±4μm	5μm	68mm	44.5mm
3594-75A	50-75mm/2-3"	±5μm	5μm	93mm	57mm
3594-100A	75-100mm/3-4"	±5μm	5μm	118.5mm	70mm



3594-25A







DIGITAL DISK MICROMETERS/SNAP GAUGES

DATA OUTPUT | NON-ROTATING SPINDLE | ONE TURN OF SLEEVE MAKES 5MM SPINDLE FEED, PRESS THE FORK, THE SPINDLE RETRACTS 3MM | ABSOLUTE ENCODER, THE ORIGINAL DATA REMAINS AFTER POWER OFF | MEASUREMENT ACCURACY IS NOT AFFECTED BY THE USE OF SLEEVE

ATTENTION: RECHARGEABLE BATTERY, FOR 24 HOURS CONTINUOUS WORKING | IP65 WATERPROOF | INSPECTION CERTIFICATE | VIDEO

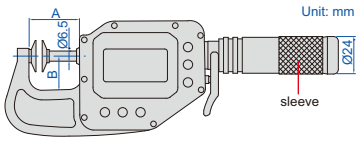
- Measure root tangent length of gear
- Absolute encoder, the original data remains after power off
- Adjustable resolution: 0.0002mm/0.00001"
  0.001mm/0.00005"
  0.01mm/0.0005"
- One turn of sleeve makes 5mm spindle feed
- Measurement accuracy is not affected by the use of sleeve
- Press the fork, the spindle retracts 3mm
- Carbide spindle and anvil
- Measuring force 7-10N
- Customizable measuring force range 2-12N
- Attention: small measuring force will reduce the dustproof and waterproof level
- Button function: data output, tolerance, data preset, data hold, measuring direction change, max./min./TIR, power off time, on/off, zero, mm/inch, adjust resolution
- Supplied with gauge blocks for zero setting
- Power: rechargeable battery, for 24 hours continuous working

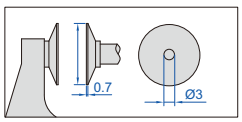
With data interface (optional wireless transmitter code 7315-3350, receiver is needed)

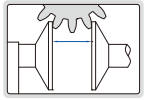
Code	Range	Accuracy	Repeatability	Parallelism	A	B
3353-25*	0-25mm/0-1"	4μm	1μm	4μm	38mm	24mm
3353-50*	25-50mm/1-2"	4μm	1μm	4μm	63mm	25mm
3353-75*	50-75mm/2-3"	5μm	1μm	5μm	88mm	42mm
3353-100*	75-100mm/3-3.95"	5μm	1μm	5μm	113mm	56mm

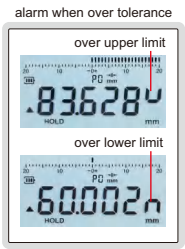
*Supplied with manufacturer inspection certificate

3353- 25







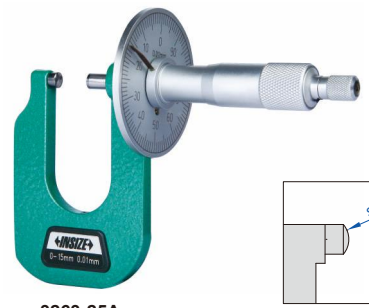


SHEET METAL MICROMETER

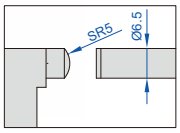
- Meet DIN863-3
- Measure thickness of sheet metal, paper, plastic and rubber parts
- Graduation 0.01mm
- Ratchet stop
- Carbide measuring faces

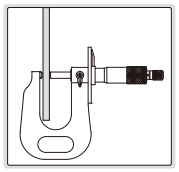
(mm)

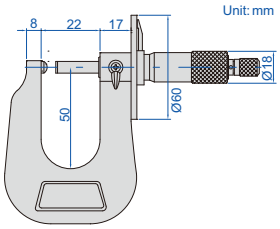
Code	Range	Accuracy
3263-15A	0-15mm	4μm



3263-25A





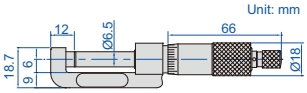


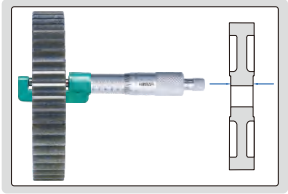
HUB MICROMETER

- Meet DIN863-3
- Measure hub thickness and shoulder inside a bore
- Graduation 0.01mm
- Ratchet stop
- Carbide measuring faces

Code	Range	Accuracy
3292-25	0-25mm	4μm

3292-25



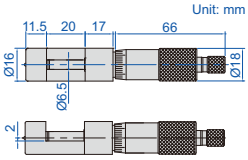


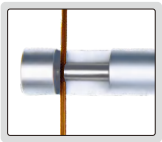
WIRE MICROMETER

- Meet DIN863-3
- Measure diameter of wires and small balls
- Graduation 0.01mm
- Ratchet stop
- Carbide measuring faces

Code	Range	Accuracy
3285-10	0-10mm	4μm

3285-10



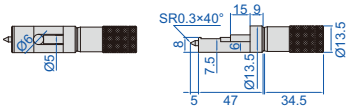


CAN SEAM MICROMETERS

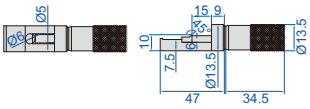
3293-131

3293-132

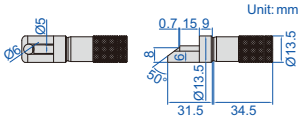
3293-133



3293-131



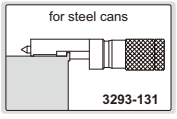
3293-132

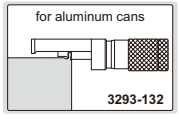


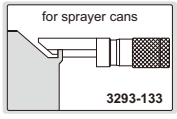
3293-133

- Measure the width, height and depth of can seams
- Graduation 0.01mm

Code	Range	Accuracy
3293-131	0-13mm	4μm
3293-132	0-13mm	4μm
3293-133	0-13mm	4μm





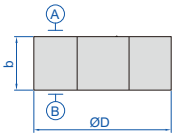


OPTICAL PARALLELS

- Check the flatness and parallelism of measuring faces of micrometer
- Flatness of A and B: 0.1μm
- Parallelism between A and B: 0.6μm

Code	Parallels included (b)	ØD	Applicable micrometer
4184-41A	15.62mm, 15.75mm, 15.87mm, 16.00mm	30mm	0-25mm
4184-42A	40.62mm, 40.75mm, 40.87mm, 41.00mm	30mm	25-50mm
4184-43B	65.62mm, 65.75mm, 65.87mm, 66.00mm	40mm	50-75mm
4184-44B	90.62mm, 90.75mm, 90.87mm, 91.00mm	50mm	75-100mm

4184-41A



MEASURING TOOLS DYNAMOMETERS

- It can be used for measuring force of micrometers, depth micrometers, dial test indicators, inside micrometers, indicators, micrometer heads and optical instruments (optical meters, contact interferometers) and other force measure ment verification
- High precision, wide application, reliable structure, easy to operate

VIDEO

ISF-DGD15

SPECIFICATION

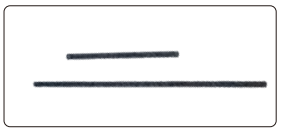
Code	ISF-DGD15	ISF-DGD50
Measuring range	0~15N	0~50N
Resolution	0.01N	
Accuracy	<4N: ±0.01N; ≥4N: ±0.5%	
Dimension	230×220×310mm	
Net weight	10kg	

STANDARD DELIVERY

Main unit	1 pc
Disk	1 pc
Rod	2 pcs
Clamping disk	1 pc

clamping disk (included)

disk (included)



rod (included)

check the measuring force of micrometers

check the measuring force of dial indicators

check the measuring force of dial test indicators

check the measuring force of indicating micrometers

check the measuring force of bore gauges

check the measuring force of calipers

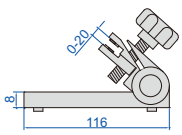
MICROMETER STAND

- Suitable for outside micrometers up to 100mm

Code
6300

6300

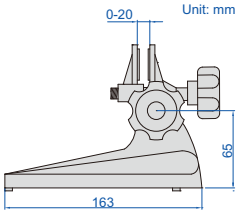
Unit: mm



MICROMETER STAND

6301

Unit: mm

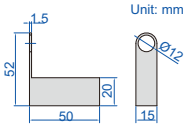


- Suitable for outside micrometers up to 100mm

Code
6301

6301-1

Unit: mm

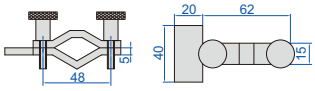


- Suitable for inside micrometers

Code	Description	Applicable products
6301-1	clamp for inside micrometers	all sizes of **3220** series

6301-2

Unit: mm



- Suitable for three points internal micrometers

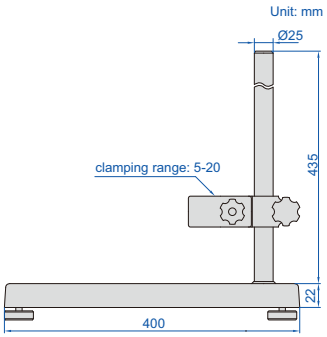
Code	Description	Applicable products
6301-2	clamp for three points internal micrometers	up to 100mm of **3127**, **3227** and **3113** series

MICROMETER STAND

- Suitable for 100-300mm outside micrometers (except **3675** series)

Code
6302

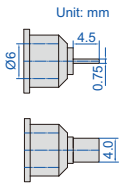
6302



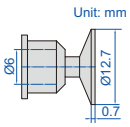
MEASURING TIPS FOR MICROMETERS

- To be installed on micrometer anvils (the measuring range of micrometer is reduced by 10mm)
- Supplied in single
- Made of stainless steel

7397-3



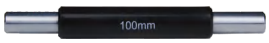
7397-5



Code	Description	Application
7397-3	blade tip	suitable for micrometers with anvil diameter 6.5mm (e.g. **3101/3102/3108/3109** series, etc.)
7397-5	disk tip	

application

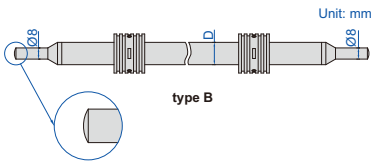
MICROMETER SETTING STANDARDS



6310-100

type A

6310-300



type B

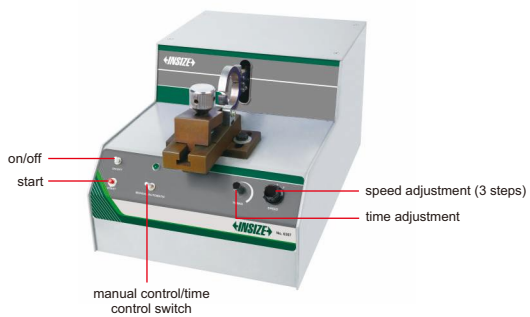
(mm)

Code	Length	Type	Accuracy	D
6310-25	25	A	±1.5μm	Ø7
6310-50	50	A	±2μm	Ø7
6310-75	75	A	±2.5μm	Ø7
6310-100	100	A	±3μm	Ø8
6310-125	125	A	±3.5μm	Ø8
6310-150	150	A	±4μm	Ø8
6310-175	175	A	±4.5μm	Ø8
6310-200	200	A	±5μm	Ø8
6310-225	225	A	±5.5μm	Ø8
6310-250	250	A	±6μm	Ø8
6310-275	275	A	±6.5μm	Ø8
6310-300	300	B	±7μm	Ø16

MICROMETER LAPPING MACHINE CODE 6307

VIDEO

- Used for lapping micrometer measuring surfaces
- Suitable for 0~100mm outside micrometers
- Supplied with diamond paste
- Optional accessory: micrometer lapping blocks



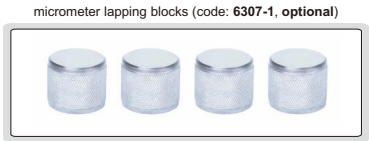
SPECIFICATION

Power supply	220V, 50/60Hz
Dimension (L×W×H)	360×230×210mm
Net weight	15kg

MICROMETER LAPPING BLOCKS (optional)

Code	For micrometer	Remark
6307-1	0~25mm	includes 4 lapping blocks
6307-2	25~50mm	includes 4 lapping blocks
6307-3	50~75mm	includes 4 lapping blocks
6307-4	75~100mm	includes 4 lapping blocks

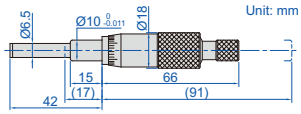
micrometer lapping blocks (code: **6307-1**, **optional**)



MICROMETER HEAD

- Meet DIN863-2
- Ratchet stop

6381-25W

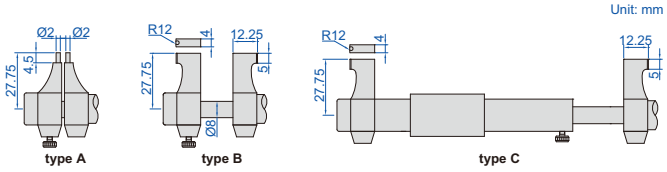


Code	Range	Stem	Spindle tip	Accuracy	Graduation
6381-25W	0-25mm	plain	flat (carbide)	3μm	0.01mm

INSIDE MICROMETERS (ECONOMIC TYPE)

ATTENTION: LOW PARALLELISM OF TWO MEASURING FACES

3220-50



- Graduation 0.01mm
- Ratchet stop
- Carbide measuring faces
- Optional accessory: setting ring (code **6312**), micrometer stand and clamp (code **6301** and **6301-1**)

micrometer stand with clamp **(optional)**

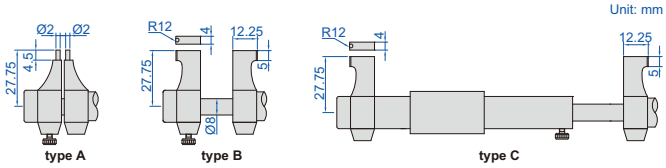
Code	Range	Type	Setting ring	Accuracy
3220-30	5-30mm	A	5mm (included)	7μm
3220-50	25-50mm	B	25mm (included)	8μm
3220-75	50-75mm	B	50mm **(optional)**	9μm
3220-100	75-100mm	C	75mm **(optional)**	10μm

DIGITAL INSIDE MICROMETERS (ECONOMIC TYPE)

ATTENTION: LOW PARALLELISM OF TWO MEASURING FACES

DATA OUTPUT

3520-30



- Resolution 0.001mm/0.00005"
- Button function: on/off, set, mm/inch, data transmisson
- Data output, automatic power off
- Ratchet stop
- Carbide measuring faces
- Battery CR2032
- Optional accessory: setting ring (code **6312**)

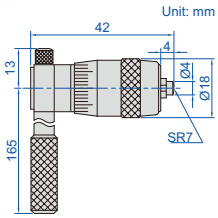
With data interface
(optional wireless transmitter code 7315-31, receiver is needed)

Code	Range	Type	Setting ring	Accuracy
3520-30	5-30mm/0.2-1.2"	A	5mm (included)	±5μm
3520-50	25-50mm/1-2"	B	25mm (included)	±6μm
3520-75	50-75mm/2-3"	B	50mm **(optional)**	±7μm
3520-100	75-100mm/3-4"	C	75mm **(optional)**	±8μm

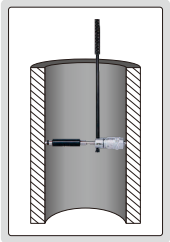
TUBULAR INSIDE MICROMETERS

- Graduation: 0.01mm
- Accuracy: (6+L/50)μm
  L=maximum measuring length (mm)
- Optional accessory: setting ring (code **6312**), gauge block accessory (code **6881**), cylinder gauge block (code **4001**), caliper/height gauge checker (code **6884**)

3221-200



application

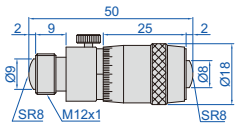


Code	Range	Travel of micrometer head	Extension rods
3221-50	25-50mm	7mm	2 pcs
3221-63	50-63mm	13mm	—
3221-200	50-200mm	13mm	6 pcs
3221-300	50-300mm	13mm	10 pcs

TUBULAR INSIDE MICROMETERS

- Micrometer head: 50-63mm
- Travel of micrometer head: 13mm
- Graduation: 0.01mm
- Accuracy: (3+n+L/50)μm
  n=number of rods,
  L=maximum measuring length (mm)
- Supplied with setting standards
- Carbide measuring faces

Unit: mm



3222-150

Code	Range	Extension rods
3222-150	50-150mm	13mm, 25mm, 50mm
3222-300	50-300mm	13mm, 25mm, 50mm (2 pcs), 100mm
3222-500	50-500mm	13mm, 25mm, 50mm (2 pcs), 100mm, 200mm
3222-600	50-600mm	13mm, 25mm, 50mm, 100mm, 150mm, 200mm
3222-1000	50-1000mm	13mm, 25mm, 50mm (2 pcs), 100mm, 200mm (2 pcs), 300mm
3222-1500	50-1500mm	13mm, 25mm, 50mm (2 pcs), 100mm, 200mm (3 pcs), 300mm (2 pcs)

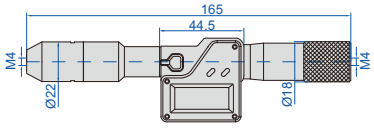
DIGITAL TUBULAR INSIDE MICROMETERS WITH INTERCHANGEABLE POINTS

POINTS CAN BE CUSTOMIZED | IP65 WATERPROOF | DATA OUTPUT

- IP65 dust/waterproof
- Resolution: 0.001mm/0.00005"
- Accuracy: (3+n+L/50)μm
  n=number of rods
  L=maximum measuring length (mm)
- Button function: on/off, set, mm/inch, data transmission
- Data output
- Automatic power off
- Battery CR2032
- Optional accessory: gauge blocks (code **4101-B200**), gauge block holder (**6886** series), gauge block accessory (code **6881-C**)

3525-1050

Unit: mm



With data interface (optional wireless transmitter code 7315-31, receiver is needed)

Code	Range*	Travel of micrometer head	Extension rods
3525-225	200-225mm	25mm	—
3525-1050	200-1050mm	25mm	25mm, 50mm (2 pcs), 100mm, 200mm, 400mm

*Range after installing ball points

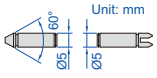
Screw thread points (optional)**

Internal thread (60° thread angle)

Code	SØD
7321-T11	0.4-0.5mm/64-48TPI
7321-T12	0.6-0.9mm/44-28TPI
7321-T13	1-1.75mm/24-14TPI
7321-T14	2-3mm/13-9TPI
7321-T15	3.5-5mm/8-5TPI
7321-T16	5.5-7mm/4.5-3.5TPI
7321-T1S	6 pairs/set, including all above points

7321-T16

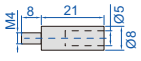
Unit: mm



Point sleeve (optional)

Code
3526-T101

Unit: mm

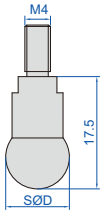


Point sleeve (code **3526-T101) is needed

Ball points (optional)**

- Supplied in pair
- Made of carbide

Unit: mm



Code	SØD
3525-S7	7mm
3525-S8	8mm
3525-S9	9mm
3525-S10	10mm

Code	SØD
3525-S11	11mm
3525-S12	12mm
3525-S13	13mm
3525-S14	14mm
3525-S15	15mm

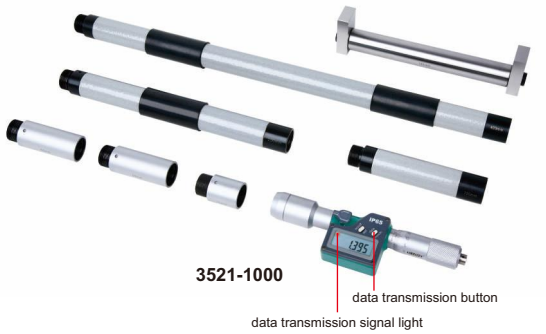
** Points can be customized according to customers' requirements

DIGITAL TUBULAR INSIDE MICROMETERS

IP65 WATERPROOF

DATA OUTPUT

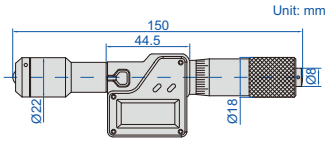
- Micrometer head: 150-175mm
- Graduation: 0.001mm/0.00005"
- Accuracy: (3+n+L/50)μm
  n= number of rods
  L=maximum measuring length (mm)
- Carbide measuring faces
- The diameter of extension rods is 22mm
- IP65 dust/waterproof
- Button function: on/off, set, mm/inch, data transmisson
- Data output
- Automatic power off
- Supplied with setting standards
- Battery CR2032



With data interface (optional wireless transmitter code 7315-31, receiver is needed)

Code	Range	Travel of micrometer head	Extension rods
3521-175	150-175mm	25mm	—
3521-1000	150-1000mm	25mm	25mm, 50mm (2 pcs), 100mm, 200mm, 400mm

Unit: mm

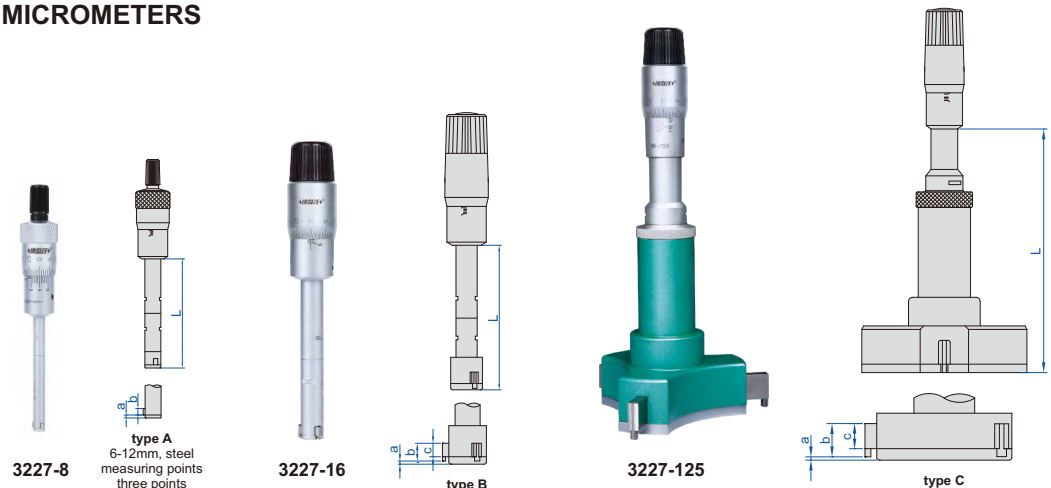


THREE POINTS INTERNAL MICROMETERS

INSPECTION CERTIFICATE

- Meet DIN863-4
- 6-12mm: graduation 0.001mm,
  12-200mm: graduation 0.005mm
- Ratchet stop
- Optional accessory:
  setting rings (code **6312**),
  micrometer stand and clamp
  (code **6301** and **6301-2**)

micrometer stand with clamp (**optional**)



Individual (mm)

Code	Range	Type	Accuracy	Setting ring	Extension rod (included)	L	a	b	c
3227-8*	6-8mm	A	4μm	Ø6mm (included)	100mm	54.5	1.5	2.5	—
3227-10*	8-10mm	A	4μm	Ø8mm (included)	100mm	54.5	1.5	2.5	—
3227-12*	10-12mm	A	4μm	Ø10mm (included)	100mm	54.5	1.5	2.5	—
3227-16*	12-16mm	B	4μm	Ø16mm (included)	150mm	80	0.5	6	4.5
3227-20*	16-20mm	B	4μm	Ø16mm (included)	150mm	80	0.5	6	4.5
3227-25*	20-25mm	B	4μm	Ø25mm (included)	150mm	90	0.5	8	6
3227-30*	25-30mm	B	4μm	Ø25mm (included)	150mm	90	0.5	8	6
3227-40*	30-40mm	B	4μm	Ø40mm (included)	150mm	97	0.5	14	12
3227-50*	40-50mm	B	5μm	Ø40mm (included)	150mm	97	0.5	14	12
3227-63*	50-63mm	C	5μm	Ø62mm (included)	150mm	114	0.5	17.5	14.5
3227-75*	62-75mm	C	5μm	Ø62mm (included)	150mm	114	0.5	17.5	14.5
3227-88*	75-88mm	C	5μm	Ø87mm (included)	150mm	114	0.5	17.5	14.5
3227-100*	87-100mm	C	5μm	Ø87mm (included)	150mm	114	0.5	17.5	14.5
3227-125*	100-125mm	C	5μm	**optional**	150mm	140	0.9	29	25
3227-150*	125-150mm	C	5μm	**optional**	150mm	140	0.9	29	25
3227-175*	150-175mm	C	7μm	**optional**	150mm	140	0.9	29	25
3227-200*	175-200mm	C	7μm	**optional**	150mm	140	0.9	29	25

extension rod (included)

setting ring

6-100mm: included
100-200mm: **optional**

Set

Code	Range	Micrometers included	Setting ring (included)	Extension rod (included)
3227-123*	6-12mm	6-8mm, 8-10mm, 10-12mm	Ø6mm, Ø8mm, Ø10mm	100mm
3227-202*	12-20mm	12-16mm, 16-20mm	Ø16mm	150mm
3227-504*	20-50mm	20-25mm, 25-30mm, 30-40mm, 40-50mm	Ø25mm, Ø40mm	150mm
3227-1004*	50-100mm	50-63mm, 62-75mm, 75-88mm, 87-100mm	Ø62mm, Ø87mm	150mm

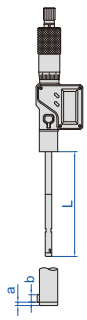
3227-504

*Supplied with manufacturer inspection certificate

DIGITAL THREE POINTS INTERNAL MICROMETERS

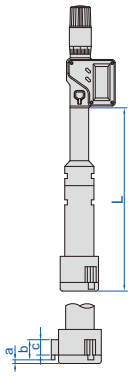
INSPECTION CERTIFICATE | IP65 WATERPROOF | DATA OUTPUT

3127-12



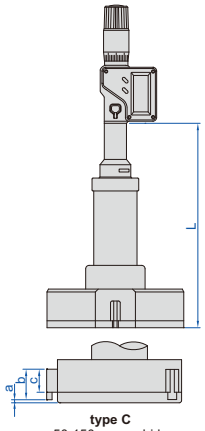
type A
6-12mm, steel measuring points three points

3127-40



type B
12-50mm, carbide measuring points three points

3127-125



type C
50-150mm, carbide measuring points three points

- Resolution 0.001mm/0.00005"
- IP65 dust/waterproof
- Buttons: on/off, set, mm/inch, data transmisson
- Data output
- Automatic power off
- Ratchet stop
- Optional accessory: wireless transmitter code **7315-31** (receiver is needed), setting ring (code **6312**), micrometer stand and clamp (code **6301** and **6301-2**)

Individual **(mm)**

Code	Range	Type	Accuracy	Setting ring	Extension rod (included)	L	a	b	c
3127-8 *	6-8mm/0.24-0.31"	A	4μm	Ø6mm (included)	100mm	57	1.5	2.5	—
3127-10 *	8-10mm/0.31-0.39"	A	4μm	Ø8mm (included)	100mm	57	1.5	2.5	—
3127-12 *	10-12mm/0.39-0.47"	A	4μm	Ø10mm (included)	100mm	57	1.5	2.5	—
3127-16 *	12-16mm/0.47-0.63"	B	4μm	Ø16mm (included)	150mm	99	0.5	6	4.5
3127-20 *	16-20mm/0.63-0.79"	B	4μm	Ø16mm (included)	150mm	99	0.5	6	4.5
3127-25 *	20-25mm/0.79-0.98"	B	4μm	Ø25mm (included)	150mm	105	0.5	8	6
3127-30 *	25-30mm/0.98-1.18"	B	4μm	Ø25mm (included)	150mm	105	0.5	8	6
3127-40 *	30-40mm/1.18-1.57"	B	4μm	Ø40mm (included)	150mm	110	0.5	14	12
3127-50 *	40-50mm/1.57-1.97"	B	5μm	Ø40mm (included)	150mm	110	0.5	14	12
3127-63 *	50-63mm/1.97-2.48"	C	5μm	Ø62mm (included)	150mm	127	0.5	17.5	14.5
3127-75 *	62-75mm/2.44-2.95"	C	5μm	Ø62mm (included)	150mm	127	0.5	17.5	14.5
3127-88 *	75-88mm/2.95-3.46"	C	5μm	Ø87mm (included)	150mm	127	0.5	17.5	14.5
3127-100 *	87-100mm/3.43-3.94"	C	5μm	Ø87mm (included)	150mm	127	0.5	17.5	14.5
3127-125 *	100-125mm/3.94-4.92"	C	5μm	**optional**	150mm	175	0.9	29	25
3127-150 *	125-150mm/4.92-5.91"	C	5μm	**optional**	150mm	175	0.9	29	25

extension rod (included)

setting ring

6-100mm: included
100-150mm: **optional**

micrometer stand with clamp (**optional**)

Set

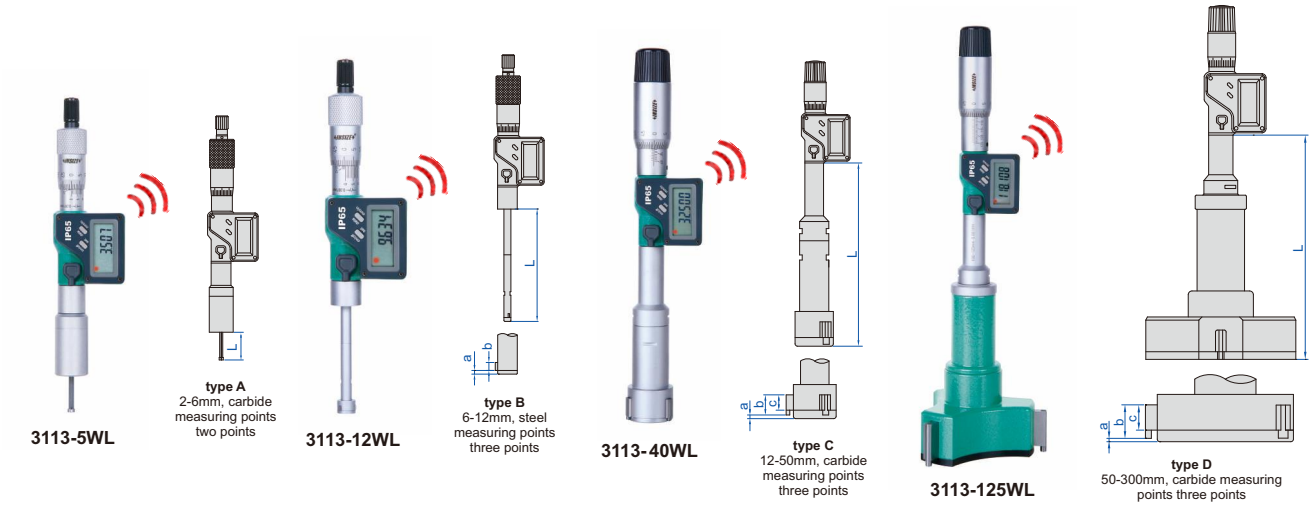
Code	Range	Micrometers included	Setting ring (included)	Extension rod (included)
3127-123 *	6-12mm/0.24-0.47"	6-8mm, 8-10mm, 10-12mm	Ø6mm, Ø8mm, Ø10mm	100mm
3127-202 *	12-20mm/0.47-0.79"	12-16mm, 16-20mm	Ø16mm	150mm
3127-504 *	20-50mm/0.79-1.97"	20-25mm, 25-30mm, 30-40mm, 40-50mm	Ø25mm, Ø40mm	150mm
3127-1004 *	50-100mm/1.97-3.94"	50-63mm, 62-75mm, 75-88mm, 87-100mm	Ø62mm, Ø87mm	150mm

*Supplied with manufacturer inspection certificate

3127-202

BUILT-IN WIRELESS DIGITAL TWO POINTS/THREE POINTS INTERNAL MICROMETERS

INSPECTION CERTIFICATE | IP65 WATERPROOF | DATA OUTPUT



- Resolution 0.001mm/0.00005" (resolution of **3113-275WL** and **3113-300WL** is 0.001mm/0.0001")
- IP65 dust/waterproof
- Built-in wireless data transmission module
- Transmission distance is 10 meter (under the condition of no obstruction and no electromagnetic interference)
- Buttons: on/off, set, mm/inch, data transmisson
- Data output
- Automatic power off
- Ratchet stop
- Built-in rechargeable lithium battery
- Optional accessory: receiver (code **7315-2/3/6/7/8/9**), setting ring (code **6312**), micrometer stand and clamp (code **6301** and **6301-2**)

Individual **(mm)**

Code	Range	Type	Accuracy	Setting ring	Extension rod (included)	L	a	b	c
3113-2WL*	2-2.5mm/0.08-0.10"	A (two points)	6μm	Ø2.5 (included)	—	12	—	—	—
3113-3WL*	2.5-3mm/0.10-0.12"	A (two points)	6μm	Ø2.5 (included)	—	12	—	—	—
3113-4WL*	3-4mm/0.12-0.16"	A (two points)	6μm	Ø4 (included)	—	22	—	—	—
3113-5WL*	4-5mm/0.16-0.20"	A (two points)	6μm	Ø5 (included)	—	22	—	—	—
3113-6WL*	5-6mm/0.20-0.24"	A (two points)	6μm	Ø6 (included)	—	22	—	—	—
3113-8WL*	6-8mm/0.24-0.31"	B (three points)	4μm	Ø6 (included)	100	57	1.5	2.5	—
3113-10WL*	8-10mm/0.31-0.39"	B (three points)	4μm	Ø8 (included)	100	57	1.5	2.5	—
3113-12WL*	10-12mm/0.39-0.47"	B (three points)	4μm	Ø10 (included)	100	57	1.5	2.5	—
3113-16WL*	12-16mm/0.47-0.63"	C (three points)	4μm	Ø16 (included)	150	99	0.5	6	4.5
3113-20WL*	16-20mm/0.63-0.79"	C (three points)	4μm	Ø16 (included)	150	99	0.5	6	4.5
3113-25WL*	20-25mm/0.79-0.98"	C (three points)	4μm	Ø25 (included)	150	105	0.5	8	6
3113-30WL*	25-30mm/0.98-1.18"	C (three points)	4μm	Ø25 (included)	150	105	0.5	8	6
3113-40WL*	30-40mm/1.18-1.57"	C (three points)	4μm	Ø40 (included)	150	110	0.5	14	12
3113-50WL*	40-50mm/1.57-1.97"	C (three points)	5μm	Ø40 (included)	150	110	0.5	14	12
3113-63WL*	50-63mm/1.97-2.48"	D (three points)	5μm	Ø62 (included)	150	127	0.5	17.5	14.5
3113-75WL*	62-75mm/2.44-2.95"	D (three points)	5μm	Ø62 (included)	150	127	0.5	17.5	14.5
3113-88WL*	75-88mm/2.95-3.46"	D (three points)	5μm	Ø87 (included)	150	127	0.5	17.5	14.5
3113-100WL*	87-100mm/3.43-3.94"	D (three points)	5μm	Ø87 (included)	150	127	0.5	17.5	14.5
3113-125WL*	100-125mm/3.94-4.92"	D (three points)	6μm	**optional**	150	175	0.9	29	25
3113-150WL*	125-150mm/4.92-5.91"	D (three points)	6μm	**optional**	150	175	0.9	29	25
3113-175WL*	150-175mm/5.91-6.89"	D (three points)	7μm	**optional**	150	175	0.9	29	25
3113-200WL*	175-200mm/6.89-7.87"	D (three points)	7μm	**optional**	150	175	0.9	29	25
3113-225WL	200-225mm/7.87-8.86"	D (three points)	8μm	**optional**	150	175	0.9	29	25
3113-250WL	225-250mm/8.86-9.84"	D (three points)	8μm	**optional**	150	175	0.9	29	25
3113-275WL	250-275mm/9.84-10.83"	D (three points)	9μm	**optional**	150	175	0.9	29	25
3113-300WL	275-300mm/10.83-11.81"	D (three points)	9μm	**optional**	150	175	0.9	29	25

To be continued

Continued from previous page

receiver (**optional**)

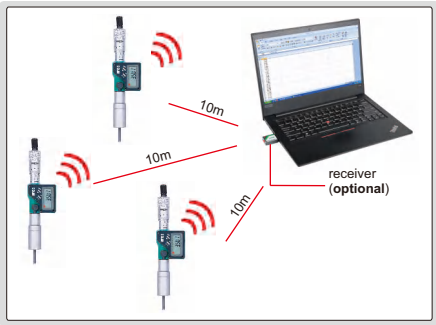
extension rod (included)

setting ring

2-100mm: included
100-300mm: **optional**

micrometer stand
with clamp (**optional**)

application



Set

Code	Range	Micrometers included	Setting ring (included)	Extension rod (included)
3113-232WL*	2-3mm/0.08-0.12"	2-2.5mm, 2.5-3mm	Ø2.5mm	—
3113-363WL*	3-6mm/0.12-0.24"	3-4mm, 4-5mm, 5-6mm	Ø4mm, Ø5mm, Ø6mm	—
3113-123WL*	6-12mm/0.24-0.47"	6-8mm, 8-10mm, 10-12mm	Ø6mm, Ø8mm, Ø10mm	100mm
3113-202WL*	12-20mm/0.47-0.79"	12-16mm, 16-20mm	Ø16mm	150mm
3113-504WL*	20-50mm/0.79-1.97"	20-25mm, 25-30mm, 30-40mm, 40-50mm	Ø25mm, Ø40mm	150mm
3113-1004WL*	50-100mm/1.97-3.94"	50-63mm, 62-75mm, 75-88mm, 87-100mm	Ø62mm, Ø87mm	150mm

*Supplied with manufacturer inspection certificate

WIDE RANGE THREE POINTS INTERNAL MICROMETERS

INSPECTION CERTIFICATE

- Meet DIN863-4
- Graduation 0.001mm
- Carbide measuring faces
- Ratchet stop
- Setting rings are included

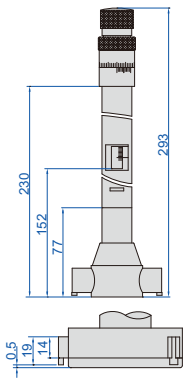
Code	Range	Accuracy	Setting ring
3228-70*	50-70mm	5μm	Ø50mm (included)
3228-100*	70-100mm	5μm	Ø70mm (included)
3228-150*	100-150mm	6μm	Ø100mm (included)
3228-250*	150-250mm	8μm	Ø150mm (included)

*Supplied with manufacturer inspection certificate

setting ring

3228-70

Unit: mm

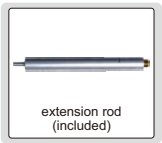


DIGITAL WIDE RANGE THREE POINTS INTERNAL MICROMETERS

INSPECTION CERTIFICATE | IP54 WATERPROOF | DATA OUTPUT

- Meet DIN863-4
- Resolution 0.001mm/0.00005"
  (resolution of **3128-300** is 0.001mm/0.0001")
- IP54 dust/waterproof
- Buttons: on/off, set, mm/inch
- Data output
- Automatic power off
- Carbide measuring faces
- Ratchet stop
- Supplied with extension rods
- Setting rings are included (except 200-300mm)
- Optional accessory:
  wireless transmitter code **7315-30** (receiver is needed)

setting ring



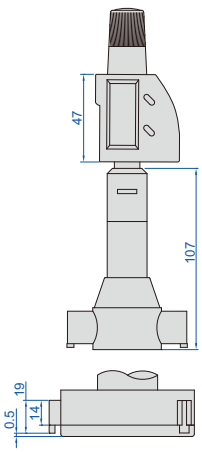
extension rod
(included)

Code	Range	Accuracy	Setting ring	Extension rod (included)
3128-70*	50-70mm/1.97-2.76"	5μm	Ø50mm (included)	150mm
3128-100*	70-100mm/2.76-3.94"	5μm	Ø70mm (included)	150mm
3128-150*	100-150mm/3.94-5.91"	6μm	Ø100mm (included)	150mm
3128-250*	150-250mm/5.91-9.84"	8μm	Ø150mm (included)	150mm
3128-300*	200-300mm/7.87-11.81"	9μm	Ø200mm **(optional)**	150mm

*Supplied with manufacturer inspection certificate

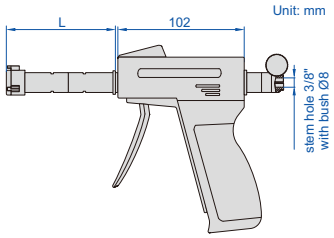
3128-150

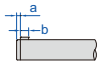
Unit: mm



PISTOL GRIP THREE POINTS BORE GAUGES

INSPECTION CERTIFICATE

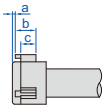




type A
6-12mm, steel measuring points

digital indicator is optional

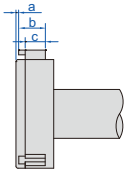
2124-8



type B
12-50mm, carbide measuring points

digital indicator is optional

2124-25



type C
50-100mm, carbide measuring points

digital indicator is optional

2124-100

- Optional accessory: digital indicators (code **2108-10F**, resolution 0.001mm/0.00005"), setting rings (code **6312**)

Individual **(mm)**

Code	Range	Type	Accuracy (without digital indicator)	Setting ring (included)	Extension rod (included)	L	a	b	c
2124-8 *	6-8mm	A	4μm	Ø6mm	100mm	50	1.5	2.5	—
2124-10 *	8-10mm	A	4μm	Ø8mm	100mm	50	1.5	2.5	—
2124-12 *	10-12mm	A	4μm	Ø10mm	100mm	50	1.5	2.5	—
2124-16 *	12-16mm	B	4μm	Ø16mm	150mm	65	0.5	6	4.5
2124-20 *	16-20mm	B	4μm	Ø16mm	150mm	65	0.5	6	4.5
2124-25 *	20-25mm	B	4μm	Ø25mm	150mm	91	0.5	8	6
2124-30 *	25-30mm	B	4μm	Ø25mm	150mm	91	0.5	8	6
2124-40 *	30-40mm	B	4μm	Ø40mm	150mm	97	0.5	14	12
2124-50 *	40-50mm	B	5μm	Ø40mm	150mm	97	0.5	14	12
2124-63 *	50-63mm	C	5μm	Ø62mm	150mm	112	0.5	17.5	14.5
2124-75 *	62-75mm	C	5μm	Ø62mm	150mm	112	0.5	17.5	14.5
2124-88 *	75-88mm	C	5μm	Ø87mm	150mm	112	0.5	17.5	14.5
2124-100 *	87-100mm	C	5μm	Ø87mm	150mm	112	0.5	17.5	14.5

setting ring (included)

extension rod (included)

2124- S504

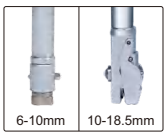
Set

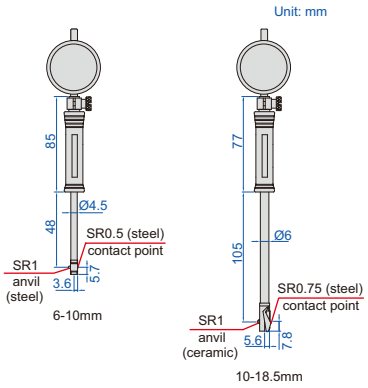
Code	Range	Probes included	Setting ring (included)	Extension rod (included)	Remark
2124-S123 *	6-12mm	6-8mm, 8-10mm, 10-12mm	Ø6mm, Ø8mm, Ø10mm	100mm	includes 1 handle
2124-S202 *	12-20mm	12-16mm, 16-20mm	Ø16mm	150mm	includes 1 handle
2124-S504 *	20-50mm	20-25mm, 25-30mm, 30-40mm, 40-50mm	Ø25mm, Ø40mm	150mm	includes 2 handles
2124-S1004 *	50-100mm	50-63mm, 62-75mm, 75-88mm, 87-100mm	Ø62mm, Ø87mm	150mm	includes 1 handle

*Supplied with manufacturer inspection certificate

PRECISION BORE GAUGES FOR SMALL HOLES (WITH DIAL INDICATOR)

BUILT-IN WIRELESS DIGITAL INDICATOR IS OPTIONAL





2853-10

2153-18

- Accuracy: ±0.007mm
- Optional accessory: setting ring (code **6312**), bore gauge setter

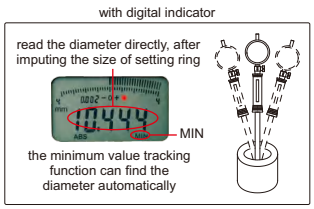
With dial indicator

Code	Range	Indicator	Repeatability
2853-10	6-10mm	dial indicator, range 1mm, graduation 0.001mm (code **2313-1FA**)	0.0015mm
2853-18	10-18.5mm		0.0015mm

With digital indicator
(optional wireless transmitter code 7315-51B, receiver is needed)

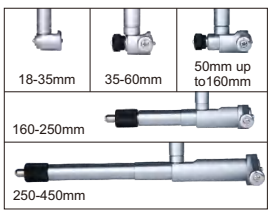
Code	Range	Indicator	Repeatability
2153-10	6-10mm	digital indicator, code **2108-101F**, range 12.7mm/0.5", resolution 0.001mm/0.00005"	0.002mm
2153-18	10-18.5mm		0.002mm

with digital indicator

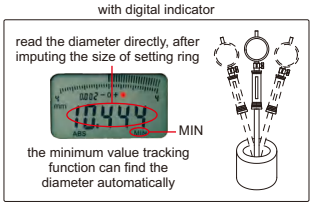


PRECISION BORE GAUGES (WITH DIAL INDICATOR)

BUILT-IN WIRELESS DIGITAL INDICATOR IS OPTIONAL



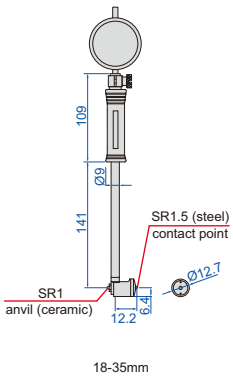
with digital indicator

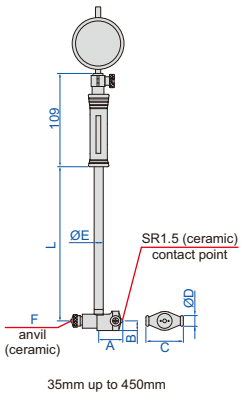


2825-160

2126-35

Unit: mm





(mm)

Range	A	B	C	ØD	ØE	F	L
35-60mm	22	9	27	13	12.8	SR2	141
50-100mm	26	9	35	13	12.8	SR2	141
50-160mm	26	9	35	13	12.8	SR2	141
100-160mm	26	9	35	13	12.8	SR2	141
160-250mm	56.5	13	74.5	15	12.8	SR2	241
250-450mm	86.5	15	101.5	15	14.5	SR2.5	241

- Optional accessory: setting ring (code **6312**), bore gauge setter

With dial indicator

Code	Range	Indicator	Accuracy	Repeatability
2825-35	18-35mm	dial indicator, range 1mm, graduation 0.001mm (code **2313-1FA**)	±0.007mm	0.0015mm
2825-60	35-60mm		±0.007mm	0.0015mm
2825-100	50-100mm		±0.007mm	0.0015mm
2825-160	50-160mm		±0.007mm	0.0015mm
2825-161	100-160mm		±0.007mm	0.0015mm
2825-250	160-250mm		±0.007mm	0.0015mm
2825-450	250-450mm		±0.007mm	0.0015mm

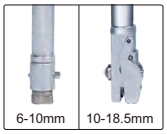
With digital indicator
(optional wireless transmitter code 7315-51B, receiver is needed)

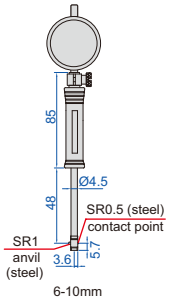
Code	Range	Indicator	Accuracy	Repeatability
2126-35	18-35mm	digital indicator, code **2108-101F**, range 12.7mm/0.5", resolution 0.001mm/0.00005"	±0.007mm	0.002mm
2126-60	35-60mm		±0.007mm	0.002mm
2126-100	50-100mm		±0.007mm	0.002mm
2126-160	50-160mm		±0.007mm	0.002mm
2126-161	100-160mm		±0.007mm	0.002mm
2126-250	160-250mm		±0.007mm	0.002mm
2126-450	250-450mm		±0.007mm	0.002mm

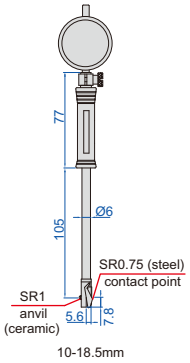
BORE GAUGES FOR SMALL HOLES (WITH DIAL INDICATOR)

ATTENTION: NOT SUITABLE FOR 0.001MM DIAL INDICATORS

BUILT-IN WIRELESS DIGITAL INDICATOR IS OPTIONAL







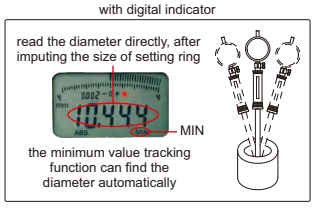
2852-10

2152-18

- Repeatability: 0.003mm
- Optional accessory: setting ring (code **6312**), bore gauge setter

With dial indicator

Code	Range	Indicator	Accuracy
2852-10	6-10mm	dial indicator, range 3mm, graduation 0.01mm (code **2311-3F**)	±0.012mm
2852-18	10-18.5mm		±0.012mm

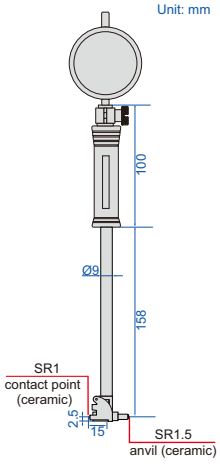


With digital indicator
(optional wireless transmitter code 7315-51B, receiver is needed)

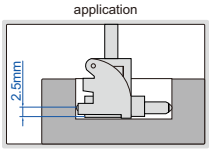
Code	Range	Indicator	Accuracy
2152-10	6-10mm	digital indicator, code **2108-10F**, range 12.7mm/0.5", resolution 0.002mm/0.0001" (can switch to: 0.01mm/0.0005")	±0.012mm
2152-18	10-18.5mm		±0.012mm

BORE GAUGE FOR BLIND HOLES (WITH DIAL INDICATOR)

ATTENTION: NOT SUITABLE FOR 0.001MM DIAL INDICATORS



2420-60



- To measure diameter of shallow and blind holes
- Optional accessory: setting ring (code **6312**), long handle (code **7351**), bore gauge setter

With dial indicator

Code	Range	Indicator	Accuracy	Repeatability
2420-60	35-60mm	dial indicator, range 10mm, graduation 0.01mm (code **2308-10FA**)	±0.018mm	0.003mm

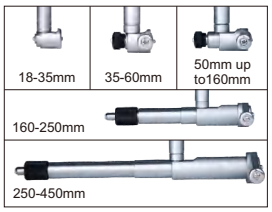
BORE GAUGES (WITH DIAL INDICATOR)

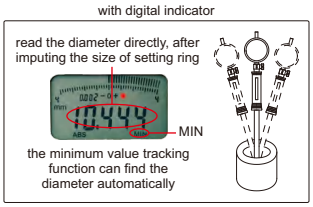
BUILT-IN WIRELESS DIGITAL INDICATOR IS OPTIONAL

ATTENTION: NOT SUITABLE FOR 0.001MM DIAL INDICATORS

POPULAR MODEL

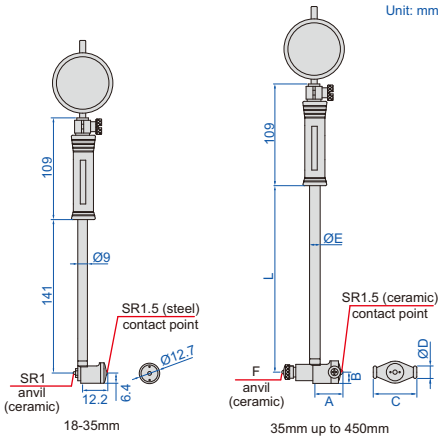
VIDEO





2322-160A

2122-35A



(mm)

Range	A	B	C	ØD	ØE	F	L
35-60mm	22	9	27	13	12.8	SR2	141
50-100mm	26	9	35	13	12.8	SR2	141
50-160mm	26	9	35	13	12.8	SR2	141
100-160mm	26	9	35	13	12.8	SR2	141
160-250mm	56.5	13	74.5	15	12.8	SR2	241
250-450mm	86.5	15	101.5	15	14.5	SR2.5	241

- Repeatability: 0.003mm
- Optional accessory: setting ring (code **6312**), long handle (code **7351**), bore gauge setter

With dial indicator

Code	Range	Indicator	Accuracy
2322-35A	18-35mm	dial indicator, range 10mm, graduation 0.01mm (code **2308-10FA**)	±0.015mm
2322-60A	35-60mm		±0.018mm
2322-100A	50-100mm		±0.018mm
2322-160A	50-160mm		±0.018mm
2322-161A	100-160mm		±0.018mm
2322-250A	160-250mm		±0.018mm
2322-450A	250-450mm		±0.018mm

With digital indicator
(optional wireless transmitter code 7315-51B, receiver is needed)

Code	Range	Indicator	Accuracy	Repeatability
2122-35A	18-35mm	digital indicator, code **2108-10F**, range 12.7mm/0.5", resolution 0.002mm/0.0001" (can switch to 0.01mm/0.0005")	±0.015mm	0.003mm
2122-60A	35-60mm		±0.018mm	0.003mm
2122-100A	50-100mm		±0.018mm	0.003mm
2122-160A	50-160mm		±0.018mm	0.003mm
2122-161A	100-160mm		±0.018mm	0.003mm
2122-250A	160-250mm		±0.018mm	0.003mm
2122-450A	250-450mm		±0.018mm	0.003mm

PRECISION BORE GAUGES (WITH DIAL INDICATOR)

BUILT-IN WIRELESS DIGITAL INDICATOR IS OPTIONAL

With dial indicator

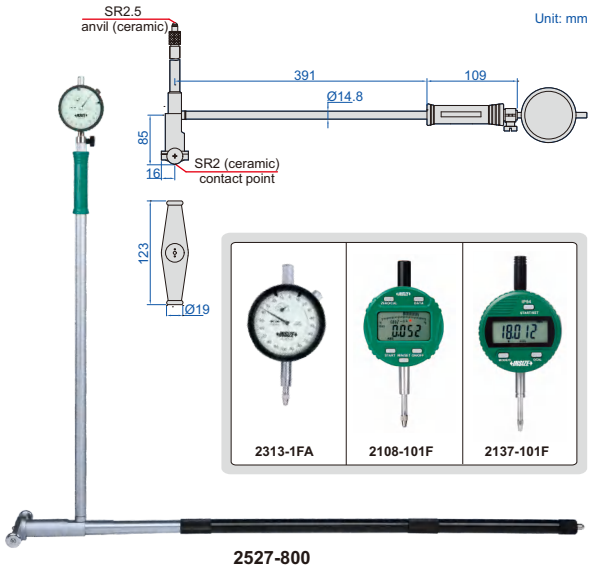
Code	Range	Indicator	Accuracy	Repeatability
2527-800	400-800mm	dial indicator, code **2313-1FA**, range 1mm, resolution 0.001mm	±0.007mm	0.0015mm

With digital indicator (optional wireless transmitter code 7315-51B, receiver is needed)

Code	Range	Indicator	Accuracy	Repeatability
2527-800G	400-800mm	digital indicator, code **2108-101F**, range 12.7mm/0.5", resolution 0.001mm/0.00005"	±0.007mm	0.002mm

With waterproof digital indicator
(optional wireless transmitter code 7315-51B, receiver is needed)

Code	Range	Indicator	Accuracy	Repeatability
2527-800WP	400-800mm	waterproof digital indicator, code **2137-101F**, range 12.7mm/0.5", dust/waterproof IP54, resolution 0.001mm/0.00005"	±0.007mm	0.002mm

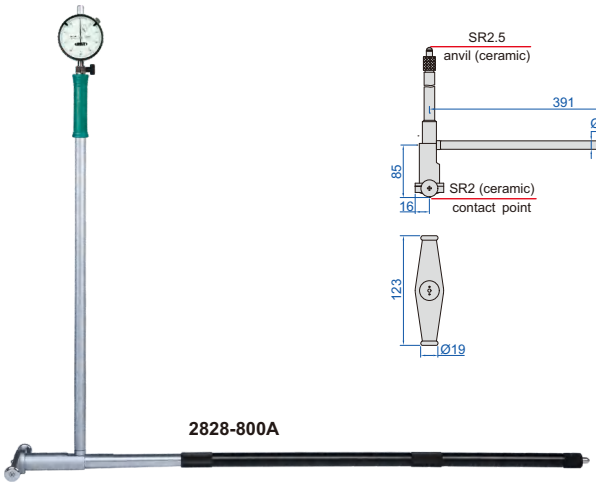


2527-800

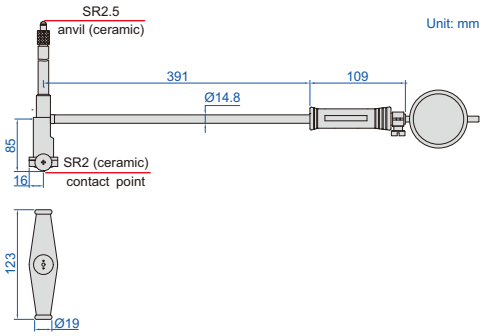
BORE GAUGE (WITH DIAL INDICATOR)

ATTENTION: NOT SUITABLE FOR 0.001MM DIAL INDICATORS

2308-10FA



2828-800A



Code	Range	Accuracy	Repeatability	Indicator
2828-800A	400-800mm	±0.025mm	0.003mm	dial indicator, code **2308-10FA**, range 10mm, graduation 0.01mm

BORE GAUGE SETS (WITH DIAL INDICATOR)

ATTENTION: NOT SUITABLE FOR 0.001MM DIAL INDICATORS

- Repeatability: 0.003mm
- Optional accessory: setting ring (code **6312**), long handle (code **7351**), bore gauge setter

packaging (code **2824-S3**)

2824-S160 2824-S3

Code	Range	Indicator	Bore gauges included	Accuracy
2824-S160	35-160mm	dial indicator, code **2308-10FA**, range 10mm, graduation 0.01mm	① 35-50mm (dial indicator and handle are not included) ② 50-160mm	35-50mm ±0.018mm 50-160mm ±0.018mm
2824-S3	18-160mm	dial indicator, code **2308-10FA**, range 10mm, graduation 0.01mm	① 18-35mm ② 35-60mm (dial indicator is not included) ③ 50-160mm (dial indicator is not included)	18-35mm ±0.015mm 35-60mm ±0.018mm 50-160mm ±0.018mm

BORE GAUGES (WITH DIAL INDICATOR)

ATTENTION: NOT SUITABLE FOR 0.001MM DIAL INDICATORS

VIDEO

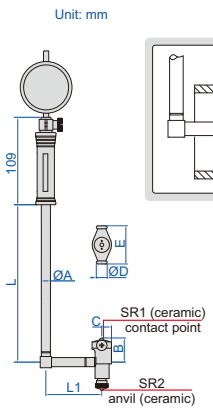
- Optional accessory: setting ring (code **6312**), long handle (code **7351**), bore gauge setter

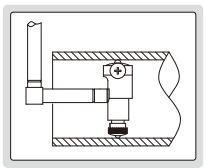
(mm)

Range	ØA	B	C	ØD	E	L	L1
35-60mm	12.8	22	9	13	27	141	75
50-160mm	12.8	28.5	9.2	13	35	141	76.2
160-250mm	14.5	62.0	12.7	15	74.5	391	100
250-450mm	14.5	91.5	15.0	15	101.5	391	100

2308-10FA

2827-160A





With dial indicator

Code	Range	Indicator	Accuracy	Repeatability
2827-60A	35-60mm	dial indicator, code **2308-10FA**, range 10mm, graduation 0.01mm	±0.018mm	0.003mm
2827-160A	50-160mm		±0.018mm	0.003mm
2827-250A	160-250mm		±0.018mm	0.003mm
2827-450A	250-450mm		±0.018mm	0.003mm

CARBON FIBER BORE GAUGES

SPRING LOADED MEASURING POINT

CARBON FIBER EXTENSION RODS, LIGHT WEIGHT, NOT EASY TO DEFORM, LOW THERMAL EXPANSION

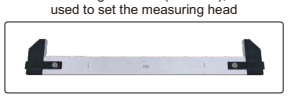
DATA OUTPUT

VIDEO

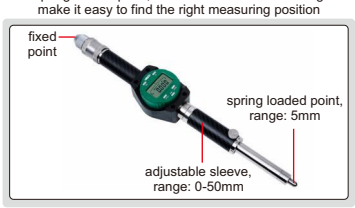
- Carbon fiber extension rods, light weight, not easy to deform, low thermal expansion
- Carbide measuring faces
- Data output
- Button function: on/off, zero, tolerance Go and No-Go display, data preset, measuring direction change, max./min./TIR measurement,inch/metric conversion, absolute/incremental measurement
- Supplied with 400mm setting standard
- Optional accessory: wireless transmitter code **7315-51** (receiver is needed)

3522-1500

setting standard (included), used to set the measuring head



spring loaded point, and max./min. value tracking make it easy to find the right measuring position



Measuring head

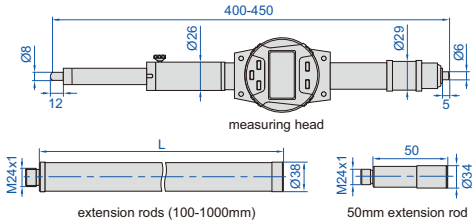
Range	Resolution	Accuracy	Repeatability	Net weight
400-450mm	0.001mm/0.00005"	±6μm	±3μm	1kg

Extension rods

Length (L)	Accuracy	Net weight	Material
50mm	±2μm	230g	steel
100mm	±3μm	300g	carbon fiber
200mm	±4.5μm	390g	carbon fiber
300mm	±6μm	470g	carbon fiber
600mm	±9μm	730g	carbon fiber
1000mm	±11μm	1000g	carbon fiber

Code	Range	Net weight	Extension rods
3522-1000	400-1000mm	3.8kg	50mm, 100mm, 200mm, 300mm
3522-1500	400-1500mm	4.5kg	50mm, 100mm, 200mm, 300mm, 600mm
3522-2000	400-2000mm	5.3kg	50mm, 100mm, 200mm, 300mm, 600mm (2 pcs)
3522-2400	400-2400mm	6.0kg	50mm, 100mm, 200mm, 300mm, 600mm (3 pcs)
3522-3400	400-3400mm	6.7kg	50mm, 100mm, 200mm, 300mm, 600mm (4 pcs)
3522-6400	400-6400mm	9.5kg	50mm, 100mm, 200mm, 300mm, 600mm, 1000mm (5 pcs)

Unit: mm



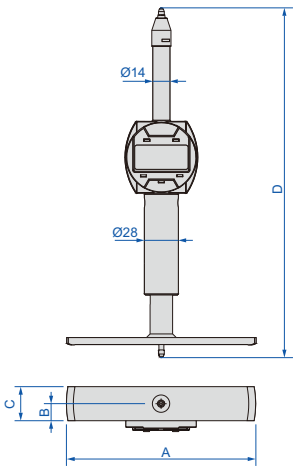
LARGE RANGE BORE GAUGES

DATA OUTPUT

- Digital indicator reading in digital and analog
- Digital indicator display can be rotated by 320°
- Digital indicator can keep preset data and tolerance data in memory after restart
- Digital indicator button function: tolerance Go and No-Go display, data preset, measuring direction change, max./min./TIR measurement, inch/metric conversion, absolute/incremental measurement, data output
- Battery CR2032
- Carbide probes
- Data output
- Optional accessory: steel gauge block sets (code **4100**), gauge block accessory (code **6981**)

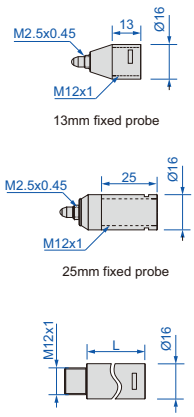
2330-510

extension rods

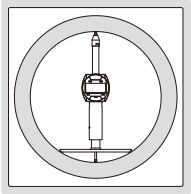


micrometer head

Unit: mm



application



Extension rods

Length (L)	Accuracy	Material
25mm	1μm	chrome plated steel
50mm	2μm	chrome plated steel
100mm	4μm	chrome plated steel

Micrometer head

Range	Resolution	Movable probe travel	Accuracy	Repeatability	Remark
180-205mm	0.001mm/0.00005"	13mm	7μm	2μm	13mm, 25mm fixed probe (included)
280-305mm	0.001mm/0.00005"	13mm	7μm	2μm	13mm, 25mm fixed probe (included)

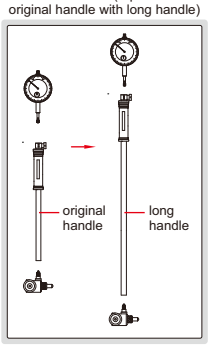
Digital indicator code 2138-10F is included
(with data interface, optional wireless transmitter code 7315-50M, receiver is needed)

Code	Range (D)	Micrometer head range	A	B	C	Extension rods
2330-300	180-300mm	180-205mm	76.5mm	12.5mm	25mm	25mm, 50mm (2pcs)
2330-510	280-510mm	280-305mm	156mm	14mm	28mm	25mm, 50mm (2pcs), 100mm

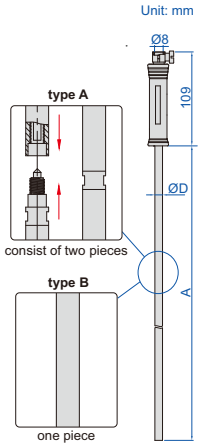
LONG HANDLES

- To assist deep-hole measurement
- Can be used for bore gauges **2322**, **2122**, **2824**, **2828** and **2827**

Code	Applicable bore gauges	A	ØD	Type
7351-EX10	18-35mm	475mm	9mm	B
7351-EX11	35-60mm, 50-100mm, 50-160mm, 100-160mm	475mm	13mm	B
7351-EX12		980mm	13mm	
7351-EX13		1480mm	14.5mm	A
7351-EX14		1980mm	14.5mm	
7351-EX21	160-250mm, 250-450mm	480mm	14.5mm	B
7351-EX22		980mm	14.5mm	
7351-EX23		1480mm	14.5mm	A
7351-EX24		1980mm	14.5mm	



7351-EX11



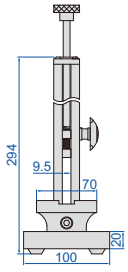
BORE GAUGE SETTERS

- Vertical and horizontal use
- To be used with gauge blocks

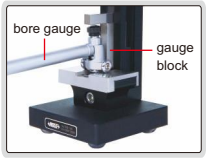
Gauge block set for 7353-160

Blocks per set	Size (mm)	Step (mm)	Quantity	Remark
33	1.005 1.01-1.09 1.1-1.9 1-9 10-30 50 100	0.01 0.1 1 10	1 pc 9 pcs 9 pcs 9 pcs 3 pcs 1 pc 1 pc	grade 2 (ISO3650)

7353-160

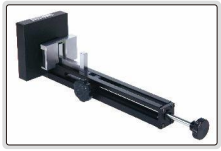


application



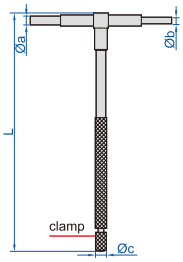
gauge blocks for **7353-160**

horizontal use



Code	Range	Repeatability	Remark
7353-160	0-160mm	1.2μm	with gauge block set
7353-160W	0-160mm	1.2μm	without gauge block set

TELESCOPING GAUGE SET



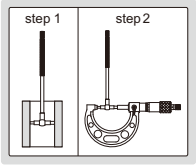
4206-1

(mm)

Range	L	Øa	Øb	Øc
8-12.7mm	116	3.9	2.9	4.7
12.7-19mm	112	5.3	3.8	4.7
19-32mm	112	5.3	3.8	4.7
32-54mm	135	7.5	5.8	6.2
54-90mm	135	7.5	5.8	6.2
90-150mm	137	7.5	5.8	6.2

- 6 gauges per set
- For quick measurement of inside diameter of holes and width of slots
- Satin chrome finish

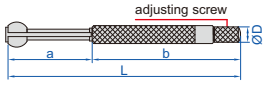
Code	Total range	Gauges included (mm)
4206-1	8-150mm	8-12.7, 12.7-19, 19-32, 32-54, 54-90, 90-150



SMALL HOLE GAUGE SET

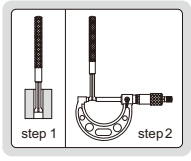
4208-1

- 4 gauges per set
- For small holes, slots and grooves, etc.
- Satin chrome finish



(mm)

Range	L	a	b	ØD
3-5mm	76	24	52	5
5-7.5mm	79	27	52	5
7.5-10mm	88	30	58	6
10-13mm	91	34	58	6



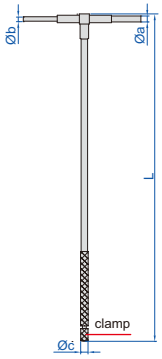
Code	Total range	Gauges included
4208-1	3-13mm	3-5mm, 5-7.5mm, 7.5-10mm, 10-13mm

LONG HANDLE TELESCOPING GAUGES

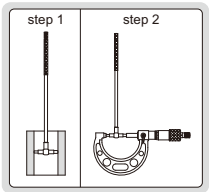
- For quick measurement of inside diameter of deep holes and width of slots
- Satin chrome finish

(mm)

Code	Range	L	Øa	Øb	Øc
4209-1	8-12.7mm	300	3.9	2.9	6.2
4209-2	12.7-19mm	300	5.3	3.8	6.2
4209-3	19-32mm	300	5.3	3.8	6.2
4209-4	32-54mm	300	7.6	6.1	7.2
4209-5	54-90mm	300	7.6	6.1	7.2
4209-6	90-150mm	300	7.6	6.1	7.2



4209-6

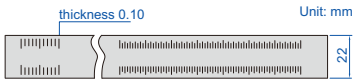


FLEXIBLE INNER DIAMETER METERS

- Measure average inner diameter of flexible materials
- Made of PET

Code	Diameter range	Graduation	Accuracy
7137-30	Ø10-30mm	0.05mm	±0.10mm
7137-60	Ø30-60mm	0.05mm	±0.10mm
7137-100	Ø50-100mm	0.05mm	±0.10mm
7137-200	Ø100-200mm	0.05mm	±0.10mm
7137-350	Ø200-350mm	0.05mm	±0.15mm

7137-60



application

INNER DIAMETER METERS

CAN BE CUSTOM-MADE

7155-500

- Used to measure the inner diameter such as seals
- Made of stainless steel

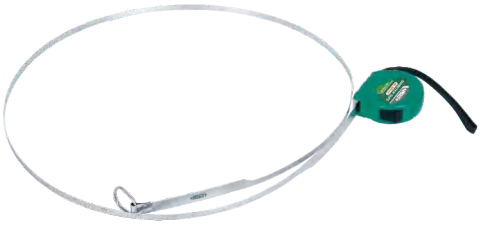
Code	Diameter range	Graduation	Accuracy
7155-100 *	Ø50-100mm	0.02mm	±0.05mm
7155-200 *	Ø100-200mm	0.02mm	±0.05mm
7155-300	Ø200-300mm	0.02mm	±0.05mm
7155-500	Ø300-500mm	0.02mm	±0.05mm
7155-700	Ø500-700mm	0.02mm	±0.06mm
7155-900	Ø700-900mm	0.02mm	±0.06mm

Code	Diameter range	Graduation	Accuracy
7155-1100	Ø900-1100mm	0.02mm	±0.06mm
7155-1300	Ø1100-1300mm	0.02mm	±0.08mm
7155-1500	Ø1300-1500mm	0.02mm	±0.08mm
7155-1700	Ø1500-1700mm	0.02mm	±0.08mm
7155-1900	Ø1700-1900mm	0.02mm	±0.08mm
7155-2100	Ø1900-2100mm	0.02mm	±0.08mm

* The thickness of code **7155-100** and **7155-200** is 0.15mm, others is 0.25mm

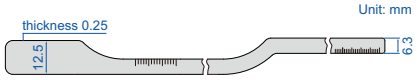
DIAMETER METERS

- Measure diameter of pipes, trees, tires, etc.
- Made of stainless steel



7153-50

Code	Diameter range	Graduation	Accuracy
7153-50	50-300mm	0.01mm	±0.05mm
7153-300	300-600mm	0.01mm	±0.06mm

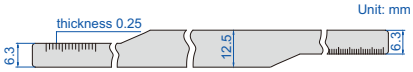


DIAMETER METERS

CAN BE CUSTOM-MADE

- Measure diameter of pipes, trees, tires, etc.
- Made of stainless steel

7135-525



Code	Diameter range	Graduation	Accuracy
7135-35 *	Ø20-35mm	0.05mm	±0.05mm
7135-55 *	Ø30-55mm	0.05mm	±0.05mm
7135-125	Ø50-125mm	0.01mm	±0.05mm
7135-225	Ø100-225mm	0.01mm	±0.05mm
7135-375	Ø200-375mm	0.01mm	±0.05mm
7135-525	Ø350-525mm	0.01mm	±0.05mm
7135-725	Ø500-725mm	0.01mm	±0.06mm
7135-925	Ø700-925mm	0.01mm	±0.06mm
7135-1125	Ø900-1125mm	0.02mm	±0.06mm
7135-1325	Ø1100-1325mm	0.02mm	±0.08mm
7135-1525	Ø1300-1525mm	0.02mm	±0.08mm
7135-1725	Ø1500-1725mm	0.02mm	±0.08mm
7135-1925	Ø1700-1925mm	0.02mm	±0.08mm
7135-2125	Ø1900-2125mm	0.02mm	±0.08mm
7135-2325	Ø2100-2325mm	0.02mm	±0.10mm
7135-2525	Ø2300-2525mm	0.02mm	±0.10mm
7135-2750	Ø2500-2750mm	0.02mm	±0.10mm
7135-3000	Ø2750-3000mm	0.02mm	±0.10mm
7135-3250	Ø3000-3250mm	0.02mm	±0.15mm
7135-3500	Ø3250-3500mm	0.02mm	±0.15mm

* The thickness of code **7135-35** and **7135-55** is 0.10mm, while the thickness of other codes is 0.25mm

Code	Diameter range	Graduation	Accuracy
7135-3750	Ø3500-3750mm	0.02mm	±0.15mm
7135-4000	Ø3750-4000mm	0.02mm	±0.20mm
7135-4250	Ø4000-4250mm	0.02mm	±0.20mm
7135-4500	Ø4250-4500mm	0.02mm	±0.20mm
7135-4750	Ø4500-4750mm	0.02mm	±0.20mm
7135-5000	Ø4750-5000mm	0.02mm	±0.20mm
7135-5250	Ø5000-5250mm	0.02mm	±0.005%L **
7135-5500	Ø5250-5500mm	0.02mm	±0.005%L **
7135-5750	Ø5500-5750mm	0.02mm	±0.005%L **
7135-6000	Ø5750-6000mm	0.02mm	±0.005%L **
7135-6250	Ø6000-6250mm	0.02mm	±0.005%L **
7135-6500	Ø6250-6500mm	0.02mm	±0.005%L **
7135-6750	Ø6500-6750mm	0.02mm	±0.005%L **
7135-7000	Ø6750-7000mm	0.02mm	±0.005%L **
7135-7250	Ø7000-7250mm	0.02mm	±0.005%L **
7135-7500	Ø7250-7500mm	0.02mm	±0.005%L **
7135-7750	Ø7500-7750mm	0.02mm	±0.005%L **
7135-8000	Ø7750-8000mm	0.02mm	±0.005%L **
7135-8250	Ø8000-8250mm	0.02mm	±0.005%L **

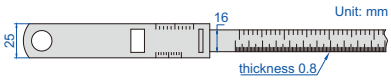
** L is the actual measured value (unit: mm)

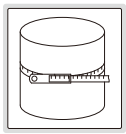
CIRCUMFERENCE METERS (ECONOMIC TYPE)

- Measure diameter and circumference of pipes, trees, tires, etc.
- Graduation: 0.1mm
- Laser engraved scale
- Made of stainless steel

Code	Circumference range	Diameter range	Accuracy	
			circumference	diameter
7114-950	150-950mm	Ø50-300mm	±3mm	±1mm
7114-2200	940-2200mm	Ø300-700mm	±3mm	±1mm
7114-3460	2190-3460mm	Ø700-1100mm	±3mm	±1mm

7114-950





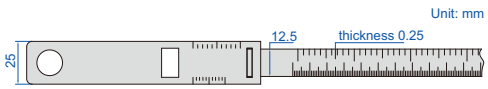
CIRCUMFERENCE METERS

CAN BE CUSTOM-MADE

- Measure diameter and circumference of pipes, trees, tires, etc.
- Made of stainless steel

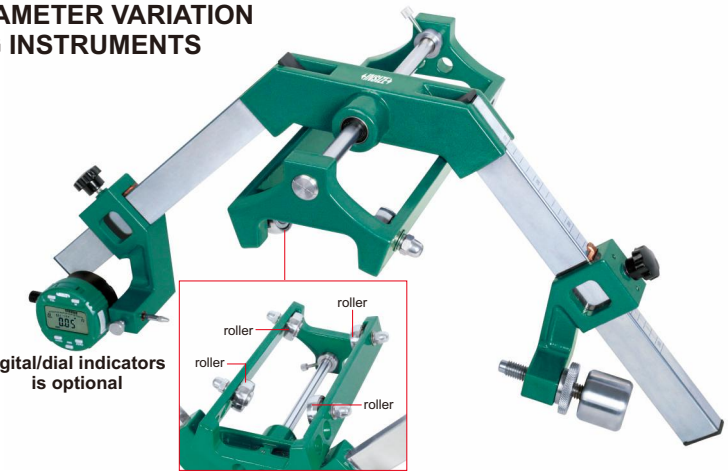
Code	Circumference range	Diameter range	Graduation	Accuracy	
				circumference	diameter
7136-940	160-940mm	Ø50-300mm	0.1mm	±0.30mm	±0.10mm
7136-1880	940-1880mm	Ø300-600mm	0.1mm	±0.30mm	±0.10mm
7136-2830	1880-2830mm	Ø600-900mm	0.1mm	±0.30mm	±0.10mm
7136-3770	2830-3770mm	Ø900-1200mm	0.1mm	±0.30mm	±0.10mm
7136-4710	3770-4710mm	Ø1200-1500mm	0.1mm	±0.30mm	±0.10mm
7136-5650	4710-5650mm	Ø1500-1800mm	0.1mm	±0.30mm	±0.10mm
7136-6600	5650-6600mm	Ø1800-2100mm	0.1mm	±0.30mm	±0.10mm
7136-7540	6600-7540mm	Ø2100-2400mm	0.1mm	±0.30mm	±0.10mm
7136-8480	7540-8480mm	Ø2400-2700mm	0.1mm	±0.30mm	±0.10mm
7136-9430	8480-9430mm	Ø2700-3000mm	0.1mm	±0.30mm	±0.10mm

7136-1880



OUTSIDE DIAMETER VARIATION MEASURING INSTRUMENTS

CAN BE CUSTOM-MADE

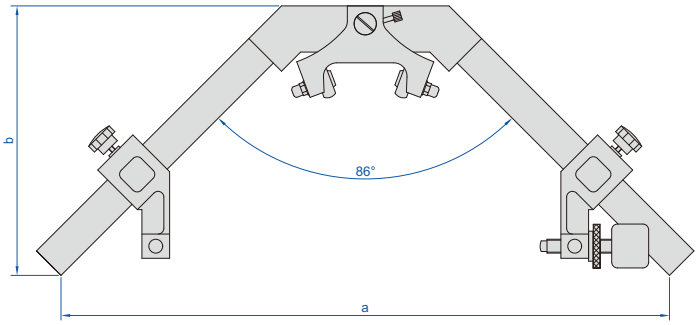


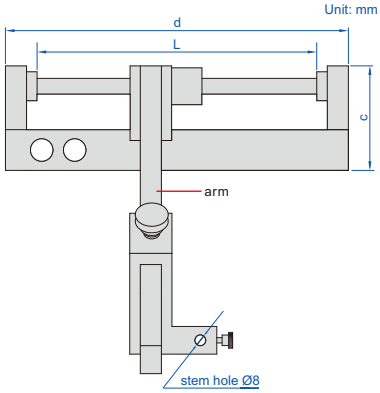
digital/dial indicators is optional

2715-350

application

VIDEO





- Measurement of diameter variation, convexity, concavity, taper and other parameters
- Continuous measurement in the axis direction
- Four rollers are included
- Optional accessory: 0.01mm or 0.001mm graduation digital/dial indicators

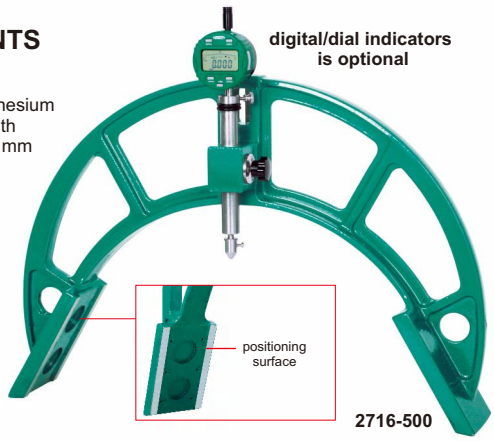
(mm)

Code	Range (diameter)	Accuracy	Repeatability	Arm moving range (L)	a	b	c	d	Net weight
2715-350	100-350mm/4-14"	0.01mm	3μm	200mm	500	230	80	260	4kg
2715-500	200-500mm/8-20"	0.01mm	3μm	151mm	630	260	95	260	5kg
2715-700	300-700mm/12-28"	0.01mm	3μm	197mm	910	372	112	320	6.5kg
2715-1000	500-1000mm/20-40"	0.01mm	3μm	190mm	1170	460	120	320	8kg

OUTSIDE DIAMETER MEASURING INSTRUMENTS

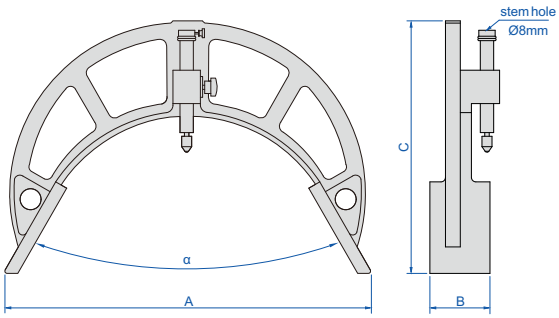
- The frame is made of aluminum magnesium alloy with light weight and high strength
- Optional accessory: 0.01mm or 0.001mm digital/dial indicators

VIDEO



digital/dial indicators is optional

2716-500



(mm)

Code	Range (diameter)	Repeatability	α	A	B	C	Net weight
2716-200	120-200	0.01mm	60°	225	70	228	2kg
2716-300	200-300	0.01mm	60°	330	80	262	2.5kg
2716-400	300-400	0.01mm	60°	405	80	303	4kg
2716-500	400-500	0.01mm	60°	494	80	340	5kg
2716-600	500-600	0.01mm	60°	594	80	398	6kg
2716-700	600-700	0.01mm	60°	685	80	446	7.5kg
2716-800	700-800	0.01mm	60°	772	80	479	9kg
2716-900	800-900	0.01mm	60°	860	80	520	10kg
2716-1000	900-1000	0.01mm	60°	950	80	560	11.5kg

DIGITAL RADIUS GAUGES

VIDEO

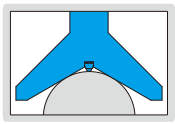
DATA OUTPUT

- Measure radius of external arc, arc angle of measured surface should be larger than 60°
- Display radius value, no need to calculate
- Button function: on/off, zero, data preset, inch/mm
- Keep preset data in memory after restart
- CR2032 battery, automatic power off (time is adjustable)
- Data output
- Stainless steel base
- Optional accessory: setting standards, wireless transmitter code **7315-50M** (receiver is needed)

2188-55

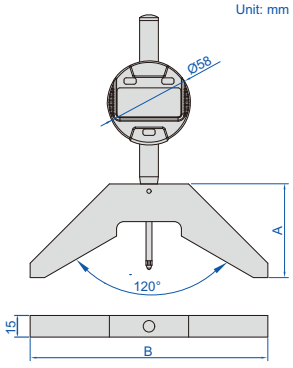
2188-233

application



setting standard application

Unit: mm



2188-143

2188-323

2188-P143

Code	Range (radius)	Resolution	Accuracy	A	B
2188-55	4-53mm/0.16-2.09"	0.01mm/0.0005"	±0.02mm	40mm	65mm
2188-143	48-143mm/1.89-5.63"	0.01mm/0.0005"	±0.03mm	65mm	165mm
2188-233	138-233mm/5.43-9.17"	0.01mm/0.0005"	±0.03mm	85mm	255mm
2188-323	228-323mm/8.98-12.72"	0.01mm/0.0005"	±0.04mm	95mm	345mm

Setting standards

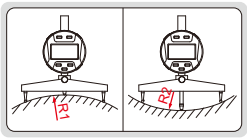
Code	Setting standards	Remark
4110-10D00	setting standard for **2188-55**	included
2188-P143	setting standard for **2188-143**	**optional**
2188-P233	setting standard for **2188-233**	**optional**
2188-P323	setting standard for **2188-323**	**optional**

DIGITAL RADIUS GAUGE (LOW ACCURACY)

VIDEO

DATA OUTPUT

- Resolution: 0.01mm/0.001"
- Buttons: on/off, hold, mm/inch, s (select jaws), zero
- Measure radius of internal or external arcs
- Display can be rotated by 320º
- Supplied with 5 jaws for different sizes of arc
- Data output, battery CR2032
- Automatic power off (time is adjustable)
- Optional accessory: calibration standard (code **2183-BLOCK**), wireless transmitter code **7315-50M** (receiver is needed)

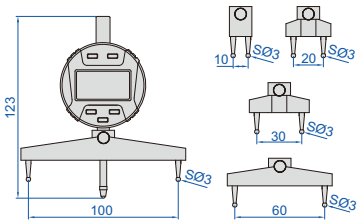


2183

Code	Range of external radius (R1)	Range of internal radius (R2)	Accuracy (mm)
2183	5-910mm/0.2-35.83"	7-910mm/0.3-35.83"	±0.01R*

*R is the radius to be measured. For example, radius is 100mm, the accuracy is ±0.01x100=±1mm

Unit: mm



Calibration standard (optional)

Code	Remark
2183-BLOCK	includes 5 standard blocks

2183-BLOCK

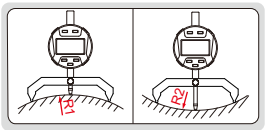
calibration standard application

DIGITAL RADIUS GAUGE

DATA OUTPUT

VIDEO

- Resolution: 0.01mm/0.001"
- Buttons: on/off, hold, mm/inch, s (select jaws), zero
- Measure radius of internal or external arcs
- Cylindrical measuring jaws, self-positioning
- Display can be rotated by 320º
- Supplied with 5 jaws for different sizes of arc
- Data output, battery CR2032
- Automatic power off (time is adjustable)
- Optional accessory:
  calibration standard (code **2183-BLOCK**),
  wireless transmitter code **7315-50M** (receiver is needed)

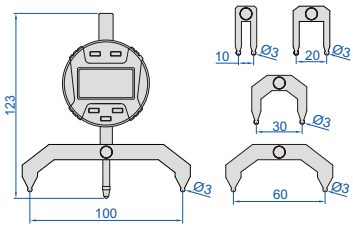


2511

Code	Range of external radius (R1)	Range of internal radius (R2)	Accuracy (mm)
2511	5-910mm/0.2-35.83"	7-910mm/0.3-35.83"	±0.005R*

*R is the radius to be measured. For example, radius is 100mm, the accuracy is ±0.005x100=±0.5mm

Unit: mm



Calibration standard (optional)

Code	Remark
2183-BLOCK	includes 5 standard blocks

2183-BLOCK

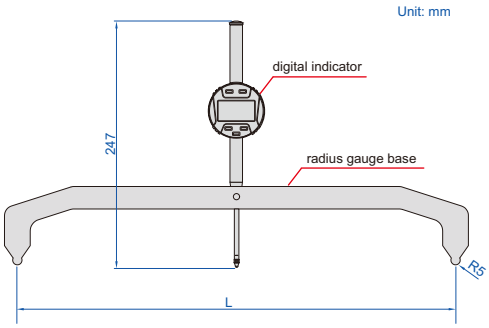
calibration standard application

LARGE RANGE DIGITAL RADIUS GAUGES

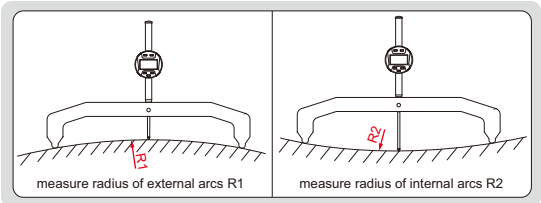
DATA OUTPUT

2512-300

Unit: mm



- Measure radius of internal or external arcs
- Resolution: 0.01mm/0.001"
- Buttons: on/off, hold, mm/inch, s (select jaws), zero
- Display can be rotated by 320º
- Battery CR2032, automatic power off (time is adjustable)
- Data output
- Optional accessory:
  wireless transmitter code **7315-50M** (receiver is needed)



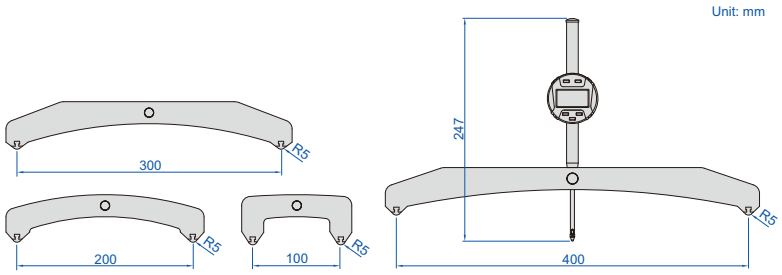
Code	Range of external radius (R1)	Range of internal radius (R2)	Accuracy (mm)*	L
2512-100	100-625mm/4-24.606"	100-625mm/4-24.606"	±0.005R	100mm
2512-200	300-2500mm/11.811-98.425"	300-2500mm/11.811-98.425"	±0.005R	200mm
2512-300	500-11250mm/19.685-442.913"	500-11250mm/19.685-442.913"	±0.005R	300mm
2512-400	1100-15000mm/43.307-590"	1100-15000mm/43.307-590"	±0.005R	400mm

*R is the radius to be measured. For example, radius is 100mm, the accuracy is ±0.005×100=±0.5mm

LARGE RANGE DIGITAL RADIUS GAUGE

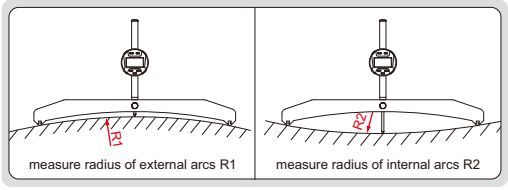
DATA OUTPUT

VIDEO



2197

- Measure radius of internal or external arcs
- Resolution: 0.01mm/0.001"
- Buttons: on/off, hold, mm/inch, s (select jaws), zero
- Display can be rotated by 320°
- Supplied with 4 jaws for different sizes of arc
- Battery CR2032, automatic power off (time is adjustable)
- Data output
- Optional accessory:
  wireless transmitter code **7315-50M** (receiver is needed)



Code	Range of external radius (R1)	Range of internal radius (R2)	Accuracy (mm)
2197	100-15000mm/4-590"	100-15000mm/4-590"	±0.005R*

*R is the radius to be measured. For example, radius is 100mm, the accuracy is ±0.005x100=±0.5mm

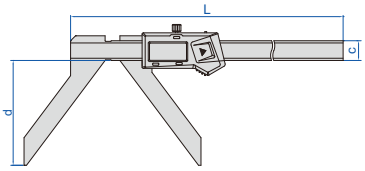
DIGITAL ARC RADIUS CALIPERS

VIDEO

DATA OUTPUT

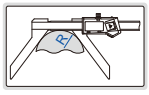
- Non waterproof
- Measure the radius of arc less than half round
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel

1189-200B



With data interface
(optional wireless transmitter code 7315-25, receiver is needed)

Code	Range (R)	Accuracy	L	c	d
1189-150B	5-150mm/0.2-6"	±0.05mm	263mm	16mm	65mm
1189-200B	5-200mm/0.2-8"	±0.07mm	313mm	16mm	85mm



DIGITAL RADIUS CALIPERS

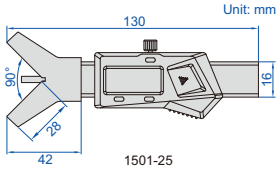
VIDEO

DIRECT READING, CALCULATION IS NOT REQUIRED

DATA OUTPUT

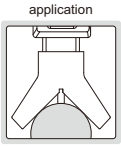
- Non waterproof
- Measure radius of external arc, arc angle of measured surface should be larger than 90°
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Supplied with pin gauge for zero setting
- Optional accessory:
  wireless transmitter code **7315-25** (receiver is needed)

1501-25

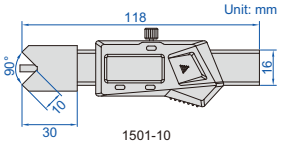


1501-25

application



1501-10



1501-10

pin gauge (included)

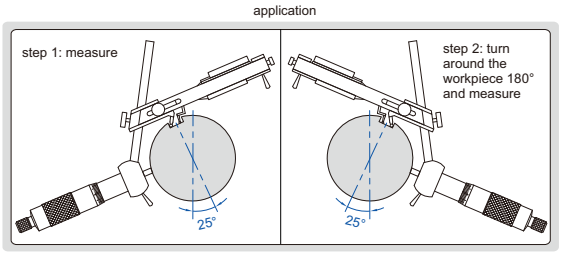
1501-10 can measure small workpieces or workpieces with steps

Code	Range (radius)	Accuracy
1501-25	2-25mm/0.079-1"	±0.05mm
1501-10	2-10mm/0.079-0.394"	±0.05mm

KEYWAY SYMMETRY GAUGE

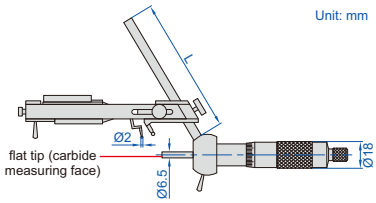
- Used to measure the symmetry of shaft keyways

4865-14



VIDEO

Unit: mm



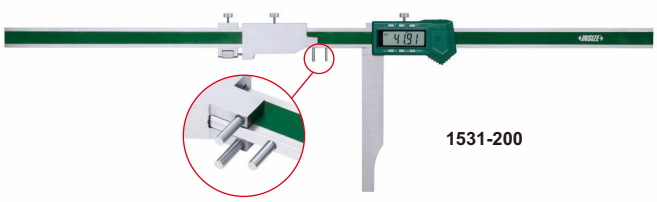
Code	Range		Graduation	Accuracy	L
	diameter of shaft	width of keyway			
4865-14	14-110mm	5-28mm	0.01mm	0.02mm	100mm

KEYWAY SYMMETRY DIGITAL CALIPERS

DATA OUTPUT

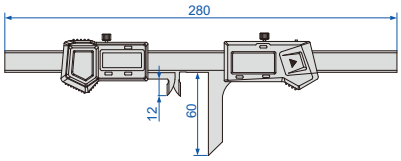
VIDEO

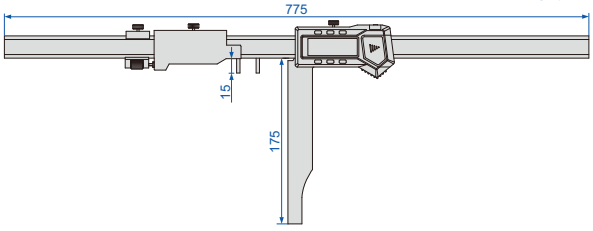
1531-60



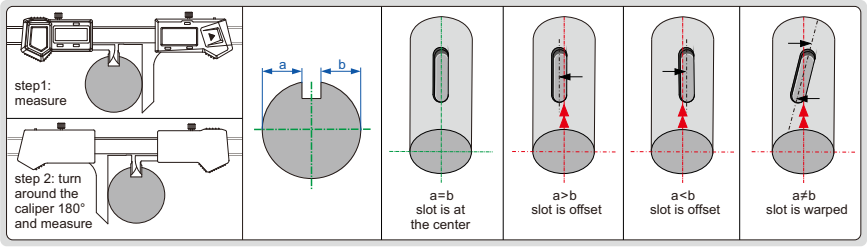
1531-200

Unit: mm





- Non waterproof
- Used to measure the symmetry of shaft keyways
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-22** (receiver is needed)



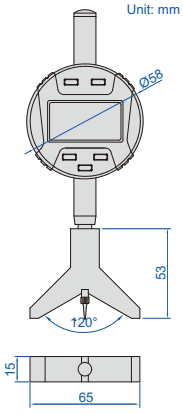
Code	Width of keyway	Diameter of shaft	Accuracy	Remark
1531-60	6-45mm	Ø10-120mm	±0.05mm	can measure keyway width
1531-200	3-250mm	Ø6-350mm	±0.05mm	cannot measure keyway width

DIGITAL KEYWAY DEPTH GAUGE

- Measure keyway depth of cylindrical workpieces with diameter Ø10-100mm
- Button function: on/off, zero, inch/metric conversion, absolute/incremental measurement, data preset, measuring direction change
- CR2032 battery
- Automatic power off (time is adjustable)
- Data output
- Stainless steel base
- Pointed tip
- Optional accessory: wireless transmitter code **7315-50M** (receiver is needed)

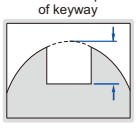
2182-25

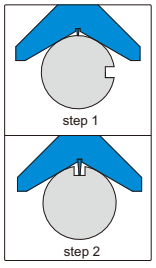
Unit: mm



VIDEO

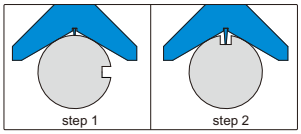
DATA OUTPUT





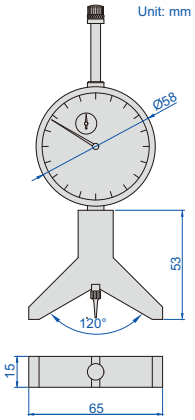
Code	Range	Accuracy	Resolution
2182-25	0-25.4mm/0-1"	±0.02mm	0.01mm/0.0005"

DIAL KEYWAY DEPTH GAUGE

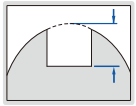


- Measure keyway depth of cylindrical workpieces with diameter Ø10-100mm
- Stainless steel base
- Pointed tip

2189-30



measure depth of keyway



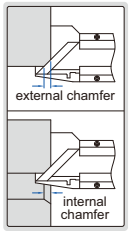
Code	Range	Graduation	Accuracy
2189-30	0-30mm	0.01mm	±0.03mm

CHAMFER GAUGES

- Measure 30º/45º/60º chamfer dimension
- Accuracy: ±0.06mm
- Graduation: 0.02mm
- Made of stainless steel
- Satin chrome plated reading surface

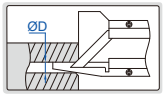
1267-6

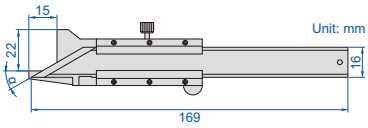
measure chamfer dimension



Code	Range	Chamfer (α)	ØD
1267-6	0-10mm	45º	7mm
1267-63	0-10mm	30º	8mm
1267-66	0-10mm	60º	7mm

for internal chamfer measurement, diameter should be larger than ØD



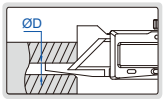


DIGITAL CHAMFER GAUGES

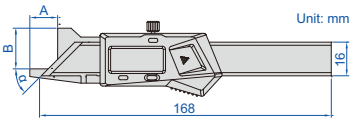
DATA OUTPUT

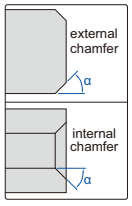
- Non waterproof
- Measure 30º/45º/60º chamfer dimension
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-25** (receiver is needed)

for internal chamfer measurement, diameter should be larger than ØD

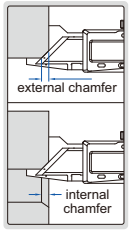


1180-6





measure chamfer dimension



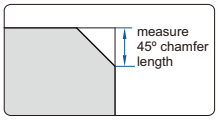
Code	Range	Accuracy	Chamfer (α)	A	B	ØD
1180-6	0-10mm/0-0.39"	±0.06mm	45º	15mm	22mm	7mm
1180-63	0-10mm/0-0.39"	±0.06mm	30º	15mm	22mm	8mm
1180-66	0-10mm/0-0.39"	±0.06mm	60º	14mm	21mm	7mm

CHAMFER GAUGE

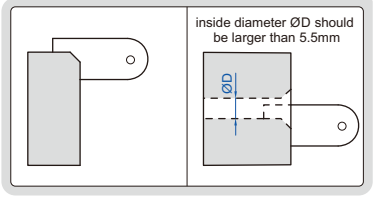
- Measure 45° chamfer length
- Made of stainless steel

4814-1

measure 45º chamfer length



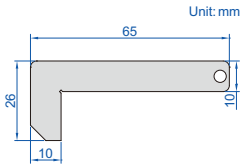
application



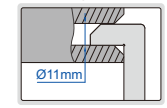
Code	Range (mm)	Quantity of leaves	Accuracy
4814-1	0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0	10	±0.03mm

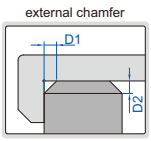
CHAMFER GAUGE

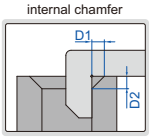
- Accuracy: ±0.25mm
- To measure internal and external chamfers
- Made of stainless steel



4844-1







Code	Graduation
4844-1	0.5mm

DIGITAL CHAMFER GAUGES

DATA OUTPUT

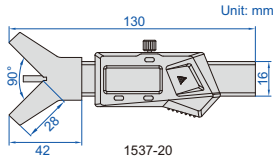
DIRECT READING, CALCULATION IS NOT REQUIRED

ATTENTION: CHAMFER OF HOLES CANNOT BE MEASURED

VIDEO

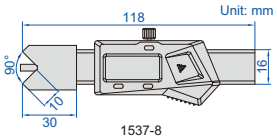
- Non waterproof
- Measure 45º chamfer length
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Supplied with pin gauge for zero setting
- Optional accessory: wireless transmitter code **7315-25** (receiver is needed)

1537-20



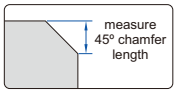
1537-20

1537-8



1537-8

Code	Range	Accuracy
1537-20	0-20mm/0-0.787"	±0.05mm
1537-8	0-8mm/0-0.315"	±0.05mm



pin gauge (included)

1537-8 can measure small workpieces or workpieces with steps

DIAL TEST INDICATORS

POPULAR MODEL

INSPECTION CERTIFICATE

JEWELED BEARING

- Meet DIN2270 (except **2380-02**, **2381-02**, **2381-021**)
- Jeweled bearing
- Carbide contact point
- Two measuring directions
- Supplied with two clamps: diameter Ø4mm and Ø8mm
- Optional accessory: styli

2380-08

Graduation: 0.01mm

Code	Range	Accuracy	Hysteresis	Dial reading	A	L
2380-08*	0.8mm	13μm	3μm	0-40-0	Ø30mm	13.5mm
2381-08*	0.8mm	13μm	3μm	0-40-0	Ø37mm	13.5mm

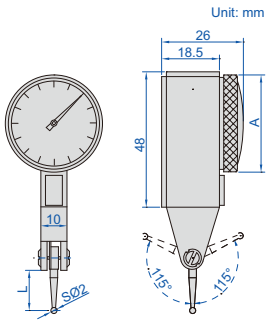
Graduation: 0.002mm

Code	Range	Accuracy	Hysteresis	Dial reading	A	L
2380-02*	0.2mm	6μm	2μm	0-100-0	Ø30mm	12.5mm
2381-02*	0.2mm	6μm	2μm	0-100-0	Ø37mm	12.5mm

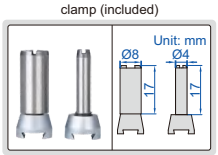
Graduation: 0.001mm

Code	Range	Accuracy	Hysteresis	Dial reading	A	L
2381-021*	0.2mm	6μm	2μm	0-100-0	Ø37mm	12.5mm

*Supplied with manufacturer inspection certificate



clamp (included)

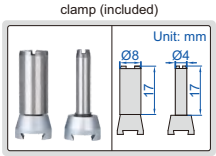


LONG STYLUS DIAL TEST INDICATOR

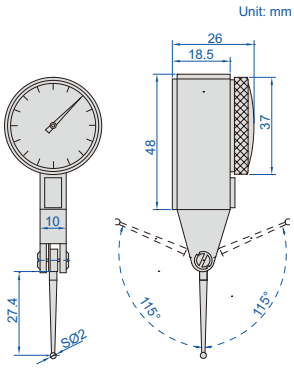
JEWELED BEARING

INSPECTION CERTIFICATE

- Meet DIN2270
- Jeweled bearing
- Carbide contact point
- Two measuring directions
- Anti magnetic body
- Supplied with two clamps: diameter Ø4mm and Ø8mm
- Optional accessory: styli



2383-08A



Code	Range	Graduation	Accuracy	Hysteresis	Dial reading
2383-08A*	0.8mm	0.01mm	13μm	3μm	0-40-0

*Supplied with manufacturer inspection certificate

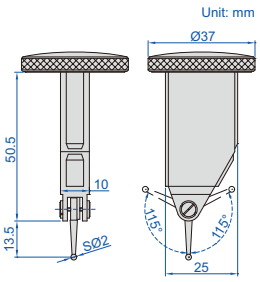
VERTICAL TYPE DIAL TEST INDICATOR

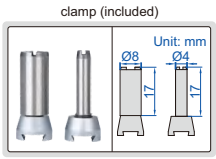
INSPECTION CERTIFICATE

JEWELED BEARING

- Meet DIN2270
- Jeweled bearing
- Carbide contact point
- Two measuring directions
- Anti magnetic body
- Supplied with two clamps: diameter Ø4mm and Ø8mm
- Optional accessory: styli

2398-08





Code	Range	Graduation	Accuracy	Hysteresis	Dial reading
2398-08*	0.8mm	0.01mm	13μm	3μm	0-40-0

*Supplied with manufacturer inspection certificate

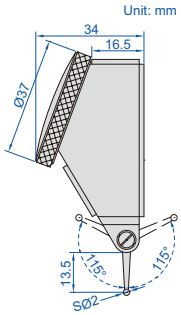
TILTED FACE TYPE DIAL TEST INDICATOR

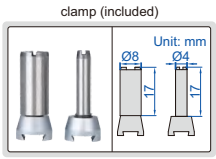
INSPECTION CERTIFICATE

JEWELED BEARING

- Meet DIN2270
- Jeweled bearing
- Carbide contact point
- Two measuring directions
- Anti magnetic body
- Supplied with two clamps: diameter Ø4mm and Ø8mm
- Optional accessory: styli

2399-08





Code	Range	Graduation	Accuracy	Hysteresis	Dial reading
2399-08*	0.8mm	0.01mm	13μm	3μm	0-40-0

*Supplied with manufacturer inspection certificate

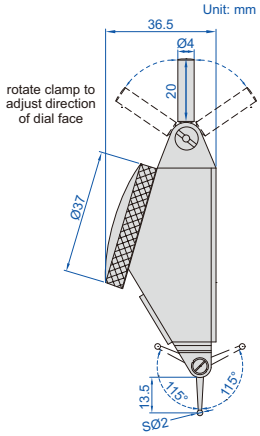
LARGE RANGE DIAL TEST INDICATOR

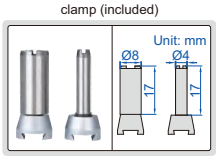
JEWELED BEARING

INSPECTION CERTIFICATE

- Jeweled bearing
- Carbide contact point
- Two measuring directions
- Anti magnetic body
- Supplied with two clamps: diameter Ø4mm and Ø8mm
- Optional accessory: styli

2386-16A





Code	Range	Graduation	Accuracy	Hysteresis	Dial reading
2386-16A*	1.6mm	0.01mm	25μm	8μm	0-40-0

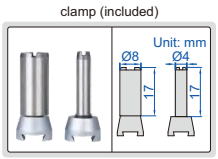
*Supplied with manufacturer inspection certificate

LARGE RANGE VERTICAL TYPE DIAL TEST INDICATOR

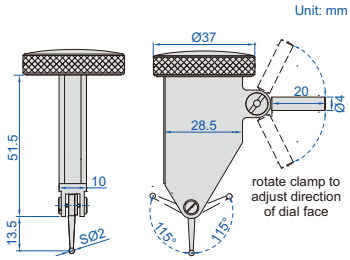
JEWELED BEARING

INSPECTION CERTIFICATE

- Dial Reading: 0-40-0
- Jeweled bearing
- Carbide contact point
- Two measuring directions
- Anti magnetic body
- Supplied with two clamps: diameter Ø4mm and Ø8mm
- Optional accessory: styli



2480-16



Code	Range	Graduation	Accuracy	Hysteresis
2480-16*	1.6mm	0.01mm	18μm	3μm

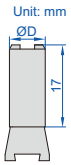
*Supplied with manufacturer inspection certificate

CLAMPS FOR DIAL TEST INDICATORS

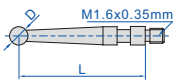
Code	ØD
6298-1	Ø4mm
6298-2	Ø8mm

6298-1

6298-2



STYLI FOR DIAL TEST INDICATORS



6284-3

(mm)

Code	For dial test indicator	Material of contact point	L	D
6284-1	2380-05 2380-08 2381-05 2381-08 2398-08 2399-08	carbide	13.5	SØ1
6284-31		ruby	13.5	SØ1
6284-3		carbide	13.5	SØ2
6284-4		ruby	13.5	SØ2
6284-8		carbide	13.5	SØ3
6284-21	2380-02 2381-02	carbide	12.5	SØ1
6284-22		carbide	12.5	SØ2

HIGH PRECISION DIGITAL INDICATOR

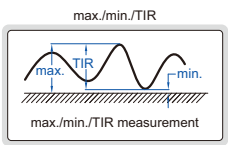
ATTENTION: RECHARGEABLE BATTERY, FOR 500 HOURS CONTINUOUS WORKING

HIGH PRECISION

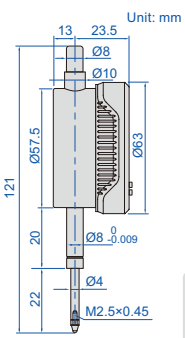
INSPECTION CERTIFICATE

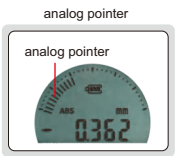
- Reading in digital and analog
- Button function: on/off, zero, data preset, tolerance Go and No-Go display, inch/metric conversion, measuring direction change, max./min./TIR measurement, absolute/incremental measurement
- Automatic power off (time is adjustable)
- Keep preset data and tolerance data in memory after restart
- Real-time data output (text format, virtual com port)
- Power: rechargeable Li-battery
- Optional accessory: contact points

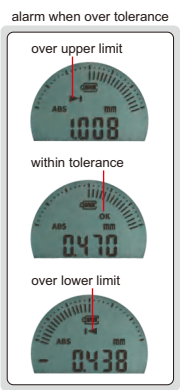
spindle lift knob is included



2503-101F







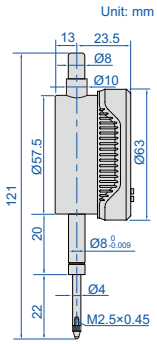
Code	Range	Resolution	Accuracy	Hysteresis	Maximum measuring force	Cap	Remark
2503-101F*	12.7mm/0.5"	0.001mm/0.00005"	3μm	2μm	1.5N	cannot lift	flat back

*Supplied with manufacturer inspection certificate

BUILT-IN BLUETOOTH DIGITAL INDICATORS

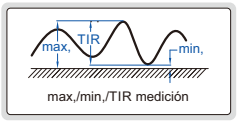
INSPECTION CERTIFICATE | HIGH PRECISION | BLUETOOTH

2510-101F



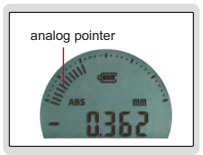
- Reading in digital and analog
- Button function: on/off, zero, data preset, tolerance Go and No-Go display, inch/metric conversion, measuring direction change, max./min./TIR measurement, absolute/incremental measurement, bluetooth on/off
- Automatic power off (time is adjustable)
- Keep preset data and tolerance data in memory after restart
- Data output:
  real-time data output with USB cable (Virtual Com Port)
  bluetooth data output (data can be transmitted to Android and iphone APP, tranmission distance is 20m)
- Android and iPhone APP, USB type-C cable are included
- USB type-C port
- Power: rechargeable Li-battery
- Optional accessory: contact points

max./min./TIR

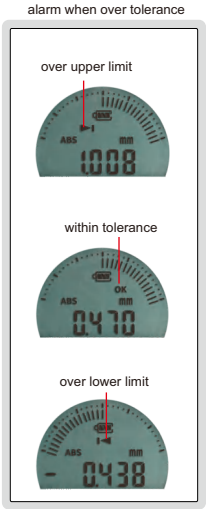


spindle lift knob is included

analog pointer



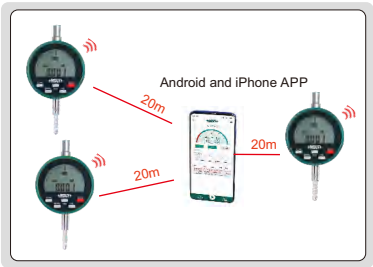
alarm when over tolerance



Code	Range	Resolution	Accuracy	Hysteresis	Maximum measuring force	Cap	Remark
2510-10F *	12.7mm/0.5"	0.01mm/0.0005"	10μm	10μm	1.5N	cannot lift	flat back
2510-101F *	12.7mm/0.5"	0.001mm/0.00005"	3μm	2μm	1.5N	cannot lift	flat back

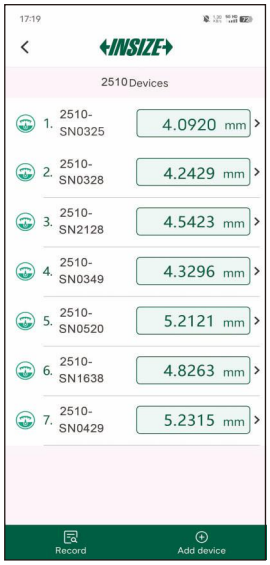
*Supplied with manufacturer inspection certificate

application

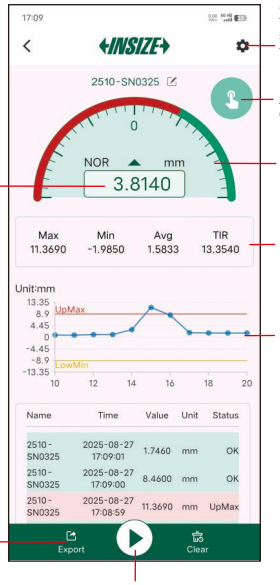


Android and iPhone APP (included)

Can connect up to 7pcs indicators simultaneously (real time data display)



Tranmission interface for single digital indicator



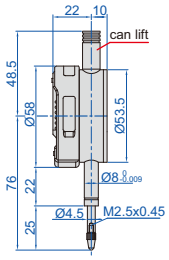
DIGITAL INDICATORS (STANDARD TYPE)

POPULAR MODEL

DATA OUTPUT

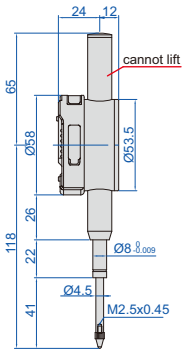
INSPECTION CERTIFICATE

2112-10F



2112-10F
2112-101F

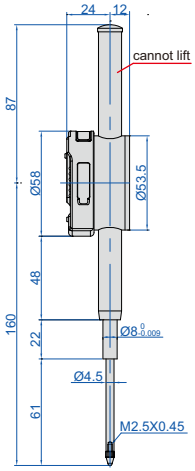
2112-251F



2112-25F
2112-251F

2112-501F

Unit: mm



2112-50F
2112-501F

- Button function: on/off, inch/mm, zero, data preset, change measuring direction, absolute/incremental measurement
- Switchable high/low frequency measurement mode, high frequency mode is suitable for high speed moving of spindle and has large power consumption, low power consumption in low frequency mode
- Keep preset data in memory after restart
- CR2032 battery, automatic power off (time is adjustable)
- Data output
- Optional accessory: wireless transmitter code **7315-50M** (receiver is needed), backs, contact points

spindle lift knob is included

Resolution 0.001mm/0.00005"

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Cap	Remark
2112-101F*	12.7mm/0.5"	5μm	2μm	1.5N	can lift	flat back
2112-251F*	25.4mm/1"	5μm	3μm	2.2N	cannot lift	flat back
2112-501F*	50.8mm/2"	6μm	3μm	2.5N	cannot lift	flat back

Resolution 0.01mm/0.0005"

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Cap	Remark
2112-10F*	12.7mm/0.5"	20μm	10μm	1.5N	can lift	flat back
2112-25F*	25.4mm/1"	20μm	10μm	2.2N	cannot lift	flat back
2112-50F*	50.8mm/2"	30μm	10μm	2.5N	cannot lift	flat back
2112-10*	12.7mm/0.5"	20μm	10μm	1.5N	can lift	lug back
2112-25*	25.4mm/1"	20μm	10μm	2.2N	cannot lift	lug back
2112-50*	50.8mm/2"	30μm	10μm	2.5N	cannot lift	lug back

*Supplied with manufacturer inspection certificate

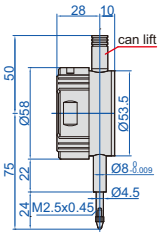
DIGITAL INDICATORS (ADVANCED TYPE)

INSPECTION CERTIFICATE

DATA OUTPUT

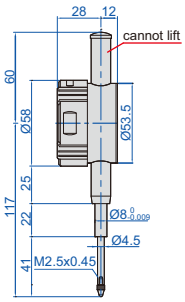
VIDEO

2103-10F



2103-10F
2104-10F

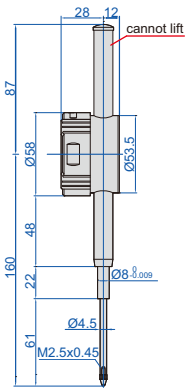
2104-25F



2103-25F
2104-25F

2103-50F

Unit: mm

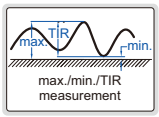


2103-50F
2104-50F

- Reading in digital and analog
- Display can be rotated by 320º
- Button function: tolerance Go and No-Go display, data preset, measuring direction change, max./min./TIR measurement, inch/metric conversion, absolute/incremental measurement
- Keep preset data and tolerance data in memory after restart
- CR2032 battery, automatic power off (time is adjustable)
- Data output
- Optional accessory: wireless transmitter code **7315-50M** (receiver is needed), backs, contact points

spindle lift knob is included

max./min./TIR



analog pointer

alarm when over tolerance

Resolution 0.001mm/0.00005"

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Cap	Remark
2103-10F*	12.7mm/0.5"	5µm	2µm	1.5N	can lift	flat back
2103-25F*	25.4mm/1"	5µm	3µm	2.2N	cannot lift	flat back
2103-50F*	50.8mm/2"	6µm	3µm	2.5N	cannot lift	flat back

Resolution 0.01mm/0.0005"

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Cap	Remark
2104-10F*	12.7mm/0.5"	20µm	10µm	1.5N	can lift	flat back
2104-25F*	25.4mm/1"	20µm	10µm	2.2N	cannot lift	flat back
2104-50F*	50.8mm/2"	30µm	10µm	2.5N	cannot lift	flat back

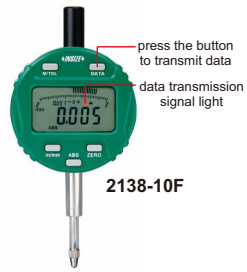
*Supplied with manufacturer inspection certificate

DIGITAL INDICATORS (WITH TRANSMISSION BUTTON AND SIGNAL LIGHT)

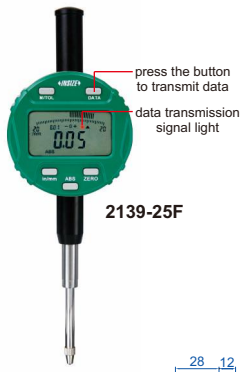
DATA OUTPUT

INSPECTION CERTIFICATE

VIDEO



2138-10F

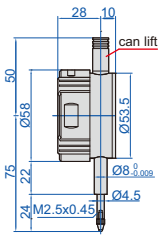


2139-25F

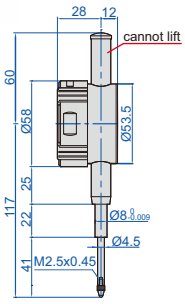
2139-25P

2138-50F

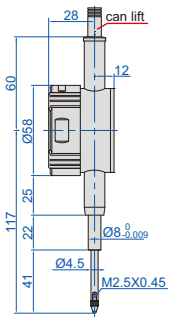
Unit: mm



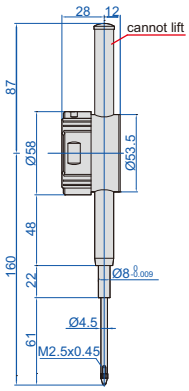
2138-10F
2139-10F



2138-25F
2139-25F



2138-25P
2139-25P

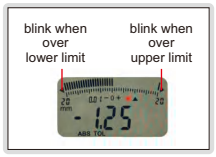


2138-50F
2139-50F

- Reading in digital and analog
- Display can be rotated by 320º
- Button function: on/off, zero, tolerance Go and No-Go display, data preset, measuring direction change, max./min./TIR measurement, inch/metric conversion, absolute/incremental measurement, data output
- Keep preset data and tolerance data in memory after restart
- CR2032 battery, automatic power off (time is adjustable)
- Data output
- Optional accessory: wireless transmitter code **7315-51** (receiver is needed), backs, contact points

analog pointer

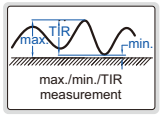
alarm when over tolerance



Resolution 0.001mm/0.00005"

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Cap	Remark
2138-10F*	12.7mm/0.5"	5µm	2µm	1.5N	can lift	flat back
2138-25F*	25.4mm/1"	5µm	3µm	2.2N	cannot lift	flat back
2138-50F*	50.8mm/2"	6µm	3µm	2.5N	cannot lift	flat back
2138-25P*	25.4mm/1"	5µm	3µm	2.2N	can lift	flat back, with lift cap
2138-50P*	50.8mm/2"	6µm	3µm	2.5N	can lift	flat back, with lift cap

max./min./TIR



spindle lift knob is included

Resolution 0.01mm/0.0005"

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Cap	Remark
2139-10F*	12.7mm/0.5"	20µm	10µm	1.5N	can lift	flat back
2139-25F*	25.4mm/1"	20µm	10µm	2.2N	cannot lift	flat back
2139-50F*	50.8mm/2"	30µm	10µm	2.5N	cannot lift	flat back
2139-25P*	25.4mm/1"	20µm	10µm	2.2N	can lift	flat back, with lift cap
2139-50P*	50.8mm/2"	30µm	10µm	2.5N	can lift	flat back, with lift cap

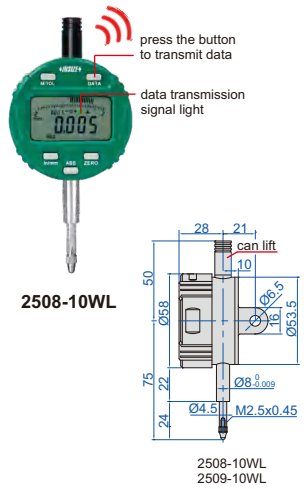
2138-25P/50P
2129-25P/50P

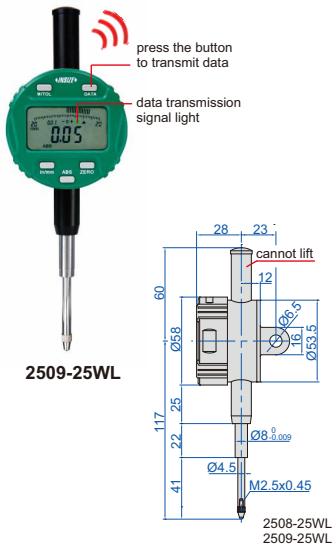
*Supplied with manufacturer inspection certificate

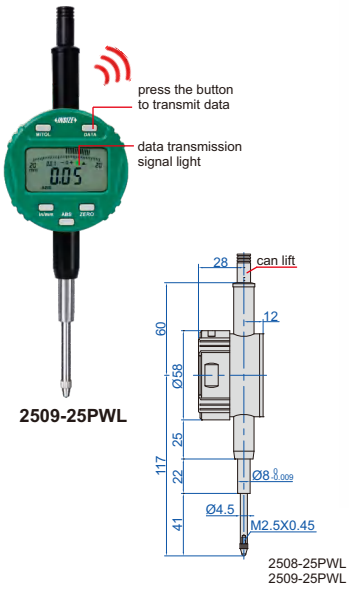
BUILT-IN WIRELESS DIGITAL INDICATORS

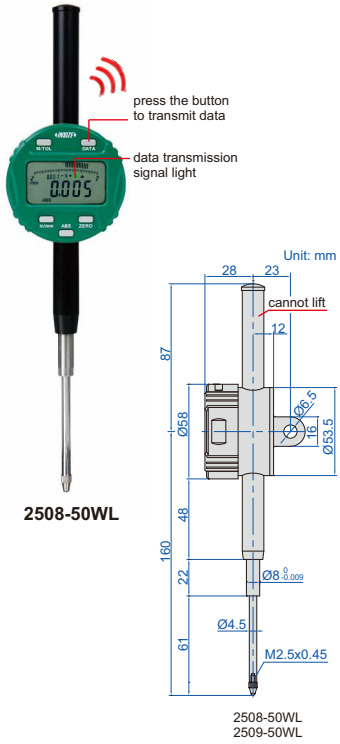
INSPECTION CERTIFICATE

DATA OUTPUT









- Built-in wireless data transmission module
- Transmission distance is 10 meters (under the condition of no obstruction and no electromagnetic interference)
- Reading in digital and analog
- Display can be rotated by 320º
- Button function: on/off, zero, tolerance Go and No-Go display, data preset, measuring direction change, max./min./TIR measurement, inch/metric conversion, absolute/incremental measurement, data output
- Keep preset data and tolerance data in memory after restart
- Automatic power off (time is adjustable)
- Power: rechargeable Li-battery
- Optional accessory: receiver (code **7315-2/3/6/7/8/9**), backs, contact points

Resolution 0.001mm/0.00005"

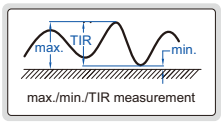
Code	Range	Accuracy	Hysteresis	Maximum measuring force	Cap	Remark
2508-10WL*	12.7mm/0.5"	5μm	2μm	1.5N	can lift	lug back
2508-25WL*	25.4mm/1"	5μm	3μm	2.2N	cannot lift	lug back
2508-50WL*	50.8mm/2"	6μm	3μm	2.5N	cannot lift	lug back
2508-10FWL*	12.7mm/0.5"	5μm	2μm	1.5N	can lift	flat back
2508-25FWL*	25.4mm/1"	5μm	3μm	2.2N	cannot lift	flat back
2508-50FWL*	50.8mm/2"	6μm	3μm	2.5N	cannot lift	flat back
2508-25PWL*	25.4mm/1"	5μm	3μm	2.2N	can lift	flat back
2508-50PWL*	50.8mm/2"	6μm	3μm	2.5N	can lift	flat back

Resolution 0.01mm/0.0005"

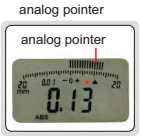
Code	Range	Accuracy	Hysteresis	Maximum measuring force	Cap	Remark
2509-10WL*	12.7mm/0.5"	20μm	10μm	1.5N	can lift	lug back
2509-25WL*	25.4mm/1"	20μm	10μm	2.2N	cannot lift	lug back
2509-50WL*	50.8mm/2"	30μm	10μm	2.5N	cannot lift	lug back
2509-10FWL*	12.7mm/0.5"	20μm	10μm	1.5N	can lift	flat back
2509-25FWL*	25.4mm/1"	20μm	10μm	2.2N	cannot lift	flat back
2509-50FWL*	50.8mm/2"	30μm	10μm	2.5N	cannot lift	flat back
2509-25PWL*	25.4mm/1"	20μm	10μm	2.2N	can lift	flat back
2509-50PWL*	50.8mm/2"	30μm	10μm	2.5N	can lift	flat back

*Supplied with manufacturer inspection certificate

max./min./TIR

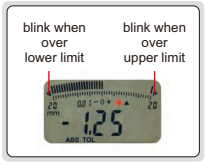


analog pointer

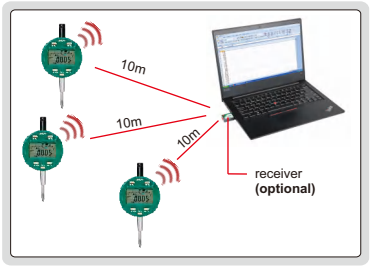


spindle lift knob is included

alarm when over tolerance



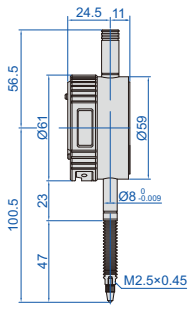
application



WATERPROOF DIGITAL INDICATORS

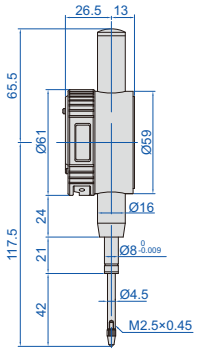
WATERPROOF | DATA OUTPUT | INSPECTION CERTIFICATE

Unit: mm



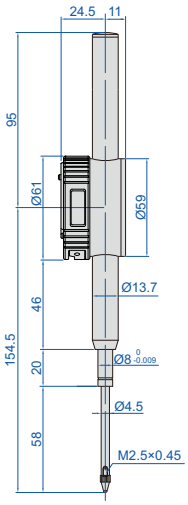
2115-10F
2115-101F

2115-10F



2115-25F
2115-251F

2115-25F

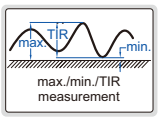


2115-50F
2115-501F

2115-50F

- Dust/waterproof
- Button function: on/off, zero, mm/inch, data preset, tolerance, change measuring direction, max./min./TIR measurement, absolute/incremental measurement
- Keep preset data and tolerance data in memory after restart
- CR2032 battery, automatic power off
- Data output
- Optional accessory: wireless transmitter code **7315-50M** (receiver is needed), backs, contact points

spindle lift knob is included
(except **2115-101F**, **2115-10F**)



max./min./TIR
measurement

alarm when
over tolerance

Resolution 0.001mm/0.00005"

Code	Range	Dust/ waterproof	Accuracy	Hysteresis	Maximum measuring force	Cap	Remark
2115-101F*	12.7mm/0.5"	IP65	5μm	2μm	1.5N	cannot lift	flat back
2115-251F*	25.4mm/1"	IP54	5μm	3μm	2.2N	cannot lift	flat back
2115-501F*	50.8mm/2"	IP54	6μm	3μm	2.5N	cannot lift	flat back

Resolution 0.01mm/0.0005"

Code	Range	Dust/ waterproof	Accuracy	Hysteresis	Maximum measuring force	Cap	Remark
2115-10F*	12.7mm/0.5"	IP65	20μm	10μm	1.5N	cannot lift	flat back
2115-25F*	25.4mm/1"	IP54	20μm	10μm	2.2N	cannot lift	flat back
2115-50F*	50.8mm/2"	IP54	30μm	10μm	2.5N	cannot lift	flat back

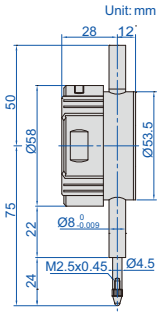
*Supplied with manufacturer inspection certificate

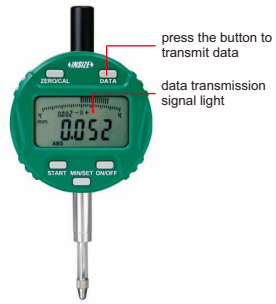
DIGITAL INDICATOR FOR BORE GAUGE (WITH TRANSMISSION BUTTON AND SIGNAL LIGHT)

INSPECTION CERTIFICATE | DATA OUTPUT | THE ORIGINAL DATA REMAINS AFTER POWER OFF

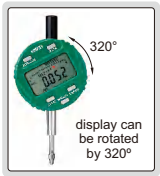
VIDEO

- Specially designed for bore gauges
- The minimum value tracking function can find the diameter automatically
- Read the diameter directly, after imputting the size of setting ring
- Reading in digital and analog
- Display can be rotated by 320º
- Button function: on/off, minimum value tracking, calibration, data preset, inch/metric conversion
- Data remains after power off, no need to recalibrate after power on
- Automatic power off (time is adjustable)
- Battery CR2032
- Optional accessory: backs, contact points





2108-10F

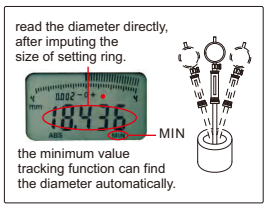


analog pointer

With data interface
(optional wireless transmitter code 7315-51B, receiver is needed)

Code	Range	Resolution	Accuracy	Hysteresis	Maximum measuring force	Cap	Remark
2108-10F *	12.7mm/0.5"	0.002mm/0.0001" (can switch to: 0.01mm/0.0005")	20μm	10μm	1.5N	cannot lift	flat back

*Supplied with manufacturer inspection certificate



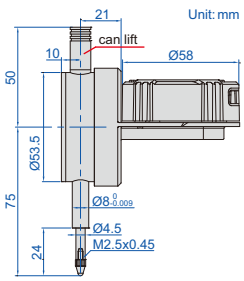
BACK PLUNGER TYPE DIGITAL INDICATOR

INSPECTION CERTIFICATE | DATA OUTPUT

VIDEO

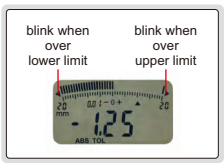
- Display can rotate 320º, and display direction is changeable
- Reading in digital and analog
- Maximum measuring force: 1.5N
- Button function: tolerance Go and No-Go display, data preset, measuring direction change, max./min./TIR measurement, inch/metric conversion, absolute/incremental measurement
- Keep preset data and tolerance data in memory after restart
- CR2032 battery, automatic power off (time is adjustable)
- Data output, with flat back
- Optional accessory: wireless transmitter code **7315-50M** (receiver is needed), backs, contact points

2118-10

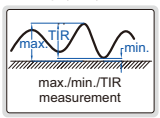


analog pointer

alarm when over tolerance

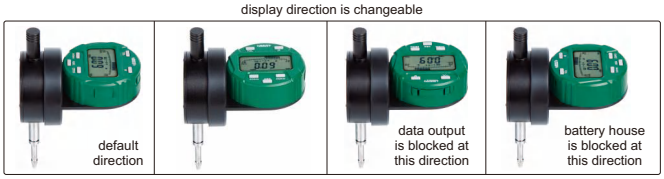


max./min./TIR



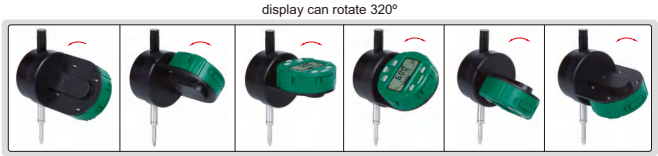
spindle lift knob is included

display direction is changeable



remark: to change above direction, 4 fixing screws on the back of display need to be removed first

display can rotate 320º



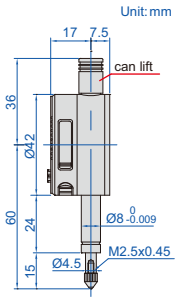
Code	Range	Resolution	Accuracy	Hysteresis	Cap	Remark
2118-10*	12.7mm/0.5"	0.01mm/0.0005"	20μm	10μm	can lift	flat back

*Supplied with manufacturer inspection certificate

COMPACT DIGITAL INDICATOR

DATA OUTPUT

INSPECTION CERTIFICATE



2114-5F

- Button function:
  in/mm: short press for inch/metric conversion
  long press to change measuring direction
  ABS: short press for absolute/incremental measurement
  long press to preset data
  0/ON: short press to turn on when power is off
  short press to set zero when power is on
  long press to turn off
- Keep preset data in memory after restart
- CR1632 battery, automatic power off
- Data output, with flat back
- Optional accessory: wireless transmitter code **7315-50M** (receiver is needed), backs, contact points

Code	Range	Resolution	Accuracy	Hysteresis	Maximum measuring force	Cap	Remark
2114-5F *	5mm/0.2"	0.01mm/0.0005"	20μm	10μm	1.5N	can lift	flat back

*Supplied with manufacturer inspection certificate

ZEROING FOOT SWITCH

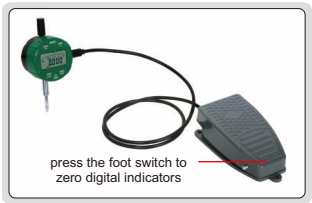
VIDEO

- For zeroing of digital indicators

Code	Description	Interface of digital indicators	Applicable products
7360-1M	zeroing foot switch with cable (length 2.5m)		for digital indicators

7360-1M

application



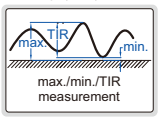
LARGE STROKE DIGITAL INDICATORS

DATA OUTPUT

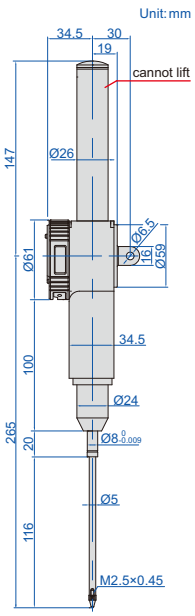
- Button function: on/off, zero, mm/inch, data preset, tolerance, change measuring direction, max./min./TIR measurement, absolute/incremental measurement
- Keep preset data and tolerance data in memory after restart
- CR2032 battery, automatic power off
- Maximum measuring force: 3.2N
- Data output
- Optional accessory: wireless transmitter code **7315-50M** (receiver is needed), backs, contact points

spindle lift knob is included

max./min./TIR



2117-100



alarm when over tolerance

Resolution 0.01mm/0.0005"

Code	Range	Accuracy	Hysteresis	Cap	Remark
2117-100	100mm/4"	30μm	10μm	cannot lift	lug back

Resolution 0.001mm/0.00005"

Code	Range	Accuracy	Hysteresis	Cap	Remark
2117-1001	100mm/4"	9μm	3μm	cannot lift	lug back

HIGH PRECISION DIGITAL INDICATORS

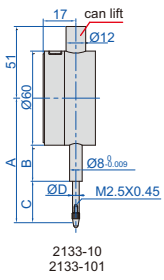
DATA OUTPUT

LINEAR BALL BEARINGS FOR TEN MILLION TIMES USE

ABSOLUTE ENCODER, THE ORIGINAL DATA REMAINS AFTER POWER OFF

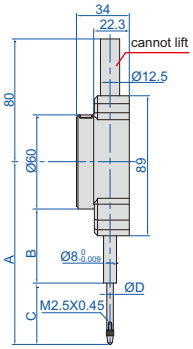
ATTENTION: RECHARGEABLE BATTERY, FOR 24 HOURS CONTINUOUS WORKING

INSPECTION CERTIFICATE



2133-10
2133-101

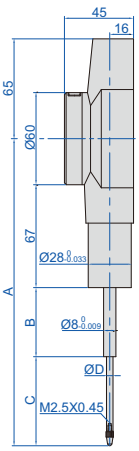
2133-10



2133-25
2133-251

2133-25

Unit: mm

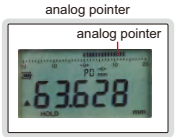


2133-50

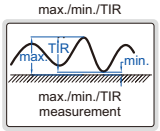
2133-50

- Linear ball bearings for ten million times use
- Absolute encoder, the original data remains after power off
- Reading in digital and analog
- Data output
- With flat back
- Button function: data output, tolerance, data preset, data hold, measuring direction change, max./min./TIR, power off time, on/off, mm/inch, adjust resolution
- Power: rechargeable battery, for 24 hours continuous working
- Optional accessory: contact points, wireless transmitter code **7315-60** (receiver is needed)

analog pointer



max./min./TIR



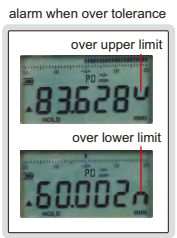
spindle lift knob is included

Standard accuracy
Carbide probe
Adjustable resolution: 0.0005mm/0.00002", 0.001mm/0.00005", 0.01mm/0.0005"

(mm)

Code	Range	Accuracy	Hysteresis	A	B	C	ØD	Maximum measuring force	Cap	Remark
2133-10*	12.7mm/0.5"	3μm	1.5μm	75.4	20.6	24.8	5	1.5N	can lift	flat back
2133-25*	25.4mm/1"	3μm	1.5μm	109.5	38.5	41	5	2.2N	cannot lift	flat back
2133-50*	50.8mm/2"	3μm	1.5μm	201	32	72	4	2.5N	—	flat back

alarm when over tolerance



High accuracy
Ruby probe
Adjustable resolution: 0.0002mm/0.00001", 0.001mm/0.00005", 0.01mm/0.0005"

(mm)

Code	Range	Accuracy	Hysteresis	A	B	C	ØD	Maximum measuring force	Cap	Remark
2133-101*	12.7mm/0.5"	1.5μm	1μm	77.4	26	21.4	4	1.5N	can lift	flat back
2133-251*	25.4mm/1"	1.8μm	1μm	116.1	42.5	44	4	2.2N	cannot lift	flat back

*Supplied with manufacturer inspection certificate

BUILT-IN BLUETOOTH HIGH PRECISION DIGITAL INDICATORS

INSPECTION CERTIFICATE

ATTENTION: RECHARGEABLE BATTERY, FOR 30 HOURS CONTINUOUS WORKING

VIDEO

BUILT-IN BLUETOOTH | IP54 WATERPROOF | COLOR DISPLAY LARGE CHARACTERS WITH BACKLIGHT | ABSOLUTE ENCODER, THE ORIGINAL DATA REMAINS AFTER POWER OFF

2135-10

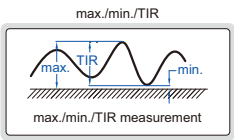
2135-25

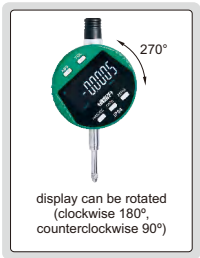
2135-50

- IP54 dust/waterproof (when cap is lifted, no dust/waterproof)
- Color display, large characters with backlight
- Absolute encoder, the original data remains after power off
- Automatic power off
- Display can be rotated by 270°
- Adjustable resolution: 0.0005mm/0.00002"
  0.001mm/0.00005"
- Button function: on/off, zero setting, data preset, tolerance Go and No-Go display, data hold, mm/inch, measuring direction change, bluetooth, max./min./TIR, adjust resolution, absolute/incremental measurement, data output
- Android and iPhone APP, USB type-C cable are included
- Power: rechargeable Li-battery, for 30 hours continuous working (bluetooth transmission reduces working hours)

spindle lift knob is included

max./min./TIR





alarm in red when over tolerance

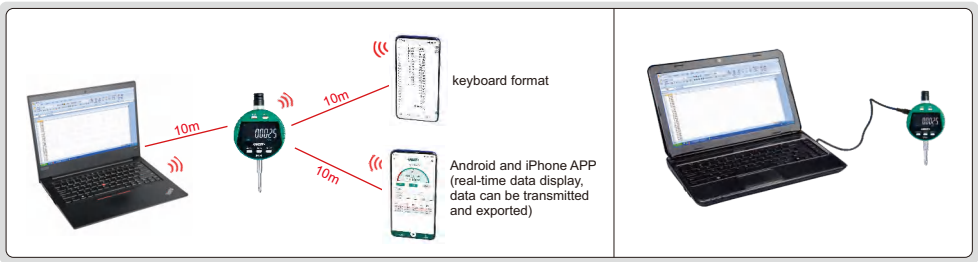
Code	Range	Accuracy	Hysteresis	Maximum measuring force	Cap	Remark
2135-10*	12.7mm/0.5"	2μm	1.5μm	1.5N	can lift	flat back
2135-25*	25.4mm/1"	2μm	1.5μm	1.8N	can lift	flat back
2135-50*	50.8mm/2"	4μm	2μm	2.3N	can lift	flat back

*Supplied with manufacturer inspection certificate

Data output

Data output with bluetooth (transmission distance is 10 meters)	keyboard format	data can be transmitted to Excel, Word, txt, etc.	single or continuous transmission (the fastest data output is 15pcs per 10s)
	virtual com port	data can be transmitted to Android and iPhone APP	real-time display (continuous transmission) or single transmission
Data output with USB cable (cable length 1.8 meters)	keyboard format	data can be transmitted to Excel, Word, txt, etc.	single or continuous transmission (the fastest data output is 40pcs per 10s)
	virtual com port and 485 data output can be customized		

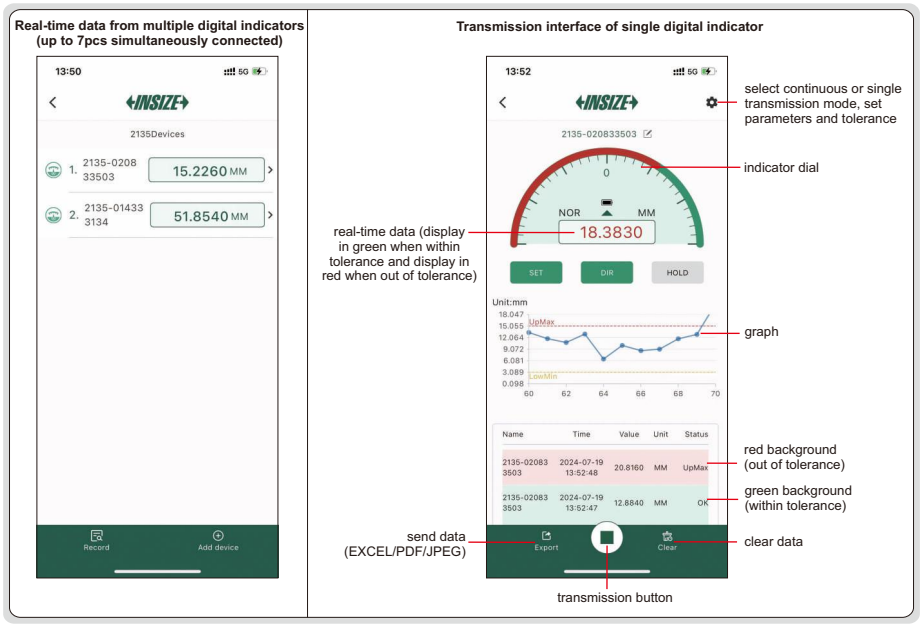
data output with bluetooth and USB cable (included)



To be continued

Continued from previous page

Android and iPhone APP (included), can choose real-time display (continuous transmission) or single transmission



HIGH PRECISION DIGITAL INDICATORS

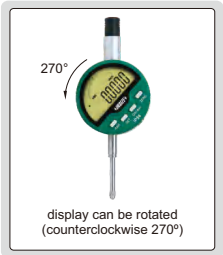
ATTENTION: RECHARGEABLE BATTERY, FOR 30 HOURS CONTINUOUS WORKING

IP54 WATERPROOF

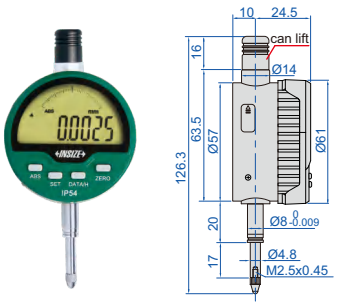
ABSOLUTE ENCODER, THE ORIGINAL DATA REMAINS AFTER POWER OFF

INSPECTION CERTIFICATE

Unit: mm

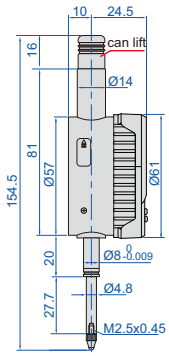


spindle lift knob is included

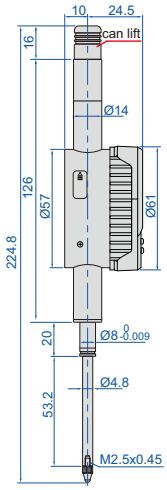


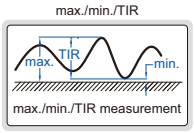
2136-10

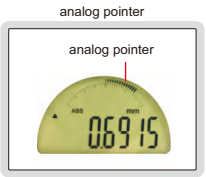
2136-25

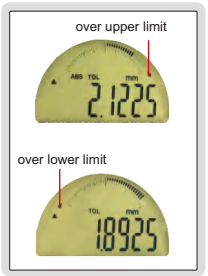


2136-50









- IP54 dust/waterproof (when cap is lifted, no dust/waterproof)
- Absolute encoder, the original data remains after power off
- Automatic power off
- Reading in digital and analog
- Display can be rotated by 270°
- Button function: on/off, zero setting, data preset, tolerance Go and No-Go display, data hold, mm/inch, measuring direction change, max./min./TIR, absolute/incremental measurement, data output
- Data output with USB cable (keyboard format), cable length 1.8 meters, single and continuous transmission (the fastest data output is 40pcs per 10s)
- Power: rechargeable battery, for 30 hours continuous working

Resolution 0.0005mm/0.00002"

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Cap	Remark
2136-10*	0-12.7mm/0-0.5"	2μm	1.5μm	1.5N	can lift	flat back
2136-25*	0-25.4mm/0-1"	2μm	1.5μm	1.8N	can lift	flat back
2136-50*	0-50.8mm/0-2"	4μm	2μm	2.3N	can lift	flat back

*Supplied with manufacturer inspection certificate

HIGH PRECISION DIGITAL INDICATORS

ATTENTION: RECHARGEABLE BATTERY, FOR 24 HOURS CONTINUOUS WORKING

ABSOLUTE ENCODER, THE ORIGINAL DATA REMAINS AFTER POWER OFF

DATA OUTPUT

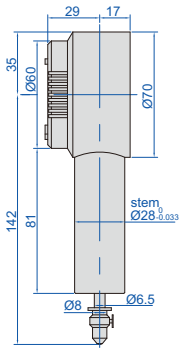
Ø28MM STEM SUITABLE FOR REINFORCED CLAMPING

LINEAR BALL BEARINGS FOR TEN MILLION TIMES USE

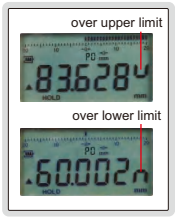
VIDEO

- Linear ball bearings for ten million times use
- Ø28mm stem suitable for reinforced clamping
- Absolute encoder, the original data remains after power off
- Adjustable resolution: 0.0002mm/0.00001"
  0.001mm/0.00005"
  0.01mm/0.0005"
- Reading in digital and analog
- Button function: data output, tolerance, data preset, data hold,measuring direction change, max./min./TIR, power off time, on/off, mm/inch, adjust resolution
- Power: rechargeable battery, for 24 hours continuous working
- Ruby probe

2140-6



alarm when over tolerance



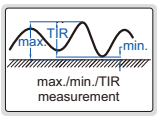
With data interface
Optional accessory: wireless transmitter code **7315-60** (receiver is needed)

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Remark
2140-6	0-6mm/0-0.24"	1.6μm	0.8μm	1. 5N	flat back

Built-in wireless
Optional accessory:
wireless receiver, code **7315-2/3/6/7/8/9**, transmission distance is 10 meters
(under the condition of no obstruction and no electromagnetic interference)

Code	Range	Accuracy	Hysteresis	Maximum measuring force	Remark
2140-6AWL*	0-6mm/0-0.24"	1.6μm	0.8μm	1. 5N	flat back

max./min./TIR



analog pointer

*Continuous data collection can be customized (press "DATA" button to start continuous collection, press again to stop; collection frequency can be customized, the fastest data collection is 10 pcs per second)

INDUCTIVE DIGITAL COMPARATOR (HIGH ACCURACY)

IP54 WATERPROOF

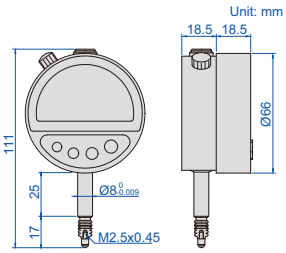
DATA OUTPUT

ATTENTION: RECHARGEABLE BATTERY, FOR 12 HOURS CONTINUOUS WORKING

VIDEO

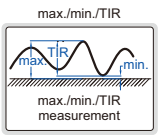
- Built-in wireless transmission
- IP54 dust/waterproof
- Reading in digital and analog
- Display can be rotated by 320º
- Can store 10 set parameters, and the parameter can be searched and recalled
- 999 groups value can be stored
- Touch sensor: use the sensor to transmit data, avoiding press the button to cause deformation of the dial indicator stand and affect the zero position
- Button function: on/off, zero, data hold, measuring direction change, inch/metric conversion, data preset, absolute/incremental measurement, max./min./TIR measurement, tolerance Go and No-Go display, data output, analog pointer resolution and range change, print data
- Power: rechargeable battery, for 12 hours continuous working
- Ruby probe
- Data output
- Optional accessory: wireless receiver (code **2149-RE**, transmission distance is 2 meters), printer (code **ISF-DF-PRINTER**)

2149-2

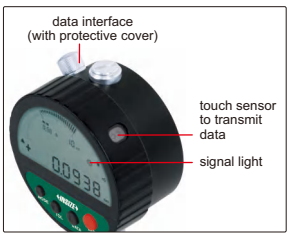


wireless receiver (**optional**)

max./min./TIR



printer (**optional**)



Code	Range	Resolution	Accuracy	Hysteresis	Repeatability	Measuring force
2149-2	2mm/0.08"	0.1μm/0.000005"	0.5μm	0.2μm	0.3μm	0.8-1N

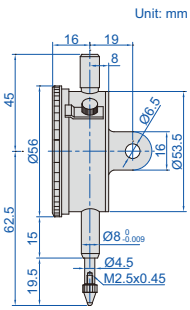
PRECISION DIAL INDICATORS

INSPECTION CERTIFICATE

JEWELED BEARING

- Graduation: 0.001mm
- Dial reading: 0-100-0
- Jeweled bearing
- Supplied with limit pointers and bezel clamp
- Optional accessory: backs, contact points

2313-1A



Code	Range	Accuracy	Hysteresis	Range/rev	Remark	Maximum measuring force	Cap	Remark
2313-1FA*	1mm	5μm	2μm	0.2mm	flat back	2N	cannot lift	flat back
2313-2FA*	2mm	6μm	2.5μm	0.2mm	flat back	2N	cannot lift	flat back
2313-1A*	1mm	5μm	2μm	0.2mm	lug back	2N	cannot lift	lug back

*Supplied with manufacturer inspection certificate

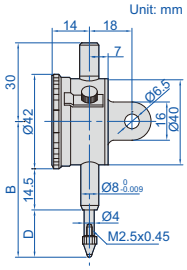
COMPACT DIAL INDICATORS

INSPECTION CERTIFICATE

JEWELED BEARING

- Range/rev: 0.5mm
- Dial reading: 0-50
- Meet DIN878
- Jeweled bearing
- Supplied with limit pointers and bezel clamp
- Optional accessory: backs, contact points

2311-5



(mm)

Code	Range	Graduation	Accuracy	Hysteresis	Maximum measuring force	Cap	Remark	B	D
2311-3F*	3mm	0.01mm	12μm	3μm	1.5N	can lift	flat back	46	10.5
2311-5F*	5mm	0.01mm	14μm	3μm	1.5N	can lift	flat back	48	12.5
2311-3*	3mm	0.01mm	12μm	3μm	1.5N	can lift	lug back	46	10.5
2311-5*	5mm	0.01mm	14μm	3μm	1.5N	can lift	lug back	48	12.5

*Supplied with manufacturer inspection certificate

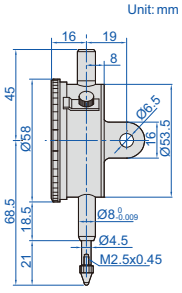
DIAL INDICATORS (STANDARD TYPE)

INSPECTION CERTIFICATE

JEWELED BEARING

- Graduation: 0.01mm
- Dial reading: 0-100
- Meet DIN878
- Jeweled bearing
- Supplied with limit pointers and bezel clamp
- Optional accessory: backs, contact points

2308-10A



Code	Range	Accuracy	Hysteresis	Range/rev	Maximum measuring force	Cap	Remark
2308-3FA*	3mm	12μm	3μm	1mm	1.5N	can lift	flat back
2308-5FA*	5mm	14μm	3μm	1mm	1.5N	can lift	flat back
2308-10FA*	10mm	17μm	3μm	1mm	1.5N	can lift	flat back
2308-3A*	3mm	12μm	3μm	1mm	1.5N	can lift	lug back
2308-5A*	5mm	14μm	3μm	1mm	1.5N	can lift	lug back
2308-10A*	10mm	17μm	3μm	1mm	1.5N	can lift	lug back

*Supplied with manufacturer inspection certificate

DIAL INDICATORS (BASIC TYPE)

POPULAR MODEL

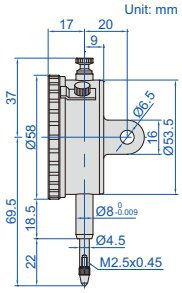
JEWELED BEARING

INSPECTION CERTIFICATE

- Graduation: 0.01mm
- Dial reading: 0-100
- Maximum measuring force: 1.5N
- Meet DIN878
- Jeweled bearing
- Supplied with limit hands and bezel clamp
- Packed in carton box
- Optional accessory: backs, contact points

2301-10

carton box



Code	Range	Accuracy	Hysteresis	Range/rev	Cap	Remark
2301-10F*	10mm	17μm	3μm	1mm	can lift	flat back
2301-10*	10mm	17μm	3μm	1mm	can lift	lug back with spare flat back

*Supplied with manufacturer inspection certificate

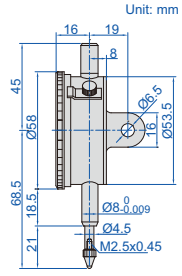
REVERSE READING DIAL INDICATORS

JEWELED BEARING

INSPECTION CERTIFICATE

- Meet DIN878
- Suitable for depth and step measurements
- Jeweled bearing
- Supplied with limit pointers and bezel clamp
- Optional accessory: backs, contact points

2801-10



Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading	Maximum measuring force	Cap	Remark
2801-10F*	10mm	0.01mm	17μm	3μm	1mm	100-0	1.5N	can lift	flat back
2801-10*	10mm	0.01mm	17μm	3μm	1mm	100-0	1.5N	can lift	lug back

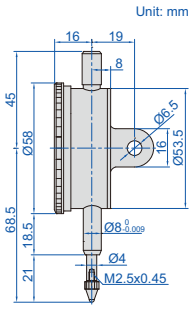
*Supplied with manufacturer inspection certificate

SHOCKPROOF DIAL INDICATORS

INSPECTION CERTIFICATE | SHOCK PROOF | JEWELED BEARING

- Graduation: 0.01mm
- Dial reading: 0-100
- Meet DIN878
- Shockproof
- Jeweled bearing
- Supplied with limit pointers and bezel clamp
- Optional accessory: backs, contact points

2314-10A



Code	Range	Accuracy	Hysteresis	Range/rev	Remark	Maximum measuring force	Cap	Remark
2314-10FA*	10mm	17μm	3μm	1mm	flat back	1.5N	can lift	flat back
2314-10A*	10mm	17μm	3μm	1mm	lug back	1.5N	can lift	lug back

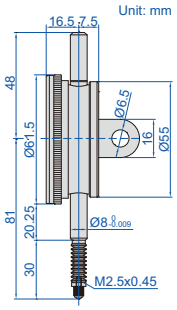
*Supplied with manufacturer inspection certificate

WATERPROOF DIAL INDICATORS

IP54 WATERPROOF | INSPECTION CERTIFICATE

- Hysteresis: 3μm
- Dial reading: 0-100
- Meet DIN878
- IP54 dust/waterproof
- With limit pointers
- Optional accessory: backs, contact points

2324-10A



Code	Range	Graduation	Accuracy	Range/rev	Maximum measuring force	Cap	Remark
2324-10FA*	10mm	0.01mm	17μm	1mm	1.5N	cannot lift	flat back
2324-10A*	10mm	0.01mm	17μm	1mm	1.5N	cannot lift	lug back

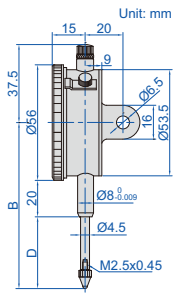
*Supplied with manufacturer inspection certificate

DIAL INDICATORS (LONG STROKE)

INSPECTION CERTIFICATE

- Graduation: 0.01mm
- Dial reading: 0-100
- Supplied with limit pointers and bezel clamp
- Optional accessory: backs, contact points

2310-30A



(mm)

Code	Range	Accuracy	Hysteresis	Range/rev	Maximum measuring force	Cap	Remark	B	D
2310-20FA*	20mm	25μm	5μm	1mm	2.0N	can lift	flat back	83	35
2310-30FA*	30mm	35μm	7μm	1mm	2.2N	can lift	flat back	88	40
2310-20A*	20mm	25μm	5μm	1mm	2.0N	can lift	lug back	83	35
2310-30A*	30mm	35μm	7μm	1mm	2.2N	can lift	lug back	88	40

*Supplied with manufacturer inspection certificate

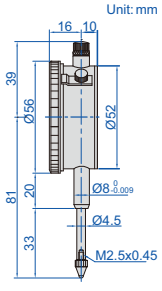
DIAL INDICATOR (LONG STROKE, BASIC TYPE)

POPULAR MODEL | INSPECTION CERTIFICATE

- Graduation: 0.01mm
- Dial reading: 0-100
- Supplied with limit pointers and bezel clamp
- Packed in carton box
- Optional accessory: backs, contact points

carton box

2302-25F



Code	Range	Accuracy	Hysteresis	Range/rev	Maximum measuring force	Cap	Remark
2302-25F*	25mm	35μm	7μm	1mm	2.2N	can lift	flat back

*Supplied with manufacturer inspection certificate

DOUBLE FACE DIAL INDICATOR

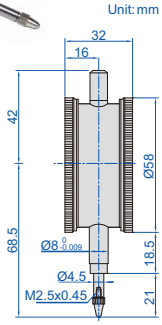
INSPECTION CERTIFICATE

JEWELED BEARING

front back

2328-10

Unit: mm



- Graduation: 0.01mm
- Meet DIN878
- Dial reading: 0-100
- Maximum measuring force: 1.5N
- Read from both sides
- Jeweled bearing
- Supplied with limit pointers
- Optional accessory: contact points

Code	Range	Accuracy	Hysteresis	Range/rev	Cap
2328-10*	10mm	17μm	3μm	1mm	can lift

*Supplied with manufacturer inspection certificate

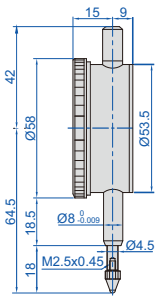
ONE REVOLUTION DIAL INDICATORS

INSPECTION CERTIFICATE

SHOCK PROOF

2316-05F

Unit: mm



- Dial indicator stroke: 5mm
- Meet DIN878
- Maximum measuring force: 1.5N
- Eliminate the possibility of reading errors due to miscounting
- Shockproof
- With flat back
- Supplied with limit pointers
- Optional accessory: backs, contact points

Code	Range	Graduation	Accuracy	Hysteresis	Dial reading	Cap
2316-05F*	0.5mm	0.01mm	9μm	3μm	25-0-25	cannot lift
2316-1F*	1mm	0.01mm	9μm	3μm	50-0-50	cannot lift

*Supplied with manufacturer inspection certificate

DIAL INDICATORS (LONG STROKE)

INSPECTION CERTIFICATE

JEWELED BEARING

SHOCK PROOF

2309-50

- Range/rev: 1mm
- Dial reading: 0-100
- Shockproof
- Jeweled bearing
- Supplied with limit pointers
- Optional accessory: backs, contact points

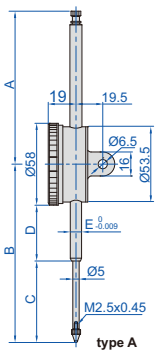
(mm)

Code	Type	A	B	C	D	E
2309-30F	A	37.5	89.5	40.9	19.5	Ø8
2309-50	A	108.3	126.2	57.7	39.5	Ø8
2309-50D	B	108.3	126.2	57.7	29.5	Ø8
2309-100D	B	167.6	207.8	108	60.8	Ø10

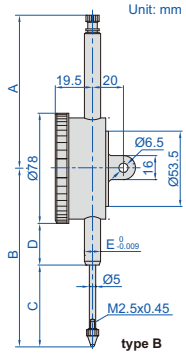
stem clamp Ø10mm of **2309-100D**

back of type B

Unit: mm



type A



type B

Code	Range	Type	Graduation	Accuracy	Hysteresis	Maximum measuring force	Cap	Remark
2309-30F*	30mm	A	0.01mm	35μm	7μm	2.2N	can lift	flat back
2309-50*	50mm	A	0.01mm	40μm	8μm	2.5N	can lift	flat back with spare lug back
2309-50D*	50mm	B	0.01mm	40μm	8μm	2.5N	can lift	flat back with spare lug back
2309-100D	100mm	B	0.01mm	50μm	9μm	3.2N	can lift	flat back with spare lug back

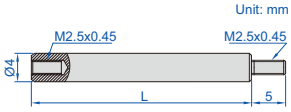
Note: 1) **2309-100D** can only be used vertically
2) **2309-100D** is supplied with stem clamp Ø10mm for magnetic stands (code **6200-60**, **6201-60**, **6202-80**, **6202-100**)
3) **2309-30F** can not accept optional backs

*Supplied with manufacturer inspection certificate

EXTENSION RODS

6282-2010

Unit: mm

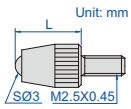


Code	Material	L
6282-2001	steel	10mm
6282-2002	steel	15mm
6282-2003	steel	20mm
6282-2004	steel	25mm
6282-2005	steel	30mm
6282-2006	steel	35mm
6282-2007	steel	40mm
6282-2008	steel	45mm
6282-2009	steel	50mm

Code	Material	L
6282-2010	steel	55mm
6282-2011	steel	60mm
6282-2012	steel	65mm
6282-2013	steel	70mm
6282-2014	steel	75mm
6282-2015	steel	80mm
6282-2016	steel	90mm
6282-2017	steel	100mm

CONTACT POINTS

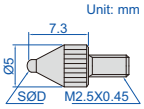
6282-0101



BALL POINT

Code	Material of measuring face	L (mm)
6282-0101	carbide	7.3
6282-0103	ceramic	7.3
6282-0104	carbide	8.3

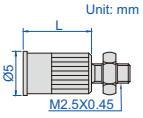
6282-0301



BALL POINT

Code	Material of measuring face	SØD
6282-0301	steel	1mm
6282-0302	carbide	1.5mm
6282-0303	carbide	1.8mm
6282-0304	carbide	2.5mm
6282-0305	carbide	4mm

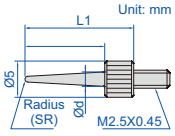
6282-1101



FLAT POINT

Code	Material of measuring face	L
6282-1101	steel	8mm

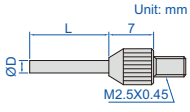
6282-1601



NEEDLE POINT (mm)

Code	Material of measuring face	L1	SR	Ød
6282-1601	steel	11	0.4	2
6282-1602	steel	13	0.2	2
6282-1603	steel	21	0.4	3
6282-1604	steel	31	0.4	3

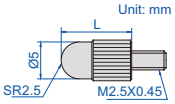
6282-1706



NEEDLE POINT

Code	Material of measuring face	ØD	L
6282-1705	carbide	1mm	8mm
6282-1706	carbide	1mm	10mm
6282-1707	carbide	1mm	20mm
6282-1708	carbide	1mm	40mm
6282-1712	carbide	1.5mm	20mm
6282-1713	carbide	1.5mm	40mm
6282-1714	carbide	2mm	8mm
6282-1715	carbide	2mm	18mm
6282-1716	carbide	2mm	28mm
6282-1717	carbide	2mm	40mm

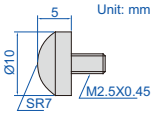
6282-0205



SHELL TYPE POINT

Code	Material of measuring face	L
6282-0205	steel	15mm
6282-0210	steel	30mm

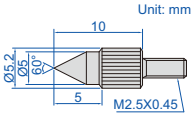
6282-0401



SPHERICAL POINT

Code	Material of measuring face
6282-0401	steel

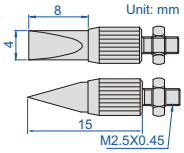
6282-0601

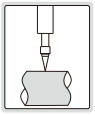


CONICAL POINT

Code	Material of measuring face
6282-0601	steel

6282-1001

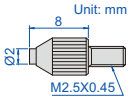




KNIFE EDGE POINT

Code	Material of measuring face
6282-1001	steel

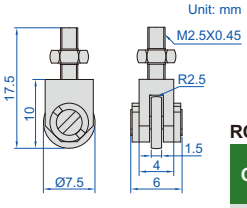
6282-1301



FLAT POINT

Code	Material of measuring face
6282-1301	carbide

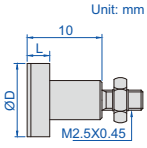
6282-1901



ROLLER POINT

Code	Material of measuring face
6282-1901	steel

6282-1201



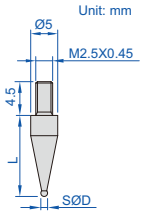
FLAT POINT (mm)

Code	Material of measuring face	ØD	L
6282-1201	steel	10	3
6282-1202	steel	15	4
6282-1203	steel	20	3
6282-1204	steel	25	4
6282-1205	steel	30	4

PRECISION BALL POINTS

- Material of measuring face: carbide
- Accuracy: ±3μm

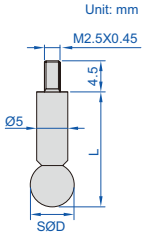
6282-3101



(mm)

Code	SØD	L
6282-3101	1	12
6282-3102	1.5	12
6282-3103	2	12
6282-3104	2.5	12
6282-3105	3	12
6282-3106	3.5	12
6282-3107	4	12
6282-3108	4.5	12
6282-3109	5	12
6282-3110	5.5	12
6282-3111	6	12
6282-3112	6.5	12

6282-3206



CUSTOM-MADE SUPPLY SPECIAL SIZES ACCORDING TO CUSTOMER'S REQUEST, AND SIZES BELOW 1mm ARE AVAILABLE

(mm)

Code	SØD	L
6282-3201	7	20
6282-3202	7.5	20
6282-3203	8	20
6282-3204	8.5	20
6282-3205	9	20
6282-3206	9.5	20
6282-3207	10	20

SPINDLE LIFT KNOB

Code
7332

- For dial/digital indicators with spindle diameter Ø4.5mm or Ø5mm

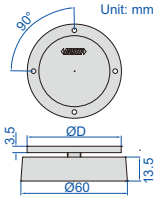
7332

MAGNETIC BACKS

front

back

7331-M2

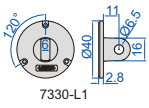


(mm)

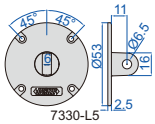
Code	ØD	For digital/dial indicators
7331-M1	51.5	2103, 2104, 2108, 2109, 2112 2115, 2116, 2117, 2118, 2138 2301, 2302, 2308 2309 (except 2309-30, 2309-30F) 2313, 2314, 2316, 2324
7331-M2	54	2318

LUG BACKS

7330-L2

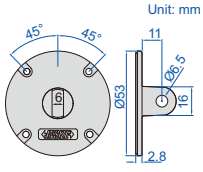


7330-L1



7330-L5

Code	For digital/dial indicators
7330-L1	2311
7330-L2	2301, 2308, 2309 (except 2309-30, 2309-30F) 2313, 2314, 2324,2316
7330-L5	2103, 2104, 2108, 2109 2112, 2115, 2117
7330-L10	2310

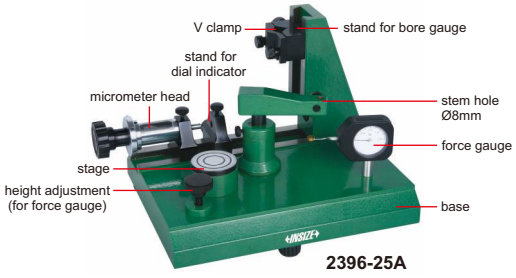


7330-L2 and 7330-L10

DIAL INDICATOR TESTER CODE 2396-25A

ATTENTION: NOT SUITABLE FOR INDICATORS WITH GRADUATION 0.001MM

- To calibrate dial indicators, test indicators and dial bore gauges
- Dimension: 270x210x205mm
- Net weight: 11kg



2396-25A

half round gauge block code **2396-block** (**optional**)

Micrometer head

Range	Sampling interval	Accuracy	Hysteresis
0-25mm	0.1mm	4μm (0-25mm), 3μm (0-10mm), 2μm (0-1mm)	1μm

Force gauge

Range	Graduation	Accuracy
0-1.6N	0.05N	±5% (of load capacity)

Stage

Diameter	Flatness	Roughness
50mm	1μm	0.05μm

Half round gauge block (optional)

Code	Parallelism
2396-block	1μm

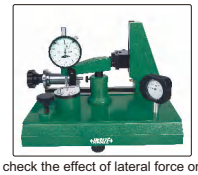
inspect accuracy of dial indicators (range 0-25mm)

inspect accuracy of dial bore gauges (range 6-450mm)

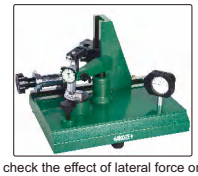
inspect accuracy of test indicators

check force of dial indicators

check repeatability of dial indicators



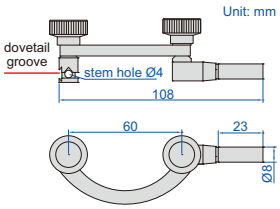
check the effect of lateral force on accuracy of dial indicators (half round gauge block is required)



check the effect of lateral force on accuracy of test indicators (half round gauge block is required)

DIAL TEST INDICATOR HOLDER

6291-1

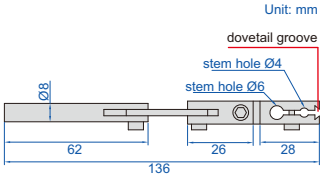


- Can be used with dial test indicators

Code
6291-1

DIAL TEST INDICATOR HOLDER

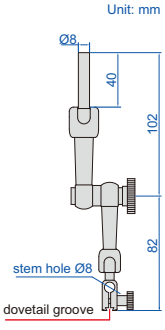
6296-1



- Supplied with hex key

Code
6296-1

DIAL TEST INDICATOR HOLDER



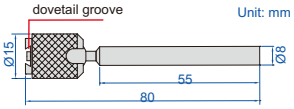
6295-1A

- Can be used with dial test indicators

Code
6295-1A

DIAL TEST INDICATOR UNIVERSAL HOLDER

6297-1

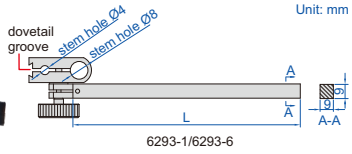


- Set the indicators at the desired attitude to the workpiece

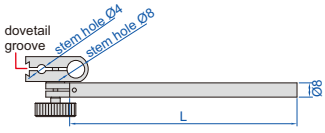
Code
6297-1

DIAL TEST INDICATOR HOLDERS

6293-1



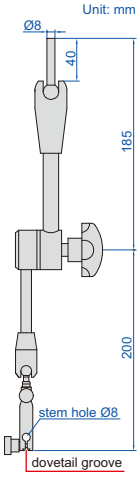
6293-2



Code	Stem section	Stem length (L)
6293-1	9x9mm	100mm
6293-6	9x9mm	50mm
6293-2	Ø8mm	115mm

DIAL INDICATOR HOLDER

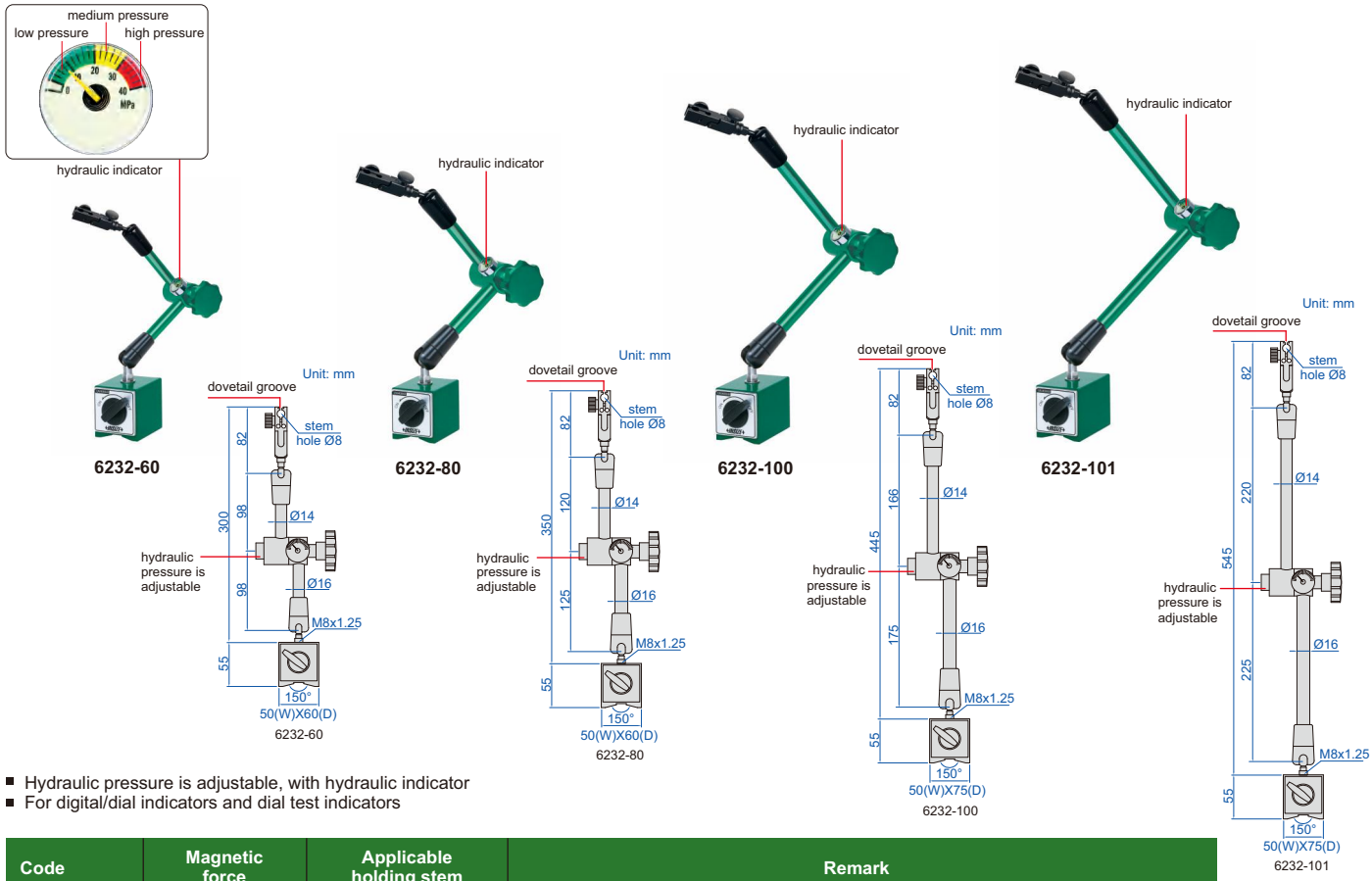
6294-1A



- Can be used with dial test indicators or dial indicators

Code
6294-1A

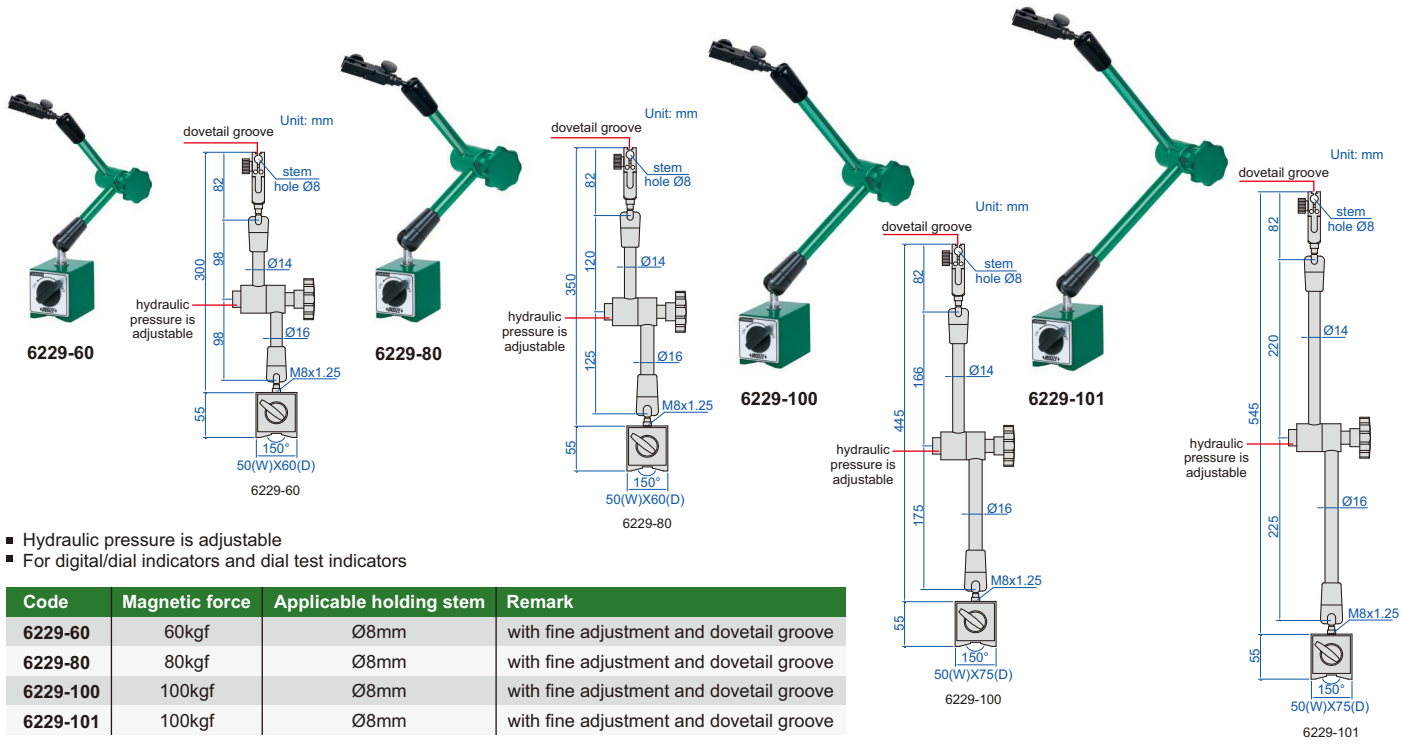
HYDRAULIC UNIVERSAL MAGNETIC STANDS (WITH HYDRAULIC INDICATOR)



- Hydraulic pressure is adjustable, with hydraulic indicator
- For digital/dial indicators and dial test indicators

Code	Magnetic force	Applicable holding stem	Remark
6232-60	60kgf	Ø8mm	with fine adjustment and dovetail groove, hydraulic pressure 0-40MPa
6232-80	80kgf	Ø8mm	with fine adjustment and dovetail groove, hydraulic pressure 0-40MPa
6232-100	100kgf	Ø8mm	with fine adjustment and dovetail groove, hydraulic pressure 0-40MPa
6232-101	100kgf	Ø8mm	with fine adjustment and dovetail groove, hydraulic pressure 0-40MPa

HYDRAULIC UNIVERSAL MAGNETIC STANDS

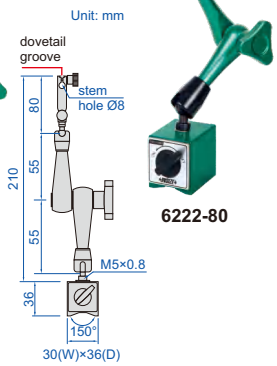


- Hydraulic pressure is adjustable
- For digital/dial indicators and dial test indicators

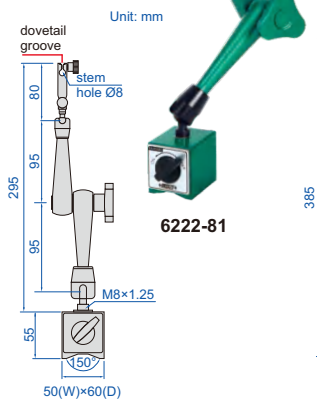
Code	Magnetic force	Applicable holding stem	Remark
6229-60	60kgf	Ø8mm	with fine adjustment and dovetail groove
6229-80	80kgf	Ø8mm	with fine adjustment and dovetail groove
6229-100	100kgf	Ø8mm	with fine adjustment and dovetail groove
6229-101	100kgf	Ø8mm	with fine adjustment and dovetail groove

LARGE LOCKING FORCE MAGNETIC STANDS

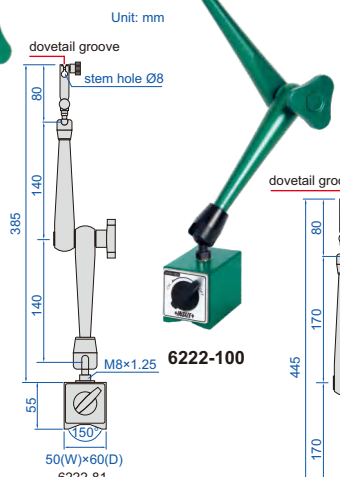
6222-40

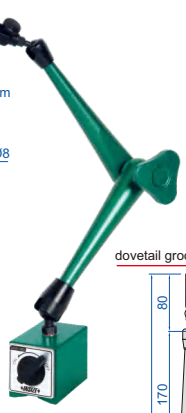


6222-80

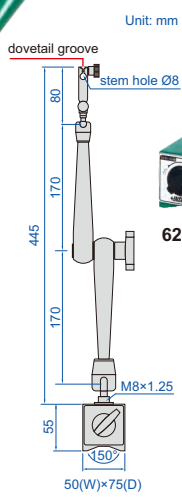


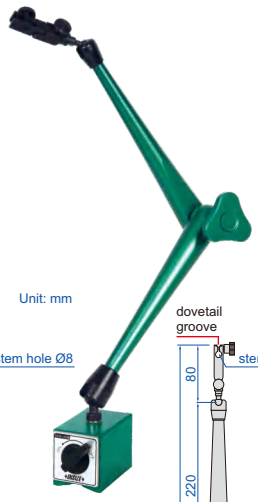
6222-81



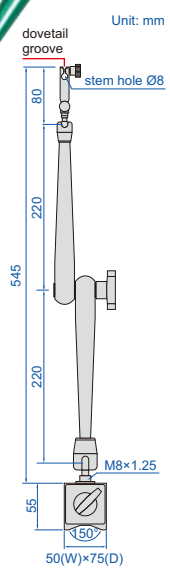


6222-100





6222-101



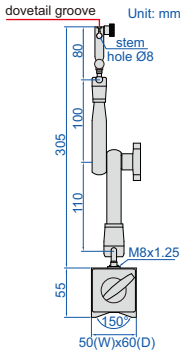
Code	Magnetic force	Applicable holding stem	Remark
6222-40	40kgf	Ø8mm	with fine adjustment and dovetail groove
6222-80	80kgf	Ø8mm	with fine adjustment and dovetail groove
6222-81	80kgf	Ø8mm	with fine adjustment and dovetail groove
6222-100	100kg	Ø8mm	with fine adjustment and dovetail groove
6222-101	100kg	Ø8mm	with fine adjustment and dovetail groove

LARGE LOCKING FORCE MAGNETIC STAND

- Applicable holding stem: Ø8mm
- For digital/dial indicators and dial test indicators
- With fine adjustment and dovetail groove

Code	Magnetic force
6219-80	80kgf

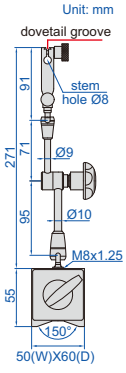
6219-80



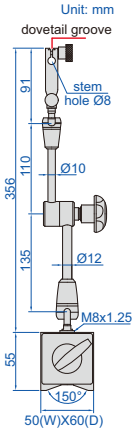
UNIVERSAL MAGNETIC STANDS

POPULAR MODEL

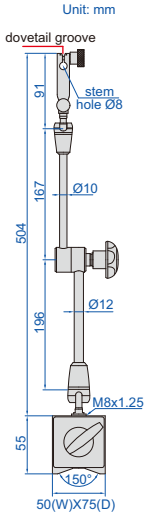
- For digital/dial indicators and dial test indicators
- With fine adjustment and dovetail groove



6210-81



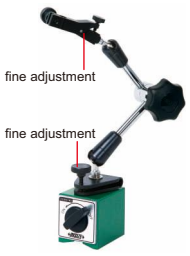
6210-80



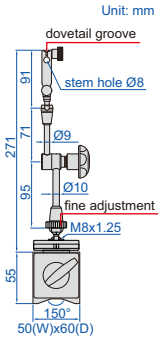
6210-100

Code	Magnetic force	Applicable holding stem
6210-81	80kgf	Ø8mm
6210-80	80kgf	Ø8mm
6210-100	100kgf	Ø8mm

MAGNETIC STAND WITH TWO FINE ADJUSTMENTS



6272-80



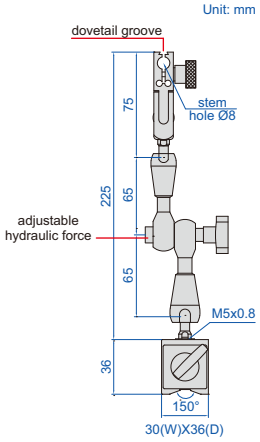
- Magnetic force: 80kgf
- With two fine adjustments on the head and on the base
- For digital/dial indicators and dial test indicators
- With two fine adjustments and dovetail groove

Code	Applicable holding stem
6272-80	Ø8mm

HYDRAULIC MINI MAGNETIC STAND

ATTENTION: FOR DIAL TEST INDICATORS ONLY

6228-40



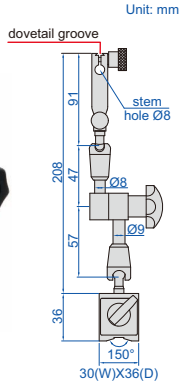
- For dial test indicators
- With fine adjustment and dovetail groove
- Adjustable hydraulic force
- Applicable holding stem: Ø8mm

Code	Magnetic force
6228-40	40kgf

MINI MAGNETIC STAND

ATTENTION: FOR DIAL TEST INDICATORS ONLY

6224-40

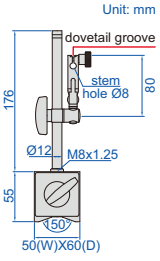


- For dial test indicators
- With fine adjustment and dovetail groove
- Applicable holding stem: Ø8mm

Code	Magnetic force
6224-40	40kgf

MAGNETIC STAND (FOR 0.001MM DIAL AND TEST INDICATORS)

6221-80

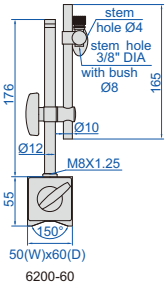


- For 0.001mm and 0.01mm dial and test indicators

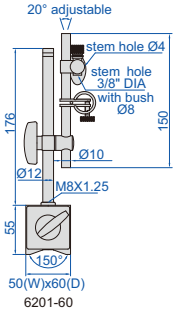
Code	Magnetic force	Applicable holding stem	Remark
6221-80	80kgf	Ø8mm	with fine adjustment and dovetail groove

MAGNETIC STANDS

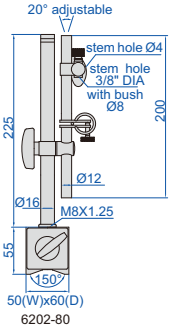
POPULAR MODEL



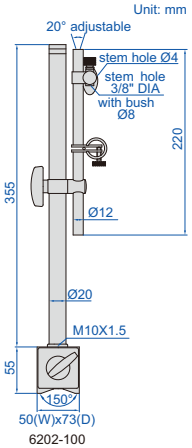
6200-60

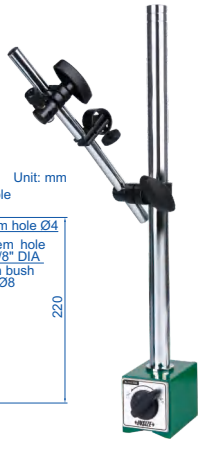


6201-60



6202-80





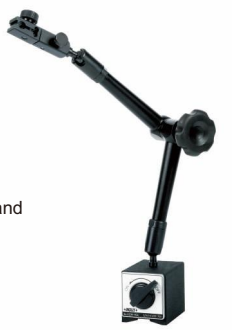
6202-100

- For digital/dial indicators and dial test indicators

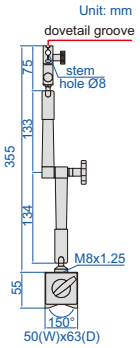
Code	Magnetic force	Applicable holding stem	Remark
6200-60	60kgf	Ø8mm, Ø4mm, 3/8" DIA	without fine adjustment
6201-60	60kgf	Ø8mm, Ø4mm, 3/8" DIA	with fine adjustment
6202-80	80kgf	Ø8mm, Ø4mm, 3/8" DIA	with fine adjustment
6202-100	100kgf	Ø8mm, Ø4mm, 3/8" DIA	with fine adjustment

UNIVERSAL MAGNETIC STAND

- For digital/dial indicators and dial test indicators



6208-80A

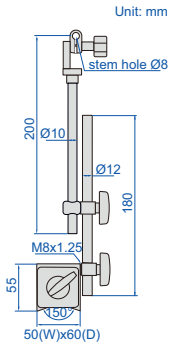


Code	Magnetic force	Applicable holding stem	Remark
6208-80A	80kgf	Ø8mm	with fine adjustment and dovetail groove

MAGNETIC STAND

- For digital/dial indicators and dial test indicators

6231-60

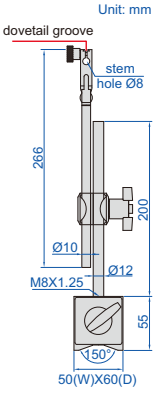


Code	Magnetic force	Applicable holding stem	Remark
6231-60	60kgf	Ø8mm	without fine adjustment or dovetail groove

MAGNETIC STAND

- For digital/dial indicators and dial test indicators
- With fine adjustment and dovetail groove

6216-80



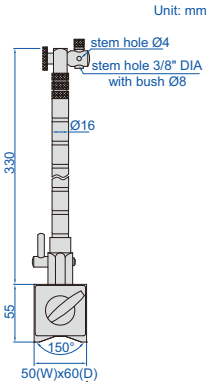
Code	Magnetic force	Applicable holding stem
6216-80	80kgf	Ø8mm

FLEX ARM MAGNETIC STAND

ATTENTION: FOR DIAL TEST INDICATORS ONLY

- For dial test indicators
- Applicable holding stem: Ø8mm, Ø4mm, 3/8" DIA.

6207-80A



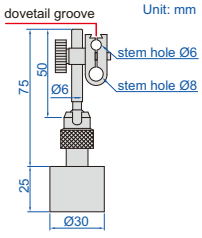
Code	Magnetic force
6207-80A	80kgf

MINI MAGNETIC STAND

ATTENTION: FOR DIAL TEST INDICATORS ONLY

- For dial test indicators
- With dovetail groove
- Applicable holding stem: Ø6mm, Ø8mm

6211-10

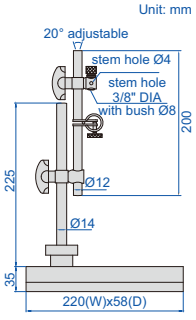


Code	Magnetic force
6211-10	10kgf

UNIVERSAL STAND

- For digital/dial indicators and dial test indicators
- With fine adjustment

6214-A



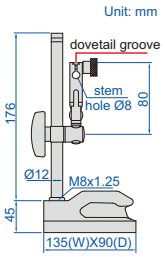
Code	Applicable holding stem
6214-A	Ø8mm, Ø4mm, 3/8" DIA

DIAL INDICATOR STAND (FOR 0.001MM DIAL AND TEST INDICATORS)

- Non-magnetic and hardened base
- Suitable for granite surface plates or cast iron surface plates
- For 0.001mm and 0.01mm dial and test indicators

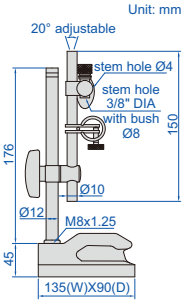
Code	Applicable holding stem	Remark
6230-60	Ø8mm	with fine adjustment and dovetail groove

6230-60



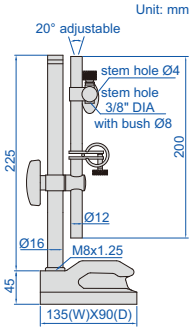
DIAL INDICATOR STANDS (NON-MAGNETIC)

6226-60



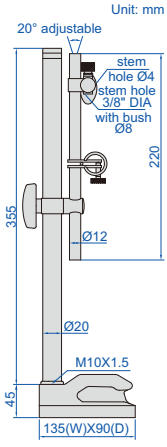
6226-60

6226-80



6226-80

6226-100



6226-100

Code	Applicable holding stem	Remark
6226-60	Ø8mm, Ø4mm, 3/8" DIA	with fine adjustment
6226-80	Ø8mm, Ø4mm, 3/8" DIA	with fine adjustment
6226-100	Ø8mm, Ø4mm, 3/8" DIA	with fine adjustment

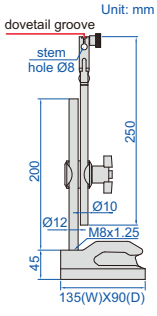
- Hardened base
- Suitable for granite surface plates and cast iron surface plates
- For digital/dial indicators and dial test indicators

DIAL INDICATOR STAND (NON-MAGNETIC)

- Hardened base
- Suitable for granite surface plates and cast iron surface plates
- For digital/dial indicators and dial test indicators
- With fine adjustment and dovetail groove

Code	Applicable holding stem
6227-80	Ø8mm

6227-80

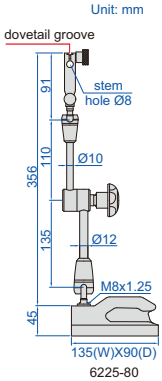


UNIVERSAL DIAL INDICATOR STANDS (NON-MAGNETIC)

- Hardened base
- Suitable for granite surface plates and cast iron surface plates
- For digital/dial indicators and dial test indicators

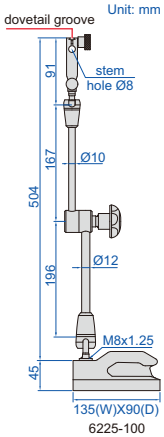
Code	Applicable holding stem	Remark
6225-80	Ø8mm	with fine adjustment and dovetail groove
6225-100	Ø8mm	with fine adjustment and dovetail groove

6225-80



6225-80

6225-100

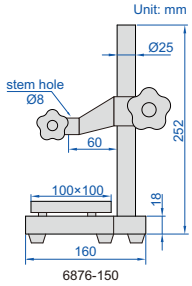


6225-100

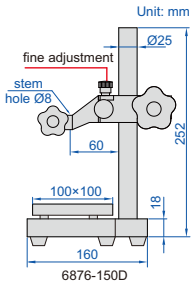
DIAL INDICATOR STANDS

6876-150

6876-150D



6876-150



6876-150D

- Vertical travel of holder: 150mm
- Applicable holding stem: Ø8mm
- Ceramic anvil
- Supplied with dust cover

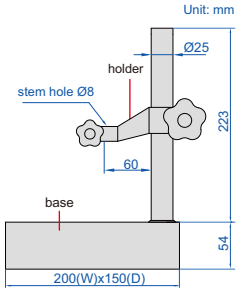
Code	Anvil	Remark
6876-150	ceramic, plain, flatness 1.5μm	without fine adjustment
6876-150D	ceramic, plain, flatness 1.5μm	with fine adjustment, fine adjustment range 3mm

GRANITE DIAL INDICATOR STANDS (BASIC TYPE)

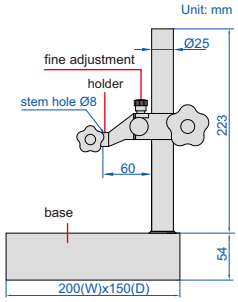
POPULAR MODEL

6841-170

6841-170D



6841-170

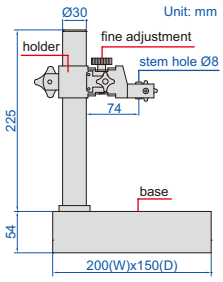


6841-170D

- Vertical travel of holder: 170mm
- Applicable holding stem: Ø8mm
- Supplied with dust cover

Code	Anvil	Remark
6841-170	flatness 2.5μm	without fine adjustment
6841-170D	flatness 2.5μm	with fine adjustment, fine adjustment range 3mm

GRANITE DIAL INDICATOR STAND

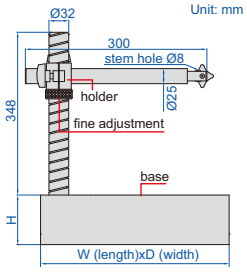


6866-150

- Vertical travel of holder: 150mm
- Fine adjustment range: 2mm
- Supplied with dust cover

Code	Applicable holding stem	Base
6866-150	Ø8mm	flatness 2.5μm

GRANITE DIAL INDICATOR STANDS



6867-250

- Vertical travel of holder: 250mm
- Fine adjustment range: entire stroke
- Supplied with dust cover

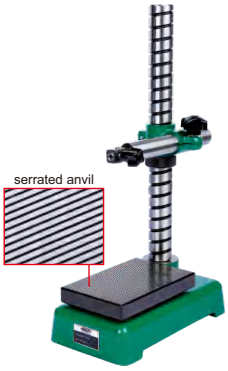
(mm)

Code	Applicable holding stem	W	D	H	Base
6867-250	Ø8mm	300	300	75	flatness 2.8μm
6867-400	Ø8mm	400	300	100	flatness 3μm

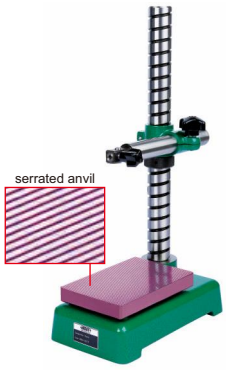
DIAL INDICATOR STANDS

- Vertical travel of holder: 250mm
- Applicable holding stem: Ø8mm
- Fine adjustment range: entire stroke
- Supplied with dust cover

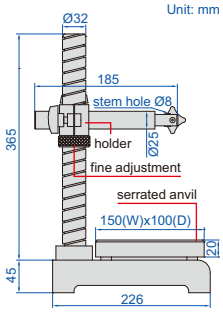
Code	Anvil
6864-250	steel (hardness HRC60±2), serrated, flatness 1.5μm
6864-250T	ceramic, serrated, flatness 1.5μm



6864-250



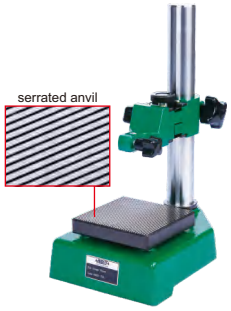
6864-250T



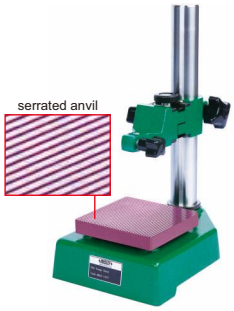
DIAL INDICATOR STANDS

- Vertical travel of holder: 150mm
- Fine adjustment range: 2mm
- Applicable holding stem: Ø8mm
- Supplied with dust cover

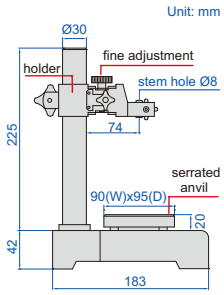
Code	Anvil
6863-150	steel (hardness HRC60±2), serrated, flatness 1.5μm
6863-150T	ceramic, serrated, flatness 1.5μm



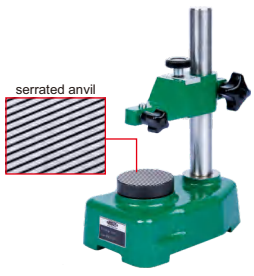
6863-150



6863-150T

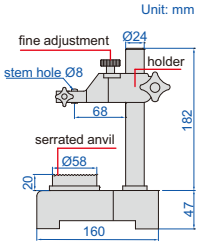


DIAL INDICATOR STANDS

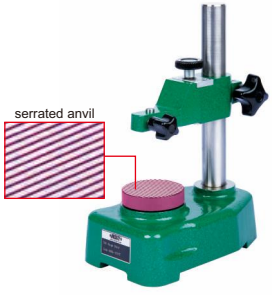


6862-1001

6862-1002

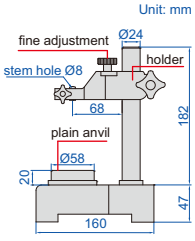


6862-1001
6862-1001T



6862-1001T

6862-1002T



6862-1002
6862-1002T

Code	Anvil
6862-1001	steel (hardness HRC60±2), serrated, flatness 1.5μm
6862-1002	steel (hardness HRC60±2), plain, flatness 1.5μm
6862-1001T	ceramic, serrated, flatness 1.5μm
6862-1002T	ceramic, plain, flatness 1.5μm

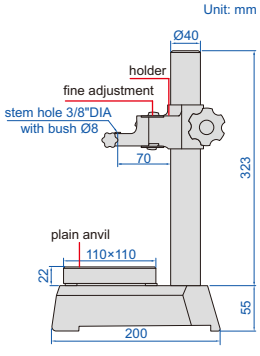
- Vertical travel of holder: 100mm
- Fine adjustment range: 2mm
- Applicable holding stem: Ø8mm
- Supplied with dust cover

DIAL INDICATOR STAND

- Vertical travel of holder: 250mm
- Fine adjustment range: 1mm
- Supplied with dust cover

Code	Applicable holding stem	Anvil
6861-250	Ø8mm, 3/8"	ceramic, plain, flatness 1.5μm

6861-250

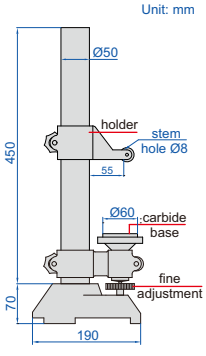


HEAVY DUTY DIAL INDICATOR STAND

- Vertical travel of holder: 300mm
- Fine adjustment range: 5mm
- Carbide base
- Supplied with dust cover
- Optional accessory:
  holder with stem hole Ø28 (code **6869-D28**)

Code	Applicable holding stem	Base
6869-300	Ø8mm	plain, flatness 1μm, carbide

6869-300



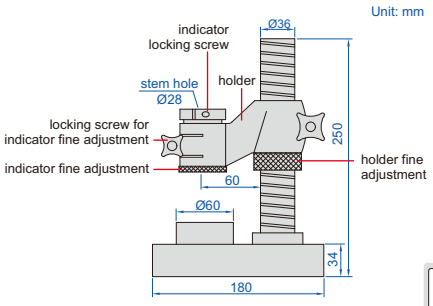
DIAL INDICATOR STAND

GAUGE BLOCKS ARE NEEDED FOR ZERO SETTING

locating fork for workpieces (included)

digital/dial indicator is optional

6845-100



- Vertical travel of holder: 100mm
- Holder fine adjustment range: entire stroke
- Indicator fine adjustment range: 3mm
- Optional accessory: Ø28mm/Ø8mm bush (code **6843-B8**), 0.001mm digital/dial indicators, high precision digital indicators (code **2140** series, **2150** series), gauge blocks (**4101** series, for zero setting)

application

Code	Applicable holding stem	Anvil
6845-100	Ø28mm	serrated, flatness 1μm

Ø28mm/Ø8mm bush (optional)

Code
6843-B8

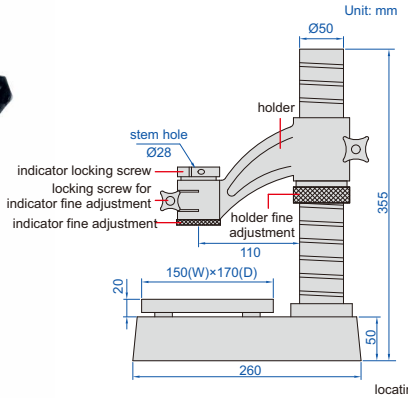
DIAL INDICATOR STAND

GAUGE BLOCKS ARE NEEDED FOR ZERO SETTING

VIDEO

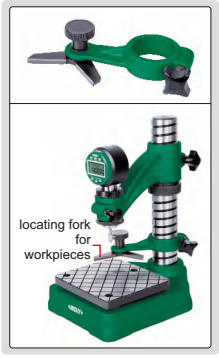
digital/dial indicator is optional

6846-140



- Vertical travel of holder: 140mm
- Holder fine adjustment range: entire stroke
- Indicator fine adjustment range: 3mm
- Optional accessory: Ø28mm/Ø8mm bush (code **6843-B8**), 0.001mm digital/dial indicators, high precision digital indicators (code **2140** series, **2150** series), gauge blocks (**4101** series, for zero setting)

locating fork for workpieces (included)



application

Code	Applicable holding stem	Anvil
6846-140	Ø28mm	grid, flatness 1μm

Ø28mm/Ø8mm bush (optional)

Code
6843-B8

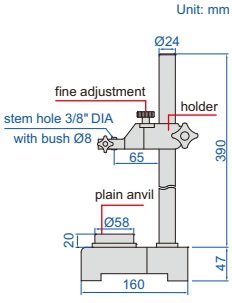
TRANSFER STANDS

- Vertical travel of holder: 335mm
- Fine adjustment range: 2mm
- Applicable holding stem: 3/8" DIA, Ø8mm
- Supplied with dust cover

Code	Anvil
6865-300	steel (hardness HRC60±2), plain, flatness 1.5μm
6865-300T	ceramic, plain, flatness 1.5μm

6865-300

6865-300T



application

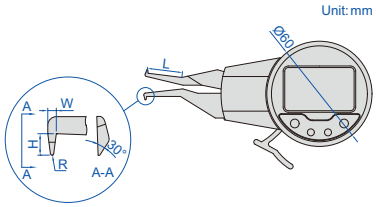
rigid construction, designed to make comparison height measurement (set zero with gauge block then measure height of workpiece) with dial indicators or digital indicators (variation of measuring force is high)

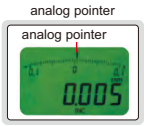
DIGITAL INTERNAL CALIPER GAUGES

DATA OUTPUT

- Resolution: 0.005mm/0.0002"
- Reading in digit and analog
- Display can be rotated by 170º
- Button function: tolerance Go and No-Go display, data preset, max./min. measurement, data holding, inch/metric conversion, absolute/incremental measurement
- CR2032 battery, automatic power off
- Data output
- Optional accessory: wireless transmitter code **7315-30** (receiver is needed)

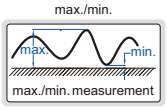
2121-15

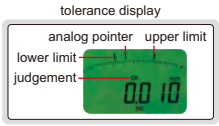




(mm)

Code	Range	Accuracy	Repeatability	L	H	W	R
2121-15	5-15mm/0.2-0.6"	±0.03mm	0.01mm	20	2	1.5	R0.3
2121-25	5-25mm/0.2-1.0"	±0.03mm	0.01mm	35	1.5	1.0	R0.3
2121-31	10-30mm/0.4-1.2"	±0.03mm	0.01mm	55	5.5	2.5	R0.5
2121-41	20-40mm/0.8-1.6"	±0.03mm	0.01mm	80	6.0	3.0	R0.5



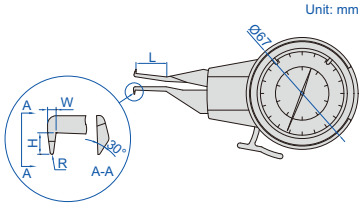


INTERNAL DIAL CALIPER GAUGES

(mm)

Code	Range	Graduation	Accuracy	L	H	W	R
2222-15	5-15mm	0.01mm	±0.02mm	20	2	1.5	R0.3
2222-25	5-25mm	0.01mm	±0.03mm	35	1.5	1.0	R0.3
2222-301	10-30mm	0.01mm	±0.03mm	55	5.5	2.5	R0.5
2222-401	20-40mm	0.01mm	±0.03mm	80	6.0	3.0	R0.5

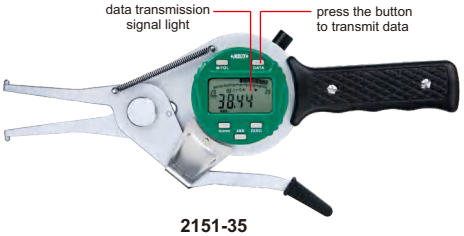
2222-15



DIGITAL INTERNAL CALIPER GAUGES

DATA OUTPUT

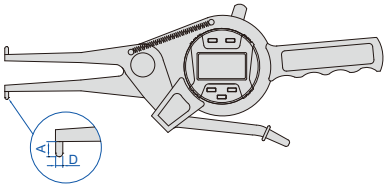
- Accuracy: ±0.04mm
- Carbide measuring tips
- Reading in digit and analog
- With transmission button and signal light
- Display can be rotated by 320º
- Button function: on/off, zero, tolerance Go and No-Go display, data preset, measuring direction change, max./min./TIR measurement, inch/metric conversion, data output, absolute/incremental measurement
- CR2032 battery, automatic power off (time is adjustable)
- Data output
- Optional accessory: wireless transmitter code **7315-55** (receiver is needed)

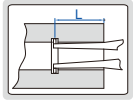


2151-35

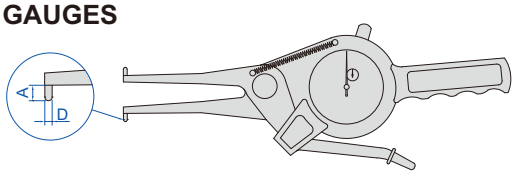
(mm)

Code	Range	Resolution	L	A	D
2151-35	15-35mm/0.6-1.4"	0.01mm/0.0005"	<50	3	Ø3
2151-55	35-55mm/1.4-2.2"	0.01mm/0.0005"	<80	6	Ø3
2151-75	55-75mm/2.2-3"	0.01mm/0.0005"	<90	8	Ø3
2151-95	75-95mm/3-3.8"	0.01mm/0.0005"	<100	8	Ø3
2151-115	95-115mm/3.8-4.6"	0.01mm/0.0005"	<120	10	Ø3.2
2151-135	115-135mm/4.6-5.4"	0.01mm/0.0005"	<120	10	Ø3.2





INTERNAL DIAL CALIPER GAUGES

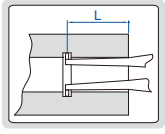


- Carbide measuring tips

2321-35

(mm)

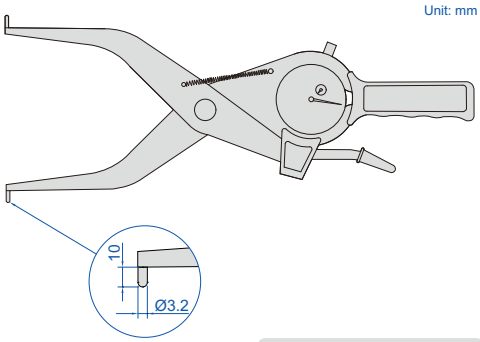
Code	Range	Graduation	Accuracy	L	A	D
2321-35	15-35mm	0.01mm	±0.04mm	<50	3	Ø3
2321-AL35	15-35mm	0.01mm	±0.04mm	<200	3	Ø3
2321-55	35-55mm	0.01mm	±0.04mm	<80	6	Ø3
2321-75	55-75mm	0.01mm	±0.04mm	<90	8	Ø3
2321-95	75-95mm	0.01mm	±0.04mm	<100	8	Ø3
2321-115	95-115mm	0.01mm	±0.04mm	<120	10	Ø3.2
2321-135	115-135mm	0.01mm	±0.04mm	<120	10	Ø3.2

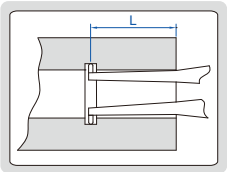


LARGE RANGE INTERNAL DIAL CALIPER GAUGES

- Carbide measuring tips

2334-155





(mm)

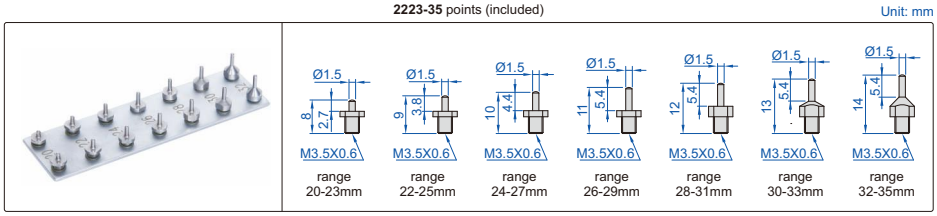
Code	Range	Graduation	Accuracy	L
2334-155	135-155mm	0.01mm	±0.04mm	<200
2334-175	155-175mm	0.01mm	±0.04mm	<200
2334-195	175-195mm	0.01mm	±0.04mm	<200
2334-215	195-215mm	0.01mm	±0.04mm	<200
2334-235	215-235mm	0.01mm	±0.04mm	<200
2334-255	235-255mm	0.01mm	±0.04mm	<200

INTERNAL DIAL CALIPER GAUGES WITH INTERCHANGEABLE POINTS

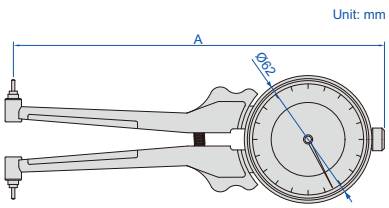
2223-153

2223-35 points (included)

Unit: mm

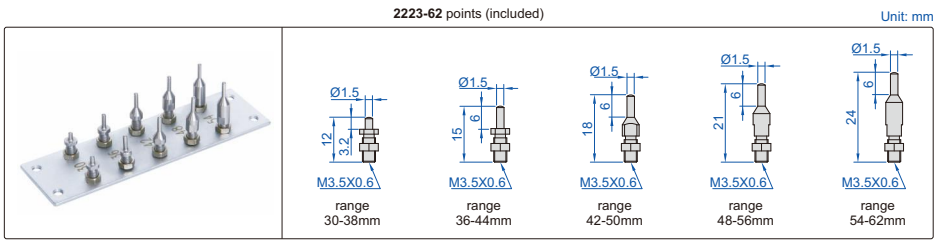


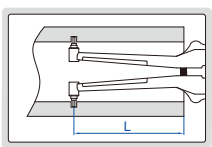
Unit: mm



2223-62 points (included)

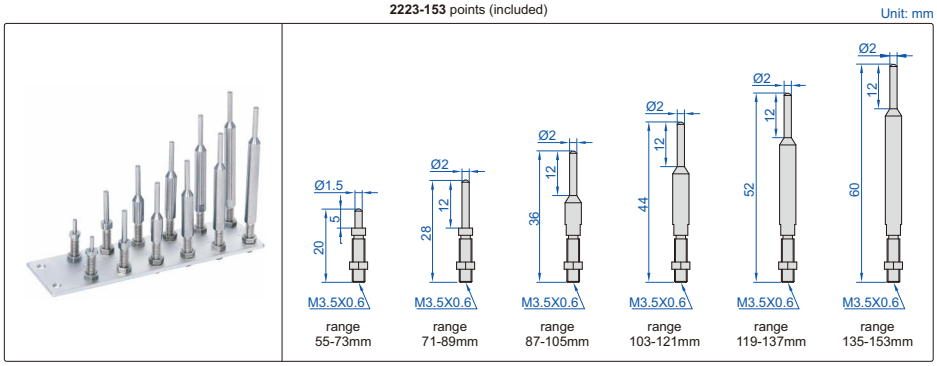
Unit: mm





2223-153 points (included)

Unit: mm



- Graduation: 0.01mm

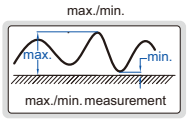
Code	Range	Dial indicator range	Accuracy	A	L	Remark
2223-35	20-35mm	2mm	±0.02mm	164mm	<70mm	supplied with 7 pairs of points
2223-62	30-62mm	2mm	±0.02mm	170mm	<75mm	supplied with 5 pairs of points
2223-153	55-153mm	2mm	±0.02mm	179mm	<90mm	supplied with 6 pairs of points

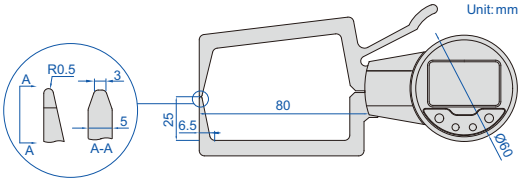
DIGITAL EXTERNAL CALIPER GAUGE

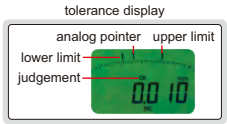
DATA OUTPUT

- Resolution: 0.005mm/0.0002"
- Repeatability: 0.01mm
- Reading in digit and analog
- Display can be rotated by 170º
- Button function: tolerance Go and No-Go display, data preset, max./min. measurement, data holding, inch/metric conversion, absolute/incremental measurement
- CR2032 battery, automatic power off
- Data output
- Optional accessory: wireless transmitter code **7315-30** (receiver is needed)

2131-21



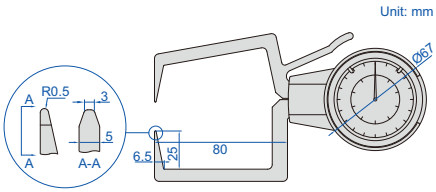




Code	Range	Accuracy
2131-21	0-20mm/0-0.8"	±0.03mm

EXTERNAL DIAL CALIPER GAUGE

2333-201



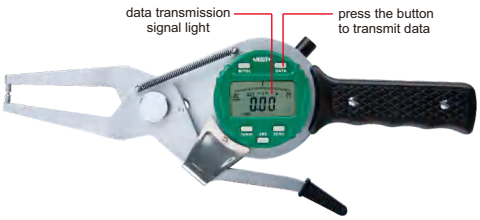
Code	Range	Graduation	Accuracy
2333-201	0-20mm	0.01mm	±0.03mm

DIGITAL EXTERNAL CALIPER GAUGE

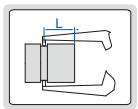
MEASURING RANGE CAN BE CUSTOMIZED MAXIMUM 260MM

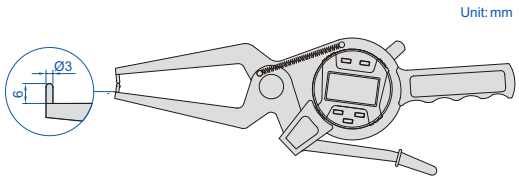
DATA OUTPUT

- Carbide measuring tips
- Reading in digit and analog
- With transmission button and signal light
- Display can be rotated by 320º
- Button function: on/off, zero, tolerance Go and No-Go display, data preset, measuring direction change, max./min./TIR measurement, inch/metric conversion, absolute/incremental measurement, data output
- CR2032 battery, automatic power off (time is adjustable)
- Data output
- Optional accessory: wireless transmitter code **7315-55** (receiver is needed)



2132-20





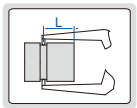
Code	Range	Resolution	Accuracy	L
2132-20	0-20mm/0-0.8"	0.01mm/0.0005"	±0.04mm	<60mm

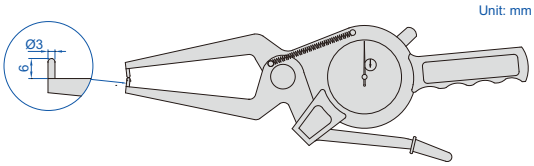
EXTERNAL DIAL CALIPER GAUGES

MEASURING RANGE CAN BE CUSTOMIZED MAXIMUM 260MM

- Carbide measuring tips

2332-20





(mm)

Code	Range	Graduation	Accuracy	L
2332-20	0-20mm	0.01mm	±0.04mm	<60
2332-40	20-40mm	0.01mm	±0.04mm	<60

HIGH PRECISION DIGITAL THICKNESS GAUGES

VIDEO

ATTENTION: RECHARGEABLE BATTERY, FOR 12 HOURS CONTINUOUS WORKING

MEASURING TIPS AND ANVILS CAN BE CUSTOM-MADE

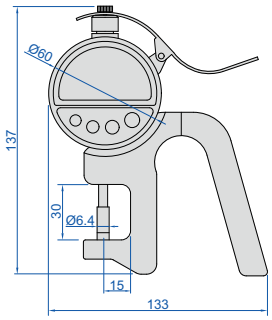
ABSOLUTE ENCODER, THE ORIGINAL DATA REMAINS AFTER POWER OFF

DATA OUTPUT

- Absolute encoder, the original data remains after power off
- Button function: on/off, zero, tolerance, absolute/incremental measurement, max./min./TIR, data preset, mm/inch, data output, data hold
- Measuring force: 0.5-1N
- Reading in digital and analog
- Power: rechargeable battery, for 12 hours continuous working
- Data output
- Supplied with data output cable (keyboard format)

2879-10

Unit: mm



Code	Range	Resolution	Accuracy	Repeatability
2879-10	0-10mm/0-0.4"	0.001mm/0.00005"	±0.002mm	0.001mm
2879-101	0-10mm/0-0.4"	0.0005mm/0.00002"	±0.0015mm	0.0005mm

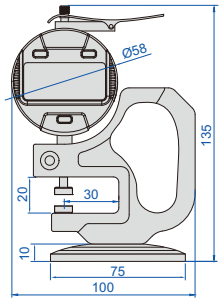
DIGITAL THICKNESS GAUGES (WITH BASE)

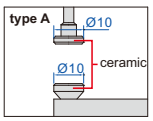
DATA OUTPUT

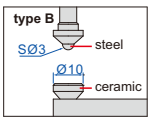
- Button function: on/off, inch/mm, zero, data preset, change measuring direction, absolute/incremental measurement
- Keep preset data in memory after restart
- CR2032 battery, automatic power off (time is adjustable)
- Data output
- Optional accessory: wireless transmitter code **7315-50M** (receiver is needed)

2673-10

Unit: mm







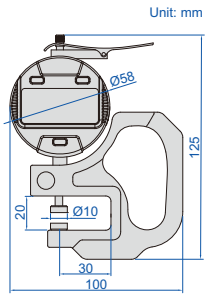
Code	Range	Resolution	Accuracy	Type
2673-10	0-10mm/0-0.4"	0.01mm/0.0005"	±0.02mm	A
2673-101	0-10mm/0-0.4"	0.001mm/0.00005"	±0.005mm	A
2673-10B	0-10mm/0-0.4"	0.01mm/0.0005"	±0.02mm	B
2673-101B	0-10mm/0-0.4"	0.001mm/0.00005"	±0.005mm	B

DIGITAL THICKNESS GAUGES

POPULAR MODEL

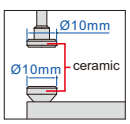
DATA OUTPUT

Unit: mm



2871-101

- Ceramic spindle tip and anvil
- Button function: on/off, inch/mm, zero, data preset, change measuring direction, absolute/incremental measurement
- Keep preset data in memory after restart
- CR2032 battery, automatic power off (time is adjustable)
- Data output
- Optional accessory: wireless transmitter code **7315-50M** (receiver is needed)

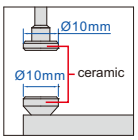


Code	Range	Resolution	Accuracy
2871-10	0-10mm/0-0.4"	0.01mm/0.0005"	±0.02mm
2871-101	0-10mm/0-0.4"	0.001mm/0.00005"	±0.005mm

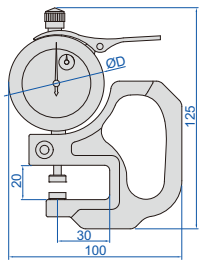
THICKNESS GAUGES

2364-10

2364-1



Unit: mm



(mm)

Code	Range	Graduation	Accuracy	ØD
2364-10	0-10mm	0.01mm	±0.02mm	58
2364-1	0-1mm	0.001mm	±0.005mm	56

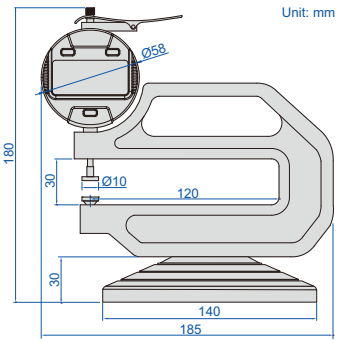
DIGITAL THICKNESS GAUGES (WITH BASE)

DATA OUTPUT

- Ceramic spindle tip and anvil
- Buttons: on/off, inch/mm, zero, data preset, change measuring direction, absolute/incremental measurement
- Keep preset data in memory after restart
- Battery CR2032, automatic power off (time is adjustable)
- Data output
- Optional accessory: wireless transmitter code **7315-50M** (receiver is needed)

measuring tips and anvils can be custom-made

2674-10



Code	Range	Resolution	Accuracy
2674-10	0-10mm/0-0.4"	0.01mm/0.0005"	±0.02mm
2674-101	0-10mm/0-0.4"	0.001mm/0.00005"	±0.01mm

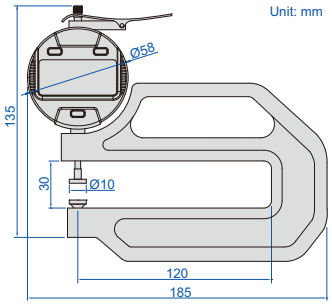
DIGITAL THICKNESS GAUGES

MEASURING TIPS AND ANVILS CAN BE CUSTOM-MADE

DATA OUTPUT

- Ceramic spindle tip and anvil
- Buttons: on/off, inch/mm, zero, data preset, change measuring direction, absolute/incremental measurement
- Keep preset data in memory after restart
- Battery CR2032, automatic power off (time is adjustable)
- Data output
- Optional accessory: wireless transmitter code **7315-50M** (receiver is needed)

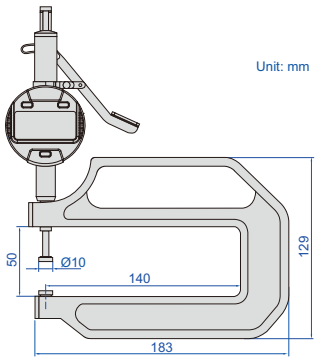
2872-10



0-10mm

measuring tips and anvils can be custom-made

2872-25

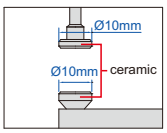


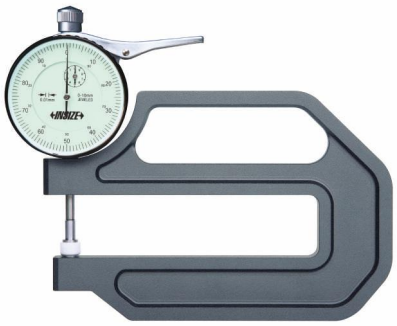
0-25.4mm

Code	Range	Resolution	Accuracy
2872-10	0-10mm/0-0.4"	0.01mm/0.0005"	±0.02mm
2872-101	0-10mm/0-0.4"	0.001mm/0.00005"	±0.01mm
2872-25	0-25.4mm/0-1"	0.01mm/0.0005"	±0.03mm

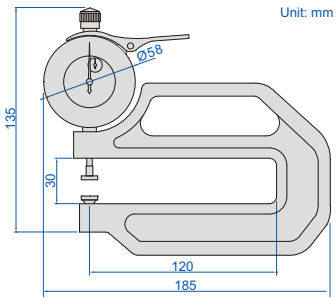
THICKNESS GAUGES

measuring tips and anvils can be custom-made





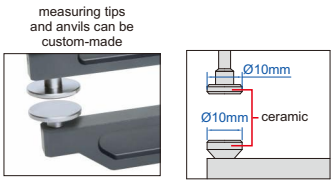
2365-10



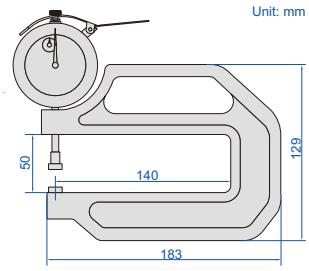
Code	Range	Graduation	Accuracy
2365-10	0-10mm	0.01mm	±0.02mm
2365-20	0-20mm	0.01mm	±0.03mm

THICKNESS GAUGE

MEASURING TIPS AND ANVILS CAN BE CUSTOM-MADE



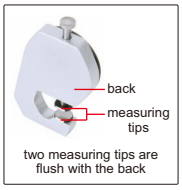
2376-30



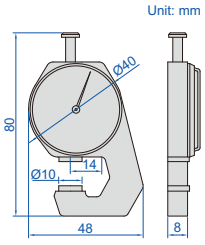
Code	Range	Graduation	Accuracy
2376-30	0-30mm	0.01mm	±0.035mm

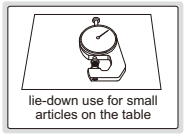
THICKNESS GAUGE

SUITABLE FOR JEWELLERY



2361-10

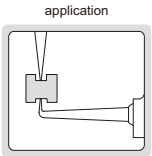




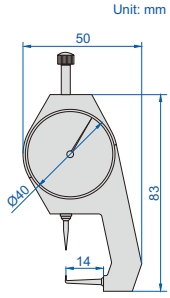
Code	Range	Graduation	Accuracy
2361-10	0-10mm	0.1mm	±0.05mm

THICKNESS GAUGE WITH POINTED TIPS

- Pointed tips fit into small grooves and recesses



2864-10



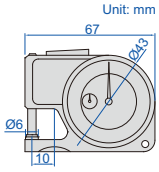
Code	Range	Graduation	Accuracy
2864-10	0-10mm	0.1mm	±0.1mm

THICKNESS GAUGE

- Graduation: 0.01mm
- Stainless steel spindle tip and anvil

Code	Range	Accuracy
2363-10	0-10mm	±0.03mm

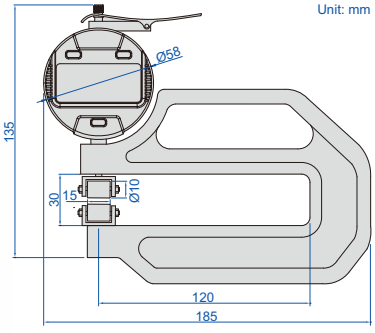
2363-10



DIGITAL ROLLER THICKNESS GAUGES

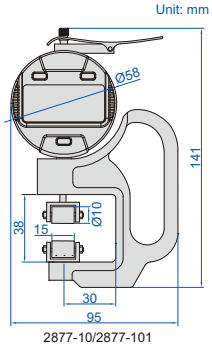
DATA OUTPUT

2877-4



2877-4/2877-41

2877-10



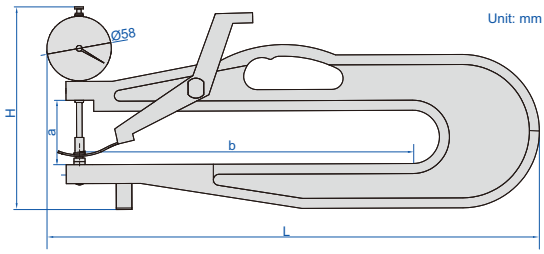
2877-10/2877-101

- Buttons: on/off, inch/mm, zero, data preset, change measuring direction, absolute/incremental measurement
- Keep preset data in memory after restart
- Battery CR2032, automatic power off (time is adjustable)
- Data output
- Optional accessory:
  wireless transmitter code **7315-50M** (receiver is needed)

Code	Range	Resolution	Accuracy
2877-4	0-3.5mm/0-0.14"	0.01mm/0.0005"	±0.02mm
2877-41	0-3.5mm/0-0.14"	0.001mm/0.00005"	±0.01mm
2877-10	0-10mm/0-0.4"	0.01mm/0.0005"	±0.02mm
2877-101	0-10mm/0-0.4"	0.001mm/0.00005"	±0.01mm

THICKNESS GAUGE

2770-30



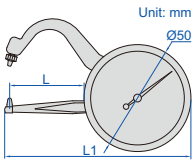
- Stainless steel spindle tip and anvil

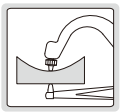
(mm)

Code	Range	Graduation	Accuracy	L	H	a	b
2770-30	0-30mm	0.01mm	±0.05mm	440	183	58	300

THICKNESS GAUGE

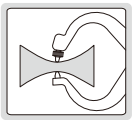
2862-101



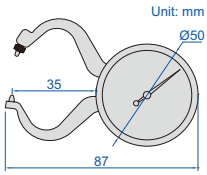


Code	Range	Graduation	Accuracy	L	L1
2862-101	0-10mm	0.05mm	±0.1mm	35mm	85mm

THICKNESS GAUGE

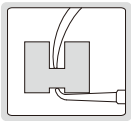


2863-10

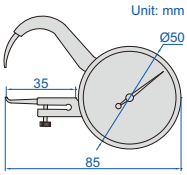


Code	Range	Graduation	Accuracy
2863-10	0-10mm	0.05mm	±0.1mm

THICKNESS GAUGE WITH POINTED TIPS



2866-10

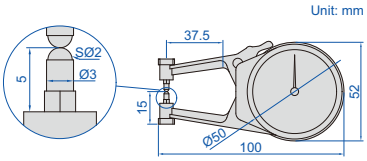


- Pointed tips fit into small grooves and recesses

Code	Range	Graduation	Accuracy
2866-10	0-10mm	0.05mm	±0.1mm

THICKNESS GAUGE

2870-10



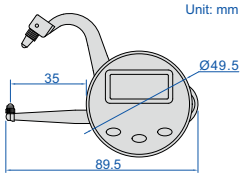
- Graduation: 0.1mm
- Main baby is made of hard plastic

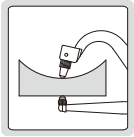
Code	Range	Accuracy
2870-10	0-10mm	±0.1mm

DIGITAL THICKNESS GAUGE

- Resolution: 0.01mm, 0.001", 1/64"
- Buttons: on/off, zero, unit (mm/in/fraction), data hold
- Battery CR2032, automatic power off

2710-25





Code	Range	Accuracy	Repeatability
2710-25	0-25.4mm/0-1"	0.05mm	0.02mm

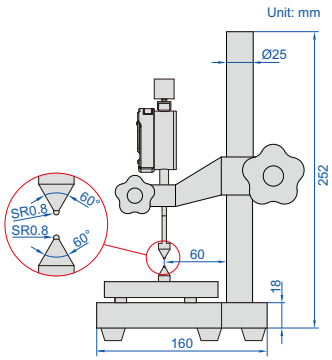
DIGITAL GEOMEMBRANE THICKNESS GAUGE

DATA OUTPUT

VIDEO

- Measure thickness of geomembranes
- Button function: on/off, inch/mm, zero, data preset, change measuring direction, absolute/incremental measurement
- CR2032 battery, automatic power off (time is adjustable)
- Supplied with dust cover
- Optional accessory:
  wireless transmitter code **7315-51** (receiver is needed)

2259-10



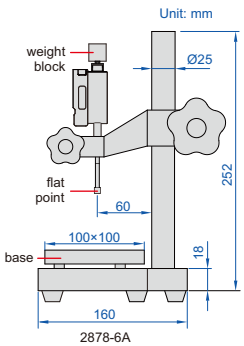
Code	Range	Resolution	Accuracy	Pressure
2259-10	12.7mm/0.5"	0.001mm/0.00005"	5μm	0.56±0.05N

DIGITAL RUBBER THICKNESS GAUGES

DATA OUTPUT

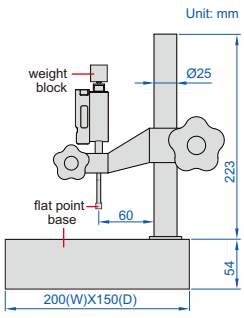
VIDEO

2878-6B



2878-6A
2878-6B

2878-71B



2878-71A
2878-71B

- Flat point diameter: 6mm
- Measure thickness of vulcanized rubber and plastic products
- Button function: on/off, inch/mm, zero, data preset, change measuring direction, absolute/incremental measurement
- CR2032 battery, automatic power off (time is adjustable)
- Supplied with dust cover
- Optional accessory: wireless transmitter code **7315-51**
  (receiver is needed), flat points, weight blocks

Code	Range	Resolution	Accuracy	Pressure	Base
2878-6A	10mm/0.4"	0.01mm/0.0005"	20μm	22kPa±5kPa	ceramic, plain, flatness 1.5μm
2878-6B	10mm/0.4"	0.001mm/0.00005"	5μm	22kPa±5kPa	ceramic, plain, flatness 1.5μm
2878-71A	10mm/0.4"	0.01mm/0.0005"	20μm	22kPa±5kPa	granite, plain, flatness 2.5μm
2878-71B	10mm/0.4"	0.001mm/0.00005"	5μm	22kPa±5kPa	granite, plain, flatness 2.5μm

Flat points and weight blocks (optional)

Flat point	Flat point code	Pressure				
		10kPa±2kPa	22kPa±5kPa	20kPa±3kPa	70kPa±5kPa	1.6kPa±0.1kPa
		weight block code	weight block code	weight block code	weight block code	weight block code
Ø4mm	**2878-P4**	–	**2878-W4B**	–	–	–
Ø5mm	**2878-P5**	**2878-W5A**	**2878-W5B**	**2878-W5C**	**2878-W5D**	–
Ø6mm	**2878-P6**	**2878-W6A**	**2878-W6B**	–	–	–
Ø8mm	**2878-P8**	**2878-W8A**	**2878-W8B**	–	–	–
Ø10mm	**2878-P10**	**2878-W10A**	**2878-W10B**	**2878-W10C**	–	–
Ø25mm	**2878-P25**	–	–	–	–	**2878-W25E**
1x4mm (rectangle)	**2878-P14**	–	–	–	**2878-W14D**	–

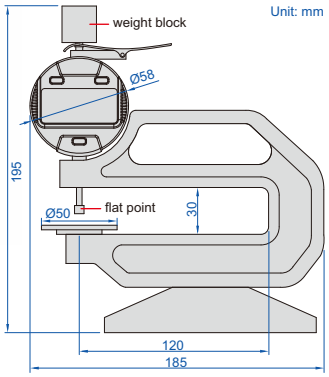
DIGITAL RUBBER THICKNESS GAUGES

DATA OUTPUT

VIDEO

- Measure thickness of vulcanized rubber and plastic products
- Button function: on/off, inch/mm, zero, data preset, change measuring direction, absolute/incremental measurement
- Keep preset data in memory after restart
- CR2032 battery, automatic power off (time is adjustable)
- Data output
- Optional accessory:
  wireless transmitter code **7315-50M** (receiver is needed), flat points, weight blocks

2263-6B



Code	Range	Resolution	Accuracy	Flat point diameter	Pressure
2263-6A	0-10mm/0-0.4"	0.01mm/0.0005"	20μm	6mm	22kPa±5kPa
2263-6B	0-10mm/0-0.4"	0.001mm/0.00005"	5μm	6mm	22kPa±5kPa

Flat points and weight blocks (optional)

Flat point	Flat point code	Pressure				
		10kPa±2kPa	22kPa±5kPa	20kPa±3kPa	70kPa±5kPa	1.6kPa±0.1kPa
		weight block code	weight block code	weight block code	weight block code	weight block code
Ø4mm	**2878-P4**	–	**2878-W4B**	–	–	–
Ø5mm	**2878-P5**	**2878-W5A**	**2878-W5B**	**2878-W5C**	**2878-W5D**	–
Ø6mm	**2878-P6**	**2878-W6A**	**2878-W6B**	–	–	–
Ø8mm	**2878-P8**	**2878-W8A**	**2878-W8B**	–	–	–
Ø10mm	**2878-P10**	**2878-W10A**	**2878-W10B**	**2878-W10C**	–	–
Ø25mm	**2878-P25**	–	–	–	–	**2878-W25E**
1×4mm (rectangle)	**2878-P14**	–	–	–	**2878-W14D**	–

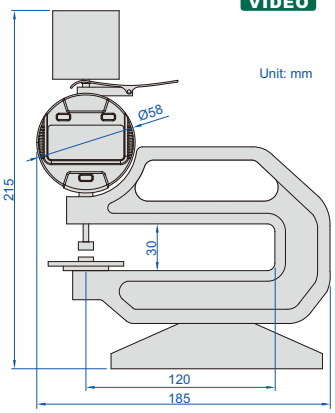
DIGITAL LEATHER THICKNESS GAUGES

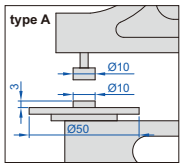
VIDEO

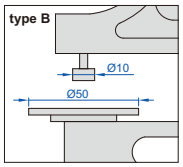
DATA OUTPUT

- Measure thickness of leather
- Buttons: on/off, inch/mm, zero, data preset, change measuring direction, absolute/incremental measurement
- Keep preset data in memory after restart
- Battery CR2032, automatic power off (time is adjustable)
- Data output
- Optional accessory:
  wireless transmitter code **7315-50M** (receiver is needed)

2262-10



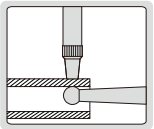




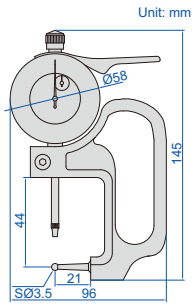
Code	Range	Resolution	Accuracy	Type
2262-10	0-10mm/0-0.4"	0.01mm/0.0005"	±0.02mm	A
2262-10B	0-10mm/0-0.4"	0.01mm/0.0005"	±0.02mm	B

TUBE THICKNESS GAUGE

- Measure tube wall thickness



2367-10A



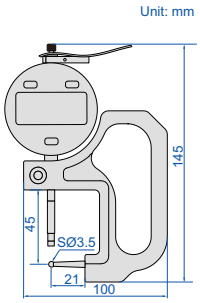
Code	Range	Graduation	Accuracy
2367-10A	0-10mm	0.01mm	±0.02mm

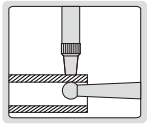
DIGITAL TUBE THICKNESS GAUGE

DATA OUTPUT

- Buttons: on/off, inch/mm, zero, data preset, change measuring direction, absolute/incremental measurement
- Keep preset data in memory after restart
- Battery CR2032 , automatic power off (time is adjustable)
- Data output
- Optional accessory: wireless transmitter code **7315-50M** (receiver is needed)

2876-10





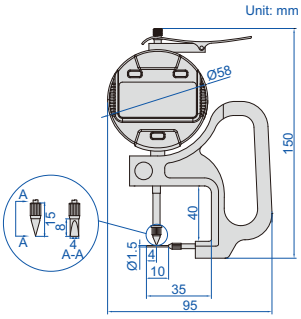
Code	Range	Resolution	Accuracy
2876-10	0-10mm/0-0.4"	0.01mm/0.0005"	±0.02mm

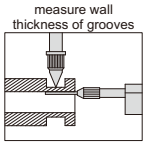
DIGITAL TUBE THICKNESS GAUGES

DATA OUTPUT

- Buttons: on/off, inch/mm, zero, data preset, change measuring direction, absolute/incremental measurement
- Keep preset data in memory after restart
- Battery CR2032, automatic power off (time is adjustable)
- Data output
- Optional accessory: wireless transmitter code **7315-50M** (receiver is needed)

2873-10



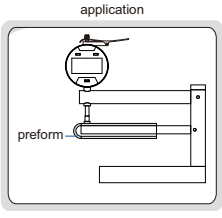


Code	Range	Resolution	Accuracy
2873-10	0-10mm/0-0.4"	0.01mm/0.0005"	±0.02mm
2873-101	0-10mm/0-0.4"	0.001mm/0.00005"	±0.005mm

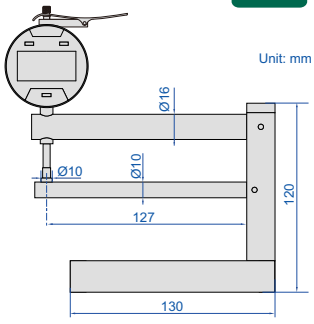
PREFORM THICKNESS TESTER

DATA OUTPUT

- Measure thickness of preforms
- Buttons: on/off, inch/mm, zero, data preset, change measuring direction, absolute/incremental measurement
- Keep preset data in memory after restart
- Battery CR2032, automatic power off (time is adjustable)
- Data output
- Optional accessory: wireless transmitter code **7315-50M** (receiver is needed)



2671-10



Code	Range	Resolution	Accuracy	Repeatability
2671-10	0-10mm/0-0.4"	0.01mm/0.0005"	±0.02mm	0.01mm

BUILT-IN BLUETOOTH DIGITAL INDICATING SNAP GAUGES

ABSOLUTE ENCODER, THE ORIGINAL DATA REMAINS AFTER POWER OFF

BUILT-IN BLUETOOTH

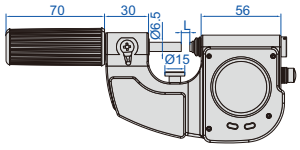
IP54 WATERPROOF

ATTENTION: SETTING STANDARDS ARE NOT INCLUDED

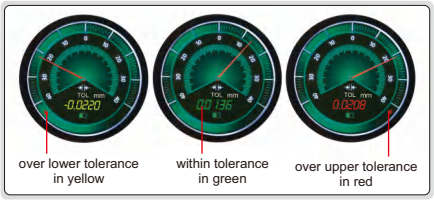
- Absolute encoder, the original data remains after power off
- Measuring stroke of anvil: 1mm
- Reading in digital and analog
- Button function: on/off, zero setting, mm/inch, tolerance, display setting, bluetooth, signal mode setting, data output
- Android and iPhone APP, USB type-C cable are included
- Carbide measuring faces
- Power: rechargeable Li-battery, for 20 hours continuous working (bluetooth transmission reduce working hours)
- Optional accessory: gauge blocks grade 0 (**4101-A** series), for zero setting

3509-25

Unit: mm



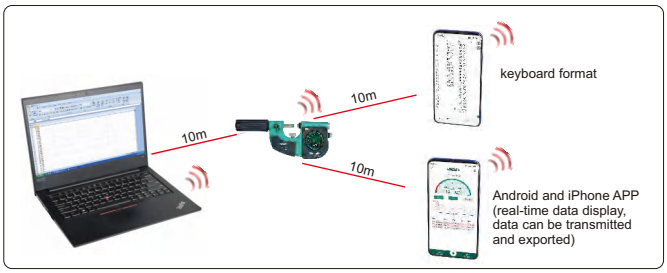
warning in red or yellow when over tolerance



Code	Range (L)	Resolution	Accuracy	Repeatability
3509-25	0-25mm/0-1"	0.0001mm/0.000005"	1μm	0.3μm
3509-50	25-50mm/1-2"	0.0001mm/0.000005"	1μm	0.3μm

Data output

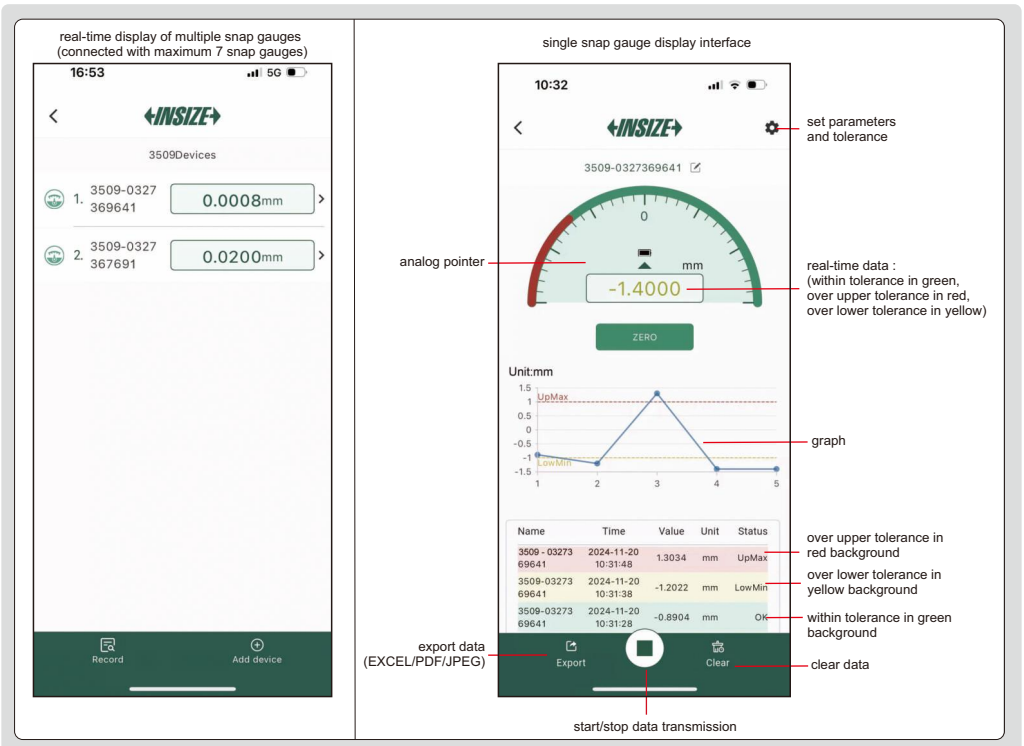
Data output with bluetooth (transmission distance is 10 meters)	keyboard format	data can be transmitted to Excel, Word, txt, etc.	single transmission
	virtual com port	data can be transmitted to Android and iPhone APP	real-time display, data can be transmitted and exported
Data output with USB cable (cable length 1.8 meters)	keyboard format	data can be transmitted to Excel, Word, txt, etc.	single transmission
	virtual com port	data can be transmitted to serial communication software	single transmission



data output with bluetooth (included)

data output with USB cable (included)

data collection application (included)
real-time display (continuous streaming) or single acquisition mode selectable



DIAL SNAP GAUGES

IP54 WATERPROOF

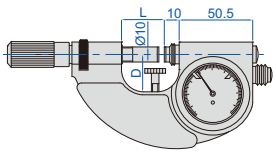
ATTENTION: SETTING STANDARDS ARE NOT INCLUDED

- Quick measurement for mass production
- Dial indicator: range ±0.04mm, graduation 0.001mm, accuracy 0.001mm
- IP54 dust/waterproof
- Measuring force: 5-10N
- Carbide measuring faces
- Optional accessory: gauge blocks grade 0 (**4101-A** series), for zero setting

Code	Range	L	D
3334-25	0-25mm	28.5mm	25mm
3334-50	25-50mm	53.5mm	35mm
3334-75	50-75mm	78.5mm	47.5mm
3334-100	75-100mm	103.5mm	60mm

3334-25

Unit: mm



DIAL SNAP GAUGES

QUICK AND ACCURATE MEASUREMENT OF CYLINDRICAL WORKPIECES

VIDEO

INSPECTION CERTIFICATE

- Left anvil retracting stroke: 2mm
- Measuring force: 6-8N
- Flatness of anvil: 1.5μm
- Repeatability: 1μm
- Carbide measuring faces for anvils
- Front edges of anvils are chamfered for easy workpiece insertion
- Optional accessory: dial indicators and digital indicators (reading 0.001mm or 0.01mm)

digital indicator is optional

2186-25

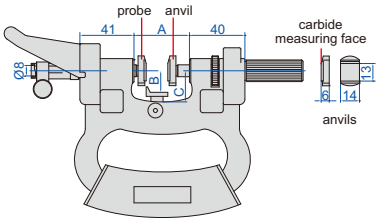
Unit: mm

(mm)

Code	Range	Parallelism of measuring faces	A	B	C
2186-25 *	0-25mm	4μm	42	11-18	20
2186-50 *	25-50mm	4μm	69	11-32	41
2186-75 *	50-75mm	5μm	94	17-41	51
2186-100 *	75-100mm	6μm	119	31-55	65

*Supplied with manufacturer inspection certificate

application



DIAL SNAP GAUGE

ATTENTION: NOT SUITABLE FOR 0.001MM DIAL INDICATORS

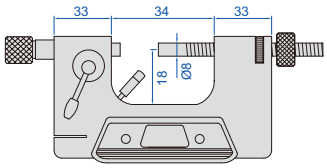
- Quick measurement for mass production
- Anvil retracting stroke: 3mm
- Measuring force: 6-9N
- Carbide measuring faces
- Optional accessory: dial indicators (graduation 0.01mm), digital indicators (resolution 0.01mm/0.0005")

Code	Range
2184-25W	0-25mm

digital indicator is optional

2184-25W

Unit: mm

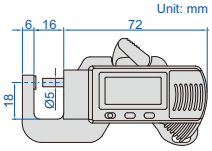


DIGITAL SNAP GAUGE

ATTENTION: NO DATA OUTPUT

2166-12

Unit: mm



Code	Range	Resolution	Accuracy
2166-12	0-12mm/0-0.5"	0.01mm/0.0005"	±0.03mm

DIGITAL 3-PURPOSE SNAP GAUGE

SUITABLE FOR JEWELLERY

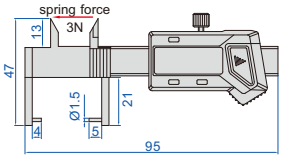
ATTENTION: NO DATA OUTPUT

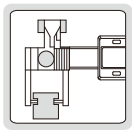
- Non waterproof
- Resolution: 0.01mm/0.0005"
- Buttons: zero, mm/inch, on/off
- Battery LR44
- Made of stainless steel

Code	Range	Accuracy
2164-25A	0-25mm/0-1"	±0.03mm

2164-25A

Unit: mm





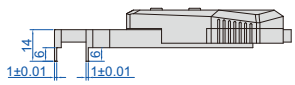
VIDEO

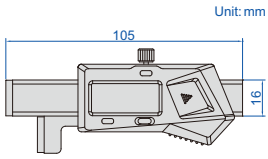
STEP AND GAP GAUGE

DATA OUTPUT

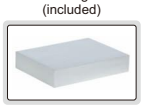
- Non waterproof
- Resolution: 0.01mm/0.0005"
- Measure step height and gap width
- Buttons: on/off, set, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Supplied with zero setting block
- Optional accessory: wireless transmitter code **7315-22** (receiver is needed)

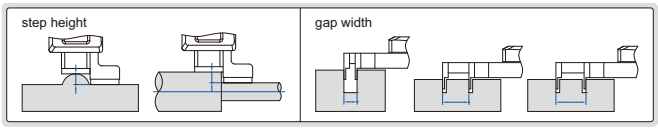
2168-12





zero setting block (included)

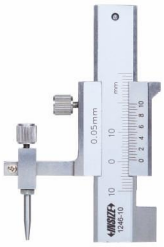




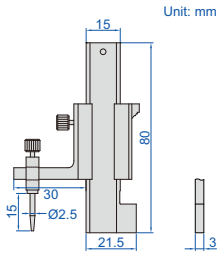
Code	Range	Accuracy
2168-12	0-12.7mm/0-0.5"	±0.03mm

MINI VERNIER HEIGHT GAUGE

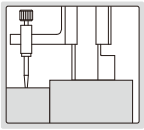
- Measure height difference of two surfaces
- Graduation: 0.05mm
- Made of stainless steel
- Satin chrome plated reading surface



1246-10



application



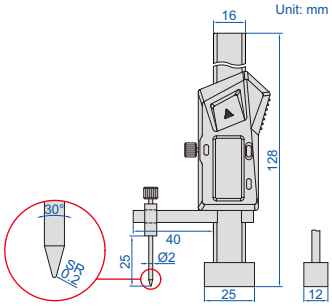
Code	Range	Accuracy
1246-10	0~±10mm	±0.05mm

MINI DIGITAL HEIGHT GAUGE

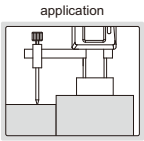
DATA OUTPUT

- Non waterproof
- Measure height difference of two surfaces
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory: wireless transmitter code **7315-25** (receiver is needed)

1146-20A



application

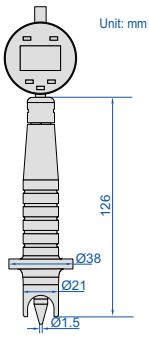


Code	Range	Accuracy
1146-20A	0~±20mm/0~±0.8"	±0.02mm

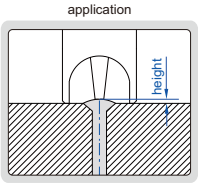
DIGITAL FLUSHNESS GAUGE

DATA OUTPUT

- Measure the edge of fastener to base or highest point of fastener to base
- Carbide measuring face
- Measuring force: 8-12N
- Digital indicator dispaly can be rotated by 320°
- Digital indicator button function: tolerance Go and No-Go display, data preset, measuring direction change, max./min./TIR measurement, inch/metric conversion, absolute/incremental measurement
- Digital indicator can keep preset data and tolerance data in memory after restart
- CR2032 battery, automatic power off (time is adjustable)
- Data output
- Optional accessory: wireless transmitter (code **7315-51B**, receiver is needed)



application

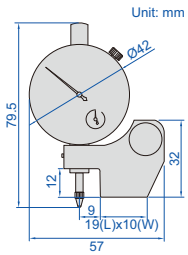


zero-setting block (included)

Code	Measuring range	Resolution	Accuracy	Repeatability
2936-51	±5mm	0.001mm/0.00005"	0.005mm	0.002mm

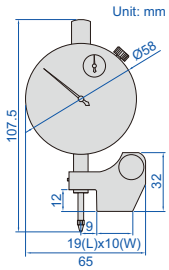
DIAL HEIGHT GAUGES

2147-4A



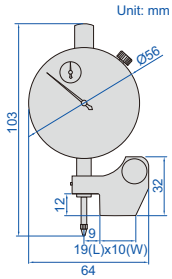
2147-4A

2147-4B



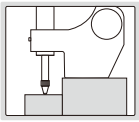
2147-4B

2147-21



2147-21

- Measure height difference of two surfaces



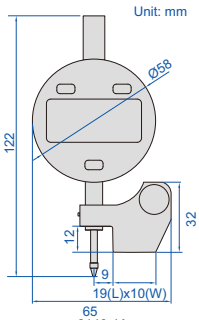
Code	Range	Dial indicator stroke	Dial indicator graduation	Accuracy
2147-4A	0~±5mm (adjustable)	5mm	0.01mm	±0.014mm
2147-4B	0~±5mm	10mm	0.01mm	±0.017mm
2147-21	0~±2mm (adjustable)	2mm	0.001mm	±0.006mm

DIGITAL HEIGHT GAUGES

DATA OUTPUT

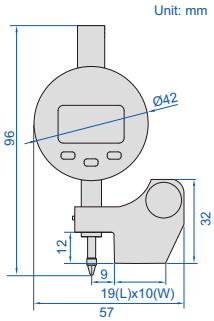
- Measure height difference of two surfaces
- Button function: on/off, inch/mm, zero, data preset, change measuring direction, absolute/incremental measurement Keep preset data in memory after restart
- Digital indicator power:
  2146-4A/41A: CR2032 battery
  2146-4B/41B: CR1632 battery
- Automatic power off (time is adjustable)
- Data output
- Optional accessory: wireless transmitter code **7315-50M** (receiver is needed)

2146-4A



2146-4A
2146-41A

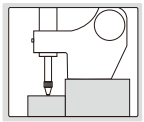
2146-4B



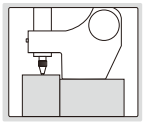
2146-4B
2146-41B

Code	Range (adjustable)	Digital indicator stroke	Digital indicator resolution	Accuracy
2146-4A	0~4mm/0~0.16" (sinked) 0~12.7mm/0~0.5" (raised)	12.7mm/0.5"	0.01mm/0.0005"	±0.02mm
2146-41A		12.7mm/0.5"	0.001mm/0.00005"	±0.005mm
2146-4B	0~4mm/0~0.16" (sinked) 0~5mm/0~0.2" (raised)	5mm/0.2"	0.01mm/0.0005"	±0.02mm
2146-41B		5mm/0.2"	0.001mm/0.00005"	±0.005mm

measure sinked step

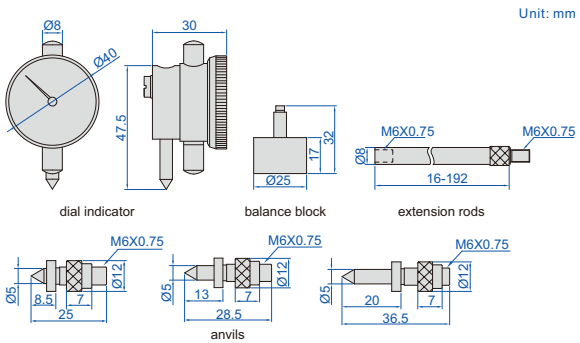


measure raised step



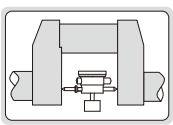
CRANKSHAFT TESTERS

2841-500



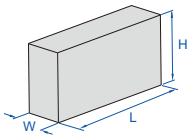
- To test crankshaft deflection
- The balance block is mounted on the back of dial indicator to keep the dial indicator facing up

Code	Range	Dial indicator range	Extension rods	Accuracy	Graduation
2841-300	60-300mm	3mm	16mm, 32mm, 64mm, 128mm	±0.02mm	0.01mm
2841-500	60-500mm	3mm	16mm, 32mm, 64mm, 96mm, 128mm, 192mm	±0.02mm	0.01mm



CERAMIC GAUGE BLOCK SETS

INSPECTION CERTIFICATE



4105-87

- Made of ceramic, extremely wear resistance and corrosion resistance, excellent dimension stability
- Meet ISO3650
- Supplied with manufacturer inspection certificate

Dimension:

Size (L)	W	H
0.5≤L≤10mm	9mm	30mm
L>10mm	9mm	35mm

Blocks per set	Gauge blocks included in set			Code	
	Size (mm)	Step (mm)	Quantity	Grade 0	Grade 1
112	1.0005 1.001-1.009 1.01-1.49 0.5-24.5 25-100	 0.001 0.01 0.5 25	1 9 49 49 4	4105-112	4105-1112
103	1.005 1.01-1.49 0.5-24.5 25-100	 0.01 0.5 25	1 49 49 4	4105-103	4105-1103
88	1.0005 1.001-1.009 1.01-1.49 0.5-9.5 10-100	 0.001 0.01 0.5 10	1 9 49 19 10	4105-88	4105-188
87	1.001-1.009 1.01-1.49 0.5-9.5 10-100	0.001 0.01 0.5 10	9 49 19 10	4105-87	4105-187
76	1.005 1.01-1.49 0.5-9.5 10-40 50-100	 0.01 0.5 10 25	1 49 19 4 3	4105-76	4105-176
56	0.5 1.001-1.009 1.01-1.09 1.1-1.9 1-24 25-100	 0.001 0.01 0.1 1 25	1 9 9 9 24 4	4105-56	4105-156

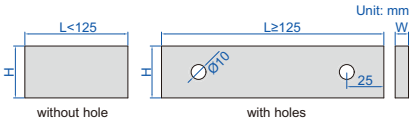
Blocks per set	Gauge blocks included in set			Code	
	Size (mm)	Step (mm)	Quantity	Grade 0	Grade 1
47	1.005 1.01-1.09 1.1-1.9 1-24 25-100	 0.01 0.1 1 25	1 9 9 24 4	4105-47A	4105-147A
47	1.005 1.01-1.19 1.2-1.9 1-9 10-100	 0.01 0.1 1 10	1 19 8 9 10	4105-47	4105-147
46	1.001-1.009 1.01-1.09 1.1-1.9 1-9 10-100	0.001 0.01 0.1 1 10	9 9 9 9 10	4105-46	4105-146
34	1.0005 1.001-1.009 1.01-1.09 1.1-1.9 1-5 10	 0.001 0.01 0.1 1	1 9 9 9 5 1	4105-34	4105-134
32	1.005 1.01-1.09 1.1-1.9 1-9 10-30 50	 0.01 0.1 1 10	1 9 9 9 3 1	4105-32	4105-132

STEEL GAUGE BLOCK SETS

INSPECTION CERTIFICATE

POPULAR MODEL

4100-87



Dimension: (mm)

Size (L)	W	H
0.5≤L≤10mm	9	30
L>10mm	9	35

- Made of alloy steel
- Meet ISO3650
- Gauge blocks ≥ 125mm have clamping holes
- Supplied with manufacturer inspection certificate

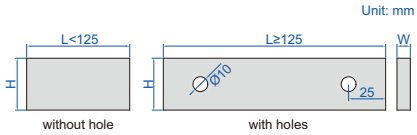
Blocks per set	Gauge blocks included in set			Code	
	Size (mm)	Step (mm)	Quantity	Grade 1	Grade 2
122	1.0005 1.001-1.009 1.01-1.49 1.6-1.9 0.5-24.5 30-100 25-75	 0.001 0.01 0.1 0.5 10 50	1 9 49 4 49 8 2	**4100-1122**	**4100-2122**
112	1.0005 1.001-1.009 1.01-1.49 0.5-24.5 25-100	 0.001 0.01 0.5 25	1 9 49 49 4	**4100-1112**	**4100-2112**
103	1.005 1.01-1.49 0.5-24.5 25-100	 0.01 0.5 25	1 49 49 4	**4100-1103**	**4100-2103**

Blocks per set	Gauge blocks included in set			Code		
	Size (mm)	Step (mm)	Quantity	Grade 0	Grade 1	Grade 2
88	1.0005 1.001-1.009 1.01-1.49 0.5-9.5 10-100	 0.001 0.01 0.5 10	1 9 49 19 10	**4100-88**	**4100-188**	**4100-288**
87	1.001-1.009 1.01-1.49 0.5-9.5 10-100	0.001 0.01 0.5 10	9 49 19 10	**4100-87**	**4100-187**	**4100-287**
83	0.5 1 1.005 1.01-1.49 1.5-1.9 2-9.5 10-100	 0.01 0.1 0.5 10	1 1 1 49 5 16 10	**4100-83**	**4100-183**	**4100-283**
76	1.005 1.01-1.49 0.5-9.5 10-40 50-100	 0.01 0.5 10 25	1 49 19 4 3	**4100-76**	**4100-176**	**4100-276**
47	1.005 1.01-1.19 1.2-1.9 1-9 10-100	 0.01 0.1 1 10	1 19 8 9 10	**4100-47**	**4100-147**	**4100-247**
32	1.005 1.01-1.09 1.1-1.9 1-9 10-30 50	 0.01 0.1 1 10	1 9 9 9 3 1	**4100-32**	**4100-132**	**4100-232**
8	125-175 200-250 300-500	25 50 100	3 2 3	**4100-8**	**4100-18**	**4100-28**

INDIVIDUAL STEEL GAUGE BLOCKS

INSPECTION CERTIFICATE

CUSTOM-MADE
CAN SUPPLY ANY SIZES FROM 0.5 TO 1000MM, SUCH AS 72.672MM



4101-B70

4101-C200

- Grade 0, 1 and 2 gauge blocks are available
- Made of alloy steel
- Meet ISO3650
- Gauge blocks with clamping holes:125, 150, 175, 200, 250, 300, 400, 500, 600, 700, 800, 900, 1000mm
- Supplied with manufacturer inspection certificate

Dimension: (mm)

Size (L)	W	H
0.5≤L≤10mm	9	30
L>10mm	9	35

Grade 0 (mm)

Code	Size
4101-F1	1
4101-F10	10
4101-F100	100

Grade 2 (mm)

Code	Size
4101-C1	1
4101-C10	10
4101-C100	100
4101-C200	200
4101-C250	250
4101-C300	300

Grade 1 (mm)

Code	Size
4101-BD5	0.5
4101-B1	1
4101-B1D001	1.001
4101-B1D002	1.002
4101-B1D003	1.003
4101-B1D004	1.004
4101-B1D005	1.005
4101-B1D006	1.006
4101-B1D009	1.009
4101-B1D01	1.01
4101-B1D02	1.02
4101-B1D03	1.03
4101-B1D04	1.04
4101-B1D05	1.05
4101-B1D06	1.06
4101-B1D07	1.07
4101-B1D08	1.08
4101-B1D09	1.09
4101-B1D1	1.1

Grade 1 (mm)

Code	Size
4101-B1D12	1.12
4101-B1D15	1.15
4101-B1D16	1.16
4101-B1D18	1.18
4101-B1D19	1.19
4101-B1D2	1.2
4101-B1D21	1.21
4101-B1D22	1.22
4101-B1D24	1.24
4101-B1D25	1.25
4101-B1D26	1.26
4101-B1D27	1.27
4101-B1D3	1.3
4101-B1D32	1.32
4101-B1D33	1.33
4101-B1D34	1.34
4101-B1D35	1.35
4101-B1D36	1.36
4101-B1D37	1.37

Grade 1 (mm)

Code	Size
4101-B1D4	1.4
4101-B1D42	1.42
4101-B1D43	1.43
4101-B1D45	1.45
4101-B1D46	1.46
4101-B1D47	1.47
4101-B1D48	1.48
4101-B1D49	1.49
4101-B1D5	1.5
4101-B1D6	1.6
4101-B1D7	1.7
4101-B1D8	1.8
4101-B1D9	1.9
4101-B2	2
4101-B2D5	2.5
4101-B3	3
4101-B3D5	3.5
4101-B4	4
4101-B4D5	4.5

Grade 1 (mm)

Code	Size
4101-B5	5
4101-B5D5	5.5
4101-B6	6
4101-B7	7
4101-B7D5	7.5
4101-B8	8
4101-B8D5	8.5
4101-B9	9
4101-B9D5	9.5
4101-B10	10
4101-B11	11
4101-B12	12
4101-B13	13
4101-B14	14
4101-B15	15
4101-B16	16
4101-B18	18
4101-B20	20
4101-B21	21

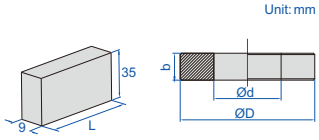
Grade 1 (mm)

Code	Size
4101-B22	22
4101-B23	23
4101-B25	25
4101-B30	30
4101-B35	35
4101-B40	40
4101-B45	45
4101-B50	50
4101-B60	60
4101-B70	70
4101-B75	75
4101-B80	80
4101-B90	90
4101-B100	100
4101-B125	125
4101-B131D4	131.4
4101-B150	150

CALIPER INSPECTION GAUGE BLOCK AND RING GAUGE SET

INSPECTION CERTIFICATE

- Gauge blocks meet ISO3650, ring gauges meet DIN2250-1:2008
- Supplied with manufacturer inspection certificate



4176-30

Ring gauge sizes:

diameter (Ød)*	b	ØD
Ø10mm	8mm	32mm
Ø25mm	14mm	53mm

*The size of the ring gauge when supplied may have deviation. For example, the size Ø25mm may be 24.996mm

Grade of gauge blocks: 2 (mm)

Code	Material	Gauge blocks included in set (L)	Ring gauges included in set (Ød)	Applicable calipers	Calibration/standard application
4176-30	alloy steel	30, 41.3, 131.4	10, 25	0-150	DIN862: 1988

CALIPER INSPECTION GAUGE BLOCK SET

INSPECTION CERTIFICATE

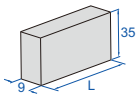
- Meet ISO3650/grade 2
- Supplied with manufacturer inspection certificate

(mm)

Code	Material	Gauge blocks included in set (L)	Applicable calipers
4108-3005	alloy steel	30, 41.3, 131.4, 243.5, 281.2	0-150, 0-200, 0-300

4108-3005

Unit: mm

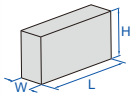


MICROMETER INSPECTION GAUGE BLOCK SET

INSPECTION CERTIFICATE

- Meet ISO3650/grade 0
- One piece of optical flat is included (size Ø30x12mm)
- Supplied with manufacturer inspection certificate

optical flat (included)



4160-10

Dimension:

Size (L)	W	H
0.5≤L≤10mm	9mm	30mm
L>10mm	9mm	35mm

application

Code	Material	Gauge blocks included in set	Applicable micrometer
4160-10	alloy steel	2.5mm, 5.1mm, 7.7mm, 10.3mm, 12.9mm, 15mm, 17.6mm, 20.2mm, 22.8mm, 25mm	0-25mm

MICROMETER INSPECTION GAUGE BLOCK HOLDER

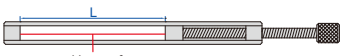
- Can fix gauge blocks for the inspection of outside micrometers with a measuring range of 0-25mm
- Optional: gauge blocks

4260-101

application

Code	Applicable gauge block size	Applicable gauge block set (optional)
4260-101	2.5mm, 5.1mm, 7.7mm, 10.3mm, 12.9mm 15mm, 17.6mm, 20.2mm, 22.8mm, 25mm	4107-10 4107-101

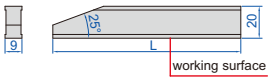
GAUGE BLOCK ACCESSORIES (BASIC TYPE)



6981-A3

6981-C1

Unit: mm



application

Code	Name	Clamping range (L)*
6981-A1	holder	0-25mm
6981-A2	holder	25-50mm
6981-A3	holder	50-100mm
6981-A4	holder	100-200mm
6981-A5	holder	200-300mm

*The actural clamping range should deduct the width of jaws

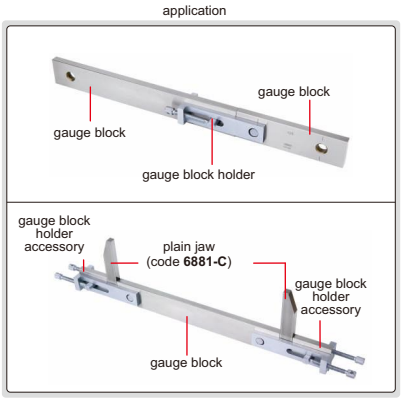
Code	Name	Size	Remark
6981-C1	plain jaw	100mm	made of steel, supplied in pair
6981-C2	plain jaw	150mm	made of steel, supplied in pair

GAUGE BLOCK HOLDER

- For gauge blocks over 125mm with clamping holes
- Optional accessory: gauge block holder accessory, gauge block accessory (code **6881**)

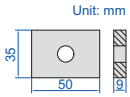
Code
6886-1

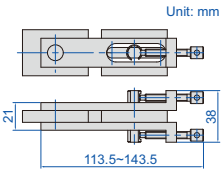
6886-1



GAUGE BLOCK HOLDER ACCESSORY

6886-A





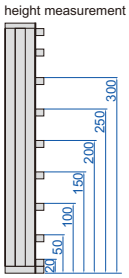
Code
6886-A

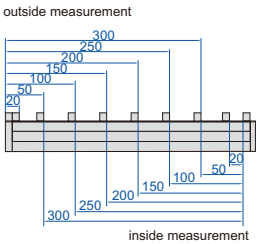
CALIPER/HEIGHT GAUGE CHECKERS

horizontal use

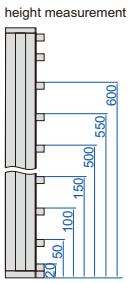
vertical use

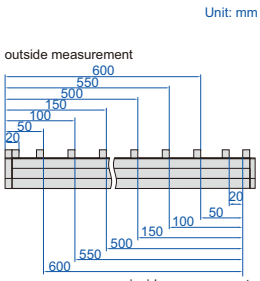
6884-300A





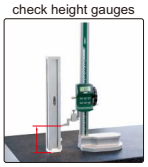
6884-300A



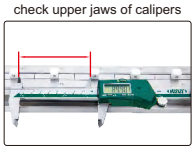


6884-600A

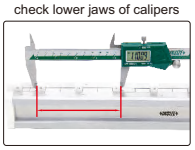
check height gauges



check upper jaws of calipers



check lower jaws of calipers



- To check calipers and height gauges
- Constructed with steel gauge blocks

(mm)

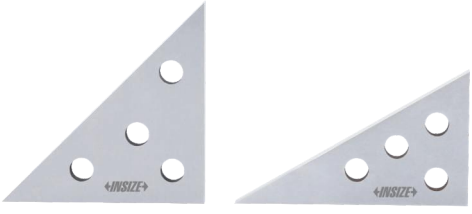
Code	Size	Range of inside measurement	Range of outside measurement	Range of height measurement	Accuracy
6884-300A*	0-300mm	20, 50, 100, 150, 200, 250, 300, 330	20, 50, 100, 150, 200, 250, 300	20, 50, 100, 150, 200, 250, 300	±2μm
6884-600A*	0-600mm	20, 50, 100, 150, 200, 250, 300,350, 400, 450, 500, 550, 600	20, 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600	20, 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600	±3.5μm

*Supplied with manufacturer inspection certificate

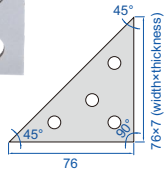
ANGLE BLOCK SET

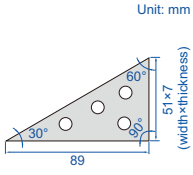
- For angle set-up in tooling, production and inspection
- Accuracy of angle: ±9 seconds
- Made of alloy steel
- Hardness HRC60±2

Code	Angle plates included	Angle
6540-1	2	45°, 45°, 90°
		30°, 60°, 90°



6540-1





CARBIDE PIN GAUGE SETS

4194-10D

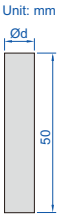
- Meet DIN2269, grade 1
- Made of carbide
- Hardness HRA90-90.5
- Diameter accuracy: ±1μm

Code	Diameter Ød (mm)	Step	Pin gauges per set
4194-1S	0.30, 0.31, 0.32, ···· 1.00	0.01mm	71
4194-2S	1.00, 1.01, 1.02, ···· 2.00	0.01mm	101
4194-3S	2.00, 2.01, 2.02, ···· 3.00	0.01mm	101
4194-4S	3.00, 3.01, 3.02, ···· 4.00	0.01mm	101
4194-5S	4.00, 4.01, 4.02, ···· 5.00	0.01mm	101
4194-6S	5.00, 5.01, 5.02, ···· 6.00	0.01mm	101
4194-7S	6.00, 6.01, 6.02, ···· 7.00	0.01mm	101
4194-8S	7.00, 7.01, 7.02, ···· 8.00	0.01mm	101
4194-9S	8.00, 8.01, 8.02, ···· 9.00	0.01mm	101
4194-10S	9.00, 9.01, 9.02, ···· 10.00	0.01mm	101
4194-10D	10.00, 10.01, 10.02, ···· 10.50	0.01mm	51
4194-11	10.50, 10.51, 10.52, ···· 11.00	0.01mm	51
4194-11D	11.00, 11.01, 11.02, ···· 11.50	0.01mm	51
4194-12	11.50, 11.51, 11.52, ···· 12.00	0.01mm	51
4194-12D	12.00, 12.01, 12.02, ···· 12.50	0.01mm	51
4194-13	12.50, 12.51, 12.52, ···· 13.00	0.01mm	51
4194-13D	13.00, 13.01, 13.02, ···· 13.50	0.01mm	51
4194-14	13.50, 13.51, 13.52, ···· 14.00	0.01mm	51
4194-14D	14.00, 14.01, 14.02, ···· 14.50	0.01mm	51
4194-15	14.50, 14.51, 14.52, ···· 15.00	0.01mm	51

CERAMIC PIN GAUGE SETS

- Meet DIN2269, grade 1
- Made of ceramic, extremely wear resistance, corrosion resistance and dimensional stability
- Diameter accuracy: ±1μm

4169-3



Code	Diameter Ød (mm)	Step	Pin gauges per set
4169-2S	1.00, 1.01, 1.02, ···· 2.00	0.01mm	101
4169-3S	2.00, 2.01, 2.02, ···· 3.00	0.01mm	101
4169-4S	3.00, 3.01, 3.02, ···· 4.00	0.01mm	101
4169-5S	4.00, 4.01, 4.02, ···· 5.00	0.01mm	101
4169-6S	5.00, 5.01, 5.02, ···· 6.00	0.01mm	101
4169-7S	6.00, 6.01, 6.02, ···· 7.00	0.01mm	101
4169-8S	7.00, 7.01, 7.02, ···· 8.00	0.01mm	101
4169-9S	8.00, 8.01, 8.02, ···· 9.00	0.01mm	101
4169-10S	9.00, 9.01, 9.02, ···· 10.00	0.01mm	101

Code	Diameter Ød (mm)	Step	Pin gauges per set
4169-411	1.0, 1.1, 1.2, ···· 5.0	0.1mm	41
4169-511	5.0, 5.1, 5.2, ···· 10.0	0.1mm	51
4169-512	10.0, 10.1, 10.2, ···· 15.0	0.1mm	51
4169-513	15.0, 15.1, 15.2, ···· 20.0	0.1mm	51

Code	Diameter Ød (mm)	Step	Pin gauges per set
4169-0D	0.30, 0.31, 0.32, ···· 0.50	0.01mm	21
4169-1	0.50, 0.51, 0.52, ···· 1.00	0.01mm	51
4169-1D	1.00, 1.01, 1.02, ···· 1.50	0.01mm	51
4169-2	1.50, 1.51, 1.52, ···· 2.00	0.01mm	51
4169-2D	2.00, 2.01, 2.02, ···· 2.50	0.01mm	51
4169-3	2.50, 2.51, 2.52, ···· 3.00	0.01mm	51
4169-3D	3.00, 3.01, 3.02, ···· 3.50	0.01mm	51
4169-4	3.50, 3.51, 3.52, ···· 4.00	0.01mm	51
4169-4D	4.00, 4.01, 4.02, ···· 4.50	0.01mm	51
4169-5	4.50, 4.51, 4.52, ···· 5.00	0.01mm	51
4169-5D	5.00, 5.01, 5.02, ···· 5.50	0.01mm	51
4169-6	5.50, 5.51, 5.52, ···· 6.00	0.01mm	51
4169-6D	6.00, 6.01, 6.02, ···· 6.50	0.01mm	51
4169-7	6.50, 6.51, 6.52, ···· 7.00	0.01mm	51
4169-7D	7.00, 7.01, 7.02, ···· 7.50	0.01mm	51
4169-8	7.50, 7.51, 7.52, ···· 8.00	0.01mm	51
4169-8D	8.00, 8.01, 8.02, ···· 8.50	0.01mm	51
4169-9	8.50, 8.51, 8.52, ···· 9.00	0.01mm	51
4169-9D	9.00, 9.01, 9.02, ···· 9.50	0.01mm	51
4169-10	9.50, 9.51, 9.52, ···· 10.00	0.01mm	51

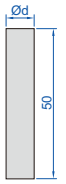
Code	Diameter Ød (mm)	Step	Pin gauges per set
4169-10D	10.00, 10.01, 10.02, ···· 10.50	0.01mm	51
4169-11	10.50, 10.51, 10.52, ···· 11.00	0.01mm	51
4169-11D	11.00, 11.01, 11.02, ···· 11.50	0.01mm	51
4169-12	11.50, 11.51, 11.52, ···· 12.00	0.01mm	51
4169-12D	12.00, 12.01, 12.02, ···· 12.50	0.01mm	51
4169-13	12.50, 12.51, 12.52, ···· 13.00	0.01mm	51
4169-13D	13.00, 13.01, 13.02, ···· 13.50	0.01mm	51
4169-14	13.50, 13.51, 13.52, ···· 14.00	0.01mm	51
4169-14D	14.00, 14.01, 14.02, ···· 14.50	0.01mm	51
4169-15	14.50, 14.51, 14.52, ···· 15.00	0.01mm	51
4169-15D	15.00, 15.01, 15.02, ···· 15.50	0.01mm	51
4169-16	15.50, 15.51, 15.52, ···· 16.00	0.01mm	51
4169-16D	16.00, 16.01, 16.02, ···· 16.50	0.01mm	51
4169-17	16.50, 16.51, 16.52, ···· 17.00	0.01mm	51
4169-17D	17.00, 17.01, 17.02, ···· 17.50	0.01mm	51
4169-18	17.50, 17.51, 17.52, ···· 18.00	0.01mm	51
4169-18D	18.00, 18.01, 18.02, ···· 18.50	0.01mm	51
4169-19	18.50, 18.51, 18.52, ···· 19.00	0.01mm	51
4169-19D	19.00, 19.01, 19.02, ···· 19.50	0.01mm	51
4169-20	19.50, 19.51, 19.52, ···· 20.00	0.01mm	51

STEEL PIN GAUGE SETS

POPULAR MODEL

Code	Diameter Ød (mm)	Step	Pin gauges per set
4166-2S	1.00, 1.01, 1.02, ···· 2.00	0.01mm	101
4166-3S	2.00, 2.01, 2.02, ···· 3.00	0.01mm	101
4166-4S	3.00, 3.01, 3.02, ···· 4.00	0.01mm	101
4166-5S	4.00, 4.01, 4.02, ···· 5.00	0.01mm	101
4166-6S	5.00, 5.01, 5.02, ···· 6.00	0.01mm	101
4166-7S	6.00, 6.01, 6.02, ···· 7.00	0.01mm	101
4166-8S	7.00, 7.01, 7.02, ···· 8.00	0.01mm	101
4166-9S	8.00, 8.01, 8.02, ···· 9.00	0.01mm	101
4166-10S	9.00, 9.01, 9.02, ···· 10.00	0.01mm	101

4166-10



Code	Diameter Ød (mm)	Step	Pin gauges per set
4166-411	1.0, 1.1, 1.2, ···· 5.0	0.01mm	41
4166-511	5.0, 5.1, 5.2, ···· 10.0	0.01mm	51
4166-512	10.0, 10.1, 10.2, ···· 15.0	0.01mm	51
4166-513	15.0, 15.1, 15.2, ···· 20.0	0.01mm	51

- Meet DIN2269, grade 1
- Made of alloy steel
- Hardness HRC62-65
- Diameter accuracy: ±1μm

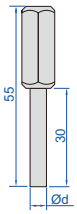
Code	Diameter Ød (mm)	Step	Pin gauges per set
4166-0D	0.20, 0.21, 0.22, ···· 0.50	0.01mm	31
4166-1	0.50, 0.51, 0.52, ···· 1.00	0.01mm	51
4166-1D	1.00, 1.01, 1.02, ···· 1.50	0.01mm	51
4166-2	1.50, 1.51, 1.52, ···· 2.00	0.01mm	51
4166-2D	2.00, 2.01, 2.02, ···· 2.50	0.01mm	51
4166-3	2.50, 2.51, 2.52, ···· 3.00	0.01mm	51
4166-3D	3.00, 3.01, 3.02, ···· 3.50	0.01mm	51
4166-4	3.50, 3.51, 3.52, ···· 4.00	0.01mm	51
4166-4D	4.00, 4.01, 4.02, ···· 4.50	0.01mm	51
4166-5	4.50, 4.51, 4.52, ···· 5.00	0.01mm	51
4166-5D	5.00, 5.01, 5.02, ···· 5.50	0.01mm	51
4166-6	5.50, 5.51, 5.52, ···· 6.00	0.01mm	51
4166-6D	6.00, 6.01, 6.02, ···· 6.50	0.01mm	51
4166-7	6.50, 6.51, 6.52, ···· 7.00	0.01mm	51
4166-7D	7.00, 7.01, 7.02, ···· 7.50	0.01mm	51
4166-8	7.50, 7.51, 7.52, ···· 8.00	0.01mm	51
4166-8D	8.00, 8.01, 8.02, ···· 8.50	0.01mm	51
4166-9	8.50, 8.51, 8.52, ···· 9.00	0.01mm	51
4166-9D	9.00, 9.01, 9.02, ···· 9.50	0.01mm	51
4166-10	9.50, 9.51, 9.52, ···· 10.00	0.01mm	51

Code	Diameter Ød (mm)	Step	Pin gauges per set
4166-10D	10.00, 10.01, 10.02, ···· 10.50	0.01mm	51
4166-11	10.50, 10.51, 10.52, ···· 11.00	0.01mm	51
4166-11D	11.00, 11.01, 11.02, ···· 11.50	0.01mm	51
4166-12	11.50, 11.51, 11.52, ···· 12.00	0.01mm	51
4166-12D	12.00, 12.01, 12.02, ···· 12.50	0.01mm	51
4166-13	12.50, 12.51, 12.52, ···· 13.00	0.01mm	51
4166-13D	13.00, 13.01, 13.02, ···· 13.50	0.01mm	51
4166-14	13.50, 13.51, 13.52, ···· 14.00	0.01mm	51
4166-14D	14.00, 14.01, 14.02, ···· 14.50	0.01mm	51
4166-15	14.50, 14.51, 14.52, ···· 15.00	0.01mm	51
4166-15D	15.00, 15.01, 15.02, ···· 15.50	0.01mm	51
4166-16	15.50, 15.51, 15.52, ···· 16.00	0.01mm	51
4166-16D	16.00, 16.01, 16.02, ···· 16.50	0.01mm	51
4166-17	16.50, 16.51, 16.52, ···· 17.00	0.01mm	51
4166-17D	17.00, 17.01, 17.02, ···· 17.50	0.01mm	51
4166-18	17.50, 17.51, 17.52, ···· 18.00	0.01mm	51
4166-18D	18.00, 18.01, 18.02, ···· 18.50	0.01mm	51
4166-19	18.50, 18.51, 18.52, ···· 19.00	0.01mm	51
4166-19D	19.00, 19.01, 19.02, ···· 19.50	0.01mm	51
4166-20	19.50, 19.51, 19.52, ···· 20.00	0.01mm	51

PIN GAUGE SETS WITH HANDLE

4266-5

Unit: mm



- Meet DIN2269, grade 1
- Made of alloy steel
- Hardness HRC62-65
- Diameter accuracy: ±1μm

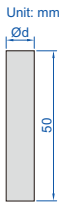
Code	Diameter Ød (mm)	Step	Pin gauges per set
4266-411	1.0, 1.1, 1.2, ···· 5.0	0.1mm	41
4266-511	5.0, 5.1, 5.2, ···· 10.0	0.1mm	51
4266-512	10.0, 10.1, 10.2, ···· 15.0	0.1mm	51
4266-513	15.0, 15.1, 15.2, ···· 20.0	0.1mm	51

Code	Diameter Ød (mm)	Step	Pin gauges per set
4266-2S	1.00, 1.01, 1.02, ···· 2.00	0.01mm	101
4266-3S	2.00, 2.01, 2.02, ···· 3.00	0.01mm	101
4266-4S	3.00, 3.01, 3.02, ···· 4.00	0.01mm	101
4266-5S	4.00, 4.01, 4.02, ···· 5.00	0.01mm	101
4266-6S	5.00, 5.01, 5.02, ···· 6.00	0.01mm	101
4266-7S	6.00, 6.01, 6.02, ···· 7.00	0.01mm	101
4266-8S	7.00, 7.01, 7.02, ···· 8.00	0.01mm	101
4266-9S	8.00, 8.01, 8.02, ···· 9.00	0.01mm	101
4266-10S	9.00, 9.01, 9.02, ···· 10.00	0.01mm	101

Code	Diameter Ød (mm)	Step	Pin gauges per set
4266-1D	1.00, 1.01, 1.02, ···· 1.50	0.01mm	51
4266-2	1.50, 1.51, 1.52, ···· 2.00	0.01mm	51
4266-2D	2.00, 2.01, 2.02, ···· 2.50	0.01mm	51
4266-3	2.50, 2.51, 2.52, ···· 3.00	0.01mm	51
4266-3D	3.00, 3.01, 3.02, ···· 3.50	0.01mm	51
4266-4	3.50, 3.51, 3.52, ···· 4.00	0.01mm	51
4266-4D	4.00, 4.01, 4.02, ···· 4.50	0.01mm	51
4266-5	4.50, 4.51, 4.52, ···· 5.00	0.01mm	51
4266-5D	5.00, 5.01, 5.02, ···· 5.50	0.01mm	51
4266-6	5.50, 5.51, 5.52, ···· 6.00	0.01mm	51
4266-6D	6.00, 6.01, 6.02, ···· 6.50	0.01mm	51
4266-7	6.50, 6.51, 6.52, ···· 7.00	0.01mm	51
4266-7D	7.00, 7.01, 7.02, ···· 7.50	0.01mm	51
4266-8	7.50, 7.51, 7.52, ···· 8.00	0.01mm	51
4266-8D	8.00, 8.01, 8.02, ···· 8.50	0.01mm	51
4266-9	8.50, 8.51, 8.52, ···· 9.00	0.01mm	51
4266-9D	9.00, 9.01, 9.02, ···· 9.50	0.01mm	51
4266-10	9.50, 9.51, 9.52, ···· 10.00	0.01mm	51
4266-10D	10.00, 10.01, 10.02, ···· 10.50	0.01mm	51

Code	Diameter Ød (mm)	Step	Pin gauges per set
4266-11	10.50, 10.51, 10.52, ···· 11.00	0.01mm	51
4266-11D	11.00, 11.01, 11.02, ···· 11.50	0.01mm	51
4266-12	11.50, 11.51, 11.52, ···· 12.00	0.01mm	51
4266-12D	12.00, 12.01, 12.02, ···· 12.50	0.01mm	51
4266-13	12.50, 12.51, 12.52, ···· 13.00	0.01mm	51
4266-13D	13.00, 13.01, 13.02, ···· 13.50	0.01mm	51
4266-14	13.50, 13.51, 13.52, ···· 14.00	0.01mm	51
4266-14D	14.00, 14.01, 14.02, ···· 14.50	0.01mm	51
4266-15	14.50, 14.51, 14.52, ···· 15.00	0.01mm	51
4266-15D	15.00, 15.01, 15.02, ···· 15.50	0.01mm	51
4266-16	15.50, 15.51, 15.52, ···· 16.00	0.01mm	51
4266-16D	16.00, 16.01, 16.02, ···· 16.50	0.01mm	51
4266-17	16.50, 16.51, 16.52, ···· 17.00	0.01mm	51
4266-17D	17.00, 17.01, 17.02, ···· 17.50	0.01mm	51
4266-18	17.50, 17.51, 17.52, ···· 18.00	0.01mm	51
4266-18D	18.00, 18.01, 18.02, ···· 18.50	0.01mm	51
4266-19	18.50, 18.51, 18.52, ···· 19.00	0.01mm	51
4266-19D	19.00, 19.01, 19.02, ···· 19.50	0.01mm	51
4266-20	19.50, 19.51, 19.52, ···· 20.00	0.01mm	51

STEEL INDIVIDUAL PIN GAUGES WITH TWO DECIMAL PLACES (0.01MM STEP)



4110-9D98

Ordering examples:

Diameter	Code
0.21mm	4110-0D21
5.56mm	4110-5D56
16.00mm	4110-16D00

Note : "D" stands for "."

- Meet DIN2269, grade 1
- Diameter range: Ø0.20~Ø20.00mm
- Diameter accuracy: ±1μm
- Made of alloy steel
- Hardness HRC62-65

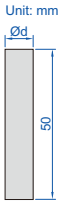
Code
4110-□□□□

Diameter Ød (mm)
0.20, 0.21, 0.22, 0.23, ···· 1.00
1.01, 1.02, 1.03, 1.04, ···· 2.00
2.01, 2.02, 2.03, 2.04, ···· 3.00
3.01, 3.02, 3.03, 3.04, ···· 4.00
4.01, 4.02, 4.03, 4.04, ···· 5.00
5.01, 5.02, 5.03, 5.04, ···· 6.00
6.01, 6.02, 6.03, 6.04, ···· 7.00
7.01, 7.02, 7.03, 7.04, ···· 8.00
8.01, 8.02, 8.03, 8.04, ···· 9.00
9.01, 9.02, 9.03, 9.04, ···· 10.00
10.01, 10.02, 10.03, 10.04, ···· 11.00
11.01, 11.02, 11.03, 11.04, ···· 12.00
12.01, 12.02, 12.03, 12.04, ···· 13.00
13.01, 13.02, 13.03, 13.04, ···· 14.00
14.01, 14.02, 14.03, 14.04, ···· 15.00
15.01, 15.02, 15.03, 15.04, ···· 16.00
16.01, 16.02, 16.03, 16.04, ···· 17.00
17.01, 17.02, 17.03, 17.04, ···· 18.00
18.01, 18.02, 18.03, 18.04, ···· 19.00
19.01, 19.02, 19.03, 19.04, ···· 20.00

CARBIDE INDIVIDUAL PIN GAUGES

INSPECTION CERTIFICATE

4193-8D015



- Meet DIN2269, grade 1
- Diameter range: Ø0.300~Ø30.000mm with three decimal, for example 0.311mm, 5.562mm, 16.298mm
- Diameter accuracy: ±1μm
- Made of carbide
- Hardness HRA90-90.5

Ordering examples:

Diameter	Code
0.311mm	4193-0D311
5.562mm	4193-5D562
16.298mm	4193-16D298

Note: "D" stands for "."

Code	Diameter range Ød (mm)
4193-□□□□□*	0.300~30.000

*Supplied with manufacturer inspection certificate

STEEL INDIVIDUAL PIN GAUGES WITH THREE DECIMAL PLACES (0.001MM STEP)

INSPECTION CERTIFICATE

- Meet DIN2269, grade 1
- Diameter range: Ø0.200~Ø30.000mm with three decimal, for example 0.211mm, 5.562mm, 16.298mm
- Diameter accuracy: ±1μm
- Made of alloy steel
- Hardness HRC62-65

Code	Diameter range Ød (mm)
4118-□□□□□*	0.200~30.000

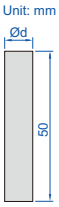
*Supplied with manufacturer inspection certificate

Ordering examples:

Diameter	Code
0.211mm	4118-0D211
5.562mm	4118-5D562
16.298mm	4118-16D298

Note: "D" stands for "."

4118-8D015



CERAMIC INDIVIDUAL PIN GAUGES WITH TWO DECIMAL PLACES (0.01MM STEP)

Ordering examples:

Diameter	Code
1.21mm	4113-1D21
5.56mm	4113-5D56
15.00mm	4113-15D00

Note: "D" stands for "."

- Meet DIN2269, grade 1
- Diameter range: Ø0.30~Ø20.00mm
- Diameter accuracy: ±1μm
- Made of ceramic, extremely wear resistance, corrosion resistance and dimensional stability

Code
4113-□□□□

4113-10D00

Diameter Ød (mm)
0.30, 0.31, 0.32, 0.33, ···· 1.00
1.01, 1.02, 1.03, 1.04, ···· 2.00
2.01, 2.02, 2.03, 2.04, ···· 3.00
3.01, 3.02, 3.03, 3.04, ···· 4.00
4.01, 4.02, 4.03, 4.04, ···· 5.00
5.01, 5.02, 5.03, 5.04, ···· 6.00
6.01, 6.02, 6.03, 6.04, ···· 7.00
7.01, 7.02, 7.03, 7.04, ···· 8.00
8.01, 8.02, 8.03, 8.04, ···· 9.00
9.01, 9.02, 9.03, 9.04, ···· 10.00

Diameter Ød (mm)
10.01, 10.02, 10.03, 10.04, ···· 11.00
11.01, 11.02, 11.03, 11.04, ···· 12.00
12.01, 12.02, 12.03, 12.04, ···· 13.00
13.01, 13.02, 13.03, 13.04, ···· 14.00
14.01, 14.02, 14.03, 14.04, ···· 15.00
15.01, 15.02, 15.03, 15.04, ···· 16.00
16.01, 16.02, 16.03, 16.04, ···· 17.00
17.01, 17.02, 17.03, 17.04, ···· 18.00
18.01, 18.02, 18.03, 18.04, ···· 19.00
19.01, 19.02, 19.03, 19.04, ···· 20.00

CERAMIC INDIVIDUAL PIN GAUGES WITH THREE DECIMAL PLACES (0.001MM STEP)

- Meet DIN2269, grade 1
- Diameter range: Ø1.000~Ø15.000mm
- With three decimal, for example 1.211mm, 5.562mm, 14.955mm
- Diameter accuracy: ±1μm
- Made of ceramic, extremely wear resistance, corrosion resistance and dimensional stability

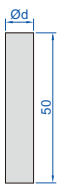
Code	Diameter range Ød (mm)
4192-□□□□	0.300-30.000

Ordering examples:

Diameter	Code
1.211mm	4192-1D211
5.562mm	4192-5D562
14.955mm	4192-14D955

Note : "D" stands for "."

4192-10D000



INDIVIDUAL PIN GAUGES WITH HANDLE (0.001MM STEP)

INSPECTION CERTIFICATE

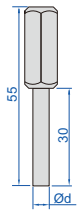
- Meet DIN2269, grade 1
- Diameter range: Ø1.000~Ø20.000mm
- Available in sizes with three decimal places, for example 5.562mm,16.298mm
- Diameter accuracy: ±1μm
- Made of alloy steel
- Hardness HRC62-65

Code	Diameter range Ød (mm)
4218-□□□□□*	1.000~20.000

*Supplied with manufacturer inspection certificate

4218-5D000

Unit: mm



Ordering examples:

Diameter	Code
5.562mm	4218-5D562
16.298mm	4218-16D298

Note: "D" stands for "."

INDIVIDUAL PIN GAUGES WITH HANDLE (0.01MM STEP)

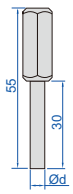
- Meet DIN2269, grade 1
- Diameter range: Ø1.00~Ø20.00mm
- Available in sizes with two decimal places, for example 5.56mm,16.00mm
- Diameter accuracy: ±1μm
- Made of alloy steel
- Hardness HRC62-65

Diameter Ød (mm)
1.00, 1.01, 1.02, 1.03, ···· 2.00
2.01, 2.02, 2.03, 2.04, ···· 3.00
3.01, 3.02, 3.03, 3.04, ···· 4.00
4.01, 4.02, 4.03, 4.04, ···· 5.00
5.01, 5.02, 5.03, 5.04, ···· 6.00
6.01, 6.02, 6.03, 6.04, ···· 7.00
7.01, 7.02, 7.03, 7.04, ···· 8.00
8.01, 8.02, 8.03, 8.04, ···· 9.00
9.01, 9.02, 9.03, 9.04, ···· 10.00

Diameter Ød (mm)
10.01, 10.02, 10.03, 10.04, ···· 11.00
11.01, 11.02, 11.03, 11.04, ···· 12.00
12.01, 12.02, 12.03, 12.04, ···· 13.00
13.01, 13.02, 13.03, 13.04, ···· 14.00
14.01, 14.02, 14.03, 14.04, ···· 15.00
15.01, 15.02, 15.03, 15.04, ···· 16.00
16.01, 16.02, 16.03, 16.04, ···· 17.00
17.01, 17.02, 17.03, 17.04, ···· 18.00
18.01, 18.02, 18.03, 18.04, ···· 19.00
19.01, 19.02, 19.03, 19.04, ···· 20.00

4214-5D00

Unit: mm



Code
4214-□□□□

Ordering examples:

Diameter	Code
5.56mm	4214-5D56
16.00mm	4214-16D00

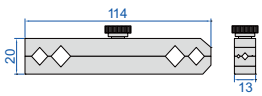
Note: "D" stands for "."

PIN GAUGE HANDLE

- Operated without wrench
- Made of aluminum

7345-13

Unit: mm



application

Code	Applicable pin gauge diameter
7345-13	1~13mm

PIN GAUGE HANDLES (OPERATED WITHOUT WRENCH)

7342-M1

application

- Operated without wrench
- Made of aluminum
- Pin gauges can be installed

Code	Applicable pin gauge diameter	H	L
7342-M0	0.3-1.25mm/0.011-0.049"	10mm	112mm
7342-M1	1.26-6.35mm/0.050-0.250"	24mm	131mm
7342-M2	6.36-12.70mm/0.251-0.500"	32mm	152mm
7342-M3	12.71-15.88mm/0.501-0.625"	37mm	152mm
7342-M4	15.89-19.00mm/0.626-0.750"	37mm	152mm
7342-M5	19.01-21.13mm/0.751-0.832"	40mm	158mm
7342-M6	21.14-23.27mm/0.833-0.916"	40mm	158mm
7342-M7	23.28-25.4mm/0.917-1.000"	40mm	158mm

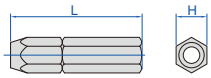
SINGLE END PIN GAUGE HANDLES (OPERATED WITH WRENCH)

7344-4G
green (GO)

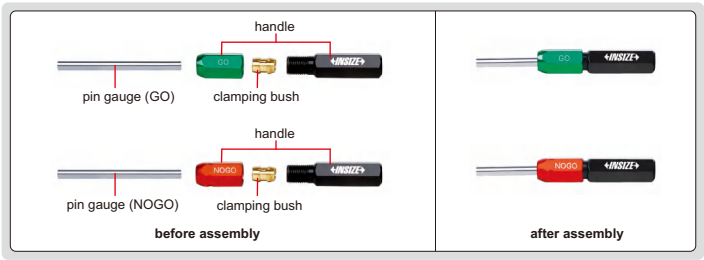
7344-4R
red (NOGO)

brass clamping bush
(0.2~7.14mm)

aluminum clamping bush
(7.14~24.80mm)



- Wrench is needed to install pins
- Clamping bushes (0.2~7.14mm) are made of brass, clamping bushes (7.14~24.80mm) are made of aluminum

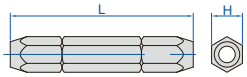


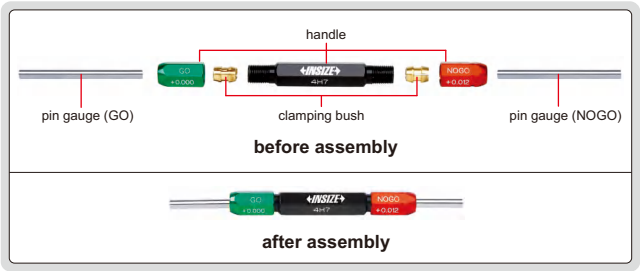
(mm)

Code		Including		Applicable pin gauge diameter	H	L
green (GO)	red (NOGO)	handle	clamping bush (mm)			
7344-0G	**7344-0R**	1 pc	6 pcs (the clamping range are 0.2-0.38, 0.38-0.51, 0.51-0.64, 0.64-0.76, 0.76-0.89, 0.89-1.02)	0.2-1.02mm	7	52
7344-1G	**7344-1R**	1 pc	7 pcs (the clamping range are 1.02-1.14, 1.14-1.27, 1.27-1.40, 1.40-1.52, 1.52-1.65, 1.65-1.78, 1.78-1.91)	1.02-1.91mm	7	52
7344-2G	**7344-2R**	1 pc	8 pcs (the clamping range are 1.91-2.08, 2.08-2.26, 2.26-2.44, 2.44-2.62, 2.62-2.79, 2.79-2.97, 2.97-3.15, 3.15 -3.33)	1.91-3.33mm	9	68
7344-3G	**7344-3R**	1 pc	7 pcs (the clamping range are 3.33-3.51, 3.51-3.68, 3.68-3.86, 3.86-4.04, 4.04-4.22, 4.22-4.39, 4.39-4.57)	3.33-4.57mm	9	68
7344-4G	**7344-4R**	1 pc	6 pcs (the clamping range are 4.57-4.78, 4.78-4.98, 4.98-5.18, 5.18-5.38, 5.38-5.59, 5.59-5.79)	4.57-5.79mm	14	73
7344-5G	**7344-5R**	1 pc	6 pcs (the clamping range are 5.79-5.99, 5.99-6.20, 6.20-6.40, 6.40-6.63, 6.63-6.88, 6.88-7.14)	5.79-7.14mm	14	73
7344-6G	**7344-6R**	1 pc	6 pcs (the clamping range are 7.14-7.39, 7.39-7.65, 7.65-7.90, 7.90-8.15, 8.15-8.41, 8.41-8.66)	7.14-8.66mm	19	79
7344-7G	**7344-7R**	1 pc	6 pcs (the clamping range are 8.66-8.92, 8.92-9.17, 9.17-9.42, 9.42-9.70, 9.70-10.01, 10.01-10.31)	8.66-10.31mm	19	79
7344-8G	**7344-8R**	1 pc	4 pcs (the clamping range are 10.31-10.67, 10.67-11.05, 11.05-11.43, 11.43-11.81)	10.31-11.81mm	22	93
7344-9G	**7344-9R**	1 pc	3 pcs (the clamping range are 11.81-12.19, 12.19-12.57, 12.57-12.95)	11.81-12.95mm	22	93
7344-10G	**7344-10R**	1 pc	4 pcs (the clamping range are 12.95-13.51, 13.51-13.89, 13.89-14.30, 14.30-14.71)	12.95-14.71mm	24	98
7344-11G	**7344-11R**	1 pc	4 pcs (the clamping range are 14.71-15.09, 15.09-15.49, 15.49-15.88, 15.88-16.13)	14.71-16.13mm	24	98
7344-12G	**7344-12R**	1 pc	4 pcs (the clamping range are 16.13-16.66, 16.66-17.07, 17.07-17.48, 17.48-17.88)	16.13-17.88mm	27	110
7344-13G	**7344-13R**	1 pc	4 pcs (the clamping range are 17.88-18.26, 18.26-18.67, 18.67-19.05, 19.05-19.30)	17.88-19.30mm	27	110
7344-15G	**7344-15R**	1 pc	8 pcs (the clamping range are 19.30-19.84, 19.84-20.62, 20.62-21.41, 21.41-22.23, 22.23-23.03, 23.03-23.80, 23.80-24.59, 24.59-24.80)	19.30-24.80mm	32	118

PIN GAUGE HANDLES (OPERATED WITH WRENCH)

handle





brass clamping bush (0.2~7.14mm)

aluminum clamping bush (7.14~24.80mm)

- Wrench is needed to install pins
- Clamping bushes (0.2~7.14mm) are made of brass, clamping bushes (7.14~24.80mm) are made of aluminum

(mm)

Code	Applicable pin gauge diameter	Including		H	L
		handle	clamping bush (mm)		
7341-0S	0.2-1.02mm	1 pc	6 pairs (the clamping range are 0.2-0.38, 0.38-0.51, 0.51-0.64, 0.64-0.76, 0.76-0.89, 0.89-1.02)	7	57
7341-1S	1.02-1.91mm	1 pc	7 pairs (the clamping range are 1.02-1.14, 1.14-1.27, 1.27-1.40, 1.40-1.52, 1.52-1.65, 1.65-1.78, 1.78-1.91)	7	57
7341-2S	1.91-3.33mm	1 pc	8 pairs (the clamping range are 1.91-2.08, 2.08-2.26, 2.26-2.44, 2.44-2.62, 2.62-2.79, 2.79-2.97, 2.97-3.15, 3.15-3.33)	9	73
7341-3S	3.33-4.57mm	1 pc	7 pairs (the clamping range are 3.33-3.51, 3.51-3.68, 3.68-3.86, 3.86-4.04, 4.04-4.22, 4.22-4.39, 4.39-4.57)	9	73
7341-4S	4.57-5.79mm	1 pc	6 pairs (the clamping range are 4.57-4.78, 4.78-4.98, 4.98-5.18, 5.18-5.38, 5.38-5.59, 5.59-5.79)	14	79
7341-5S	5.79-7.14mm	1 pc	6 pairs (the clamping range are 5.79-5.99, 5.99-6.20, 6.20-6.40, 6.40-6.63, 6.63-6.88, 6.88-7.14)	14	79
7341-6S	7.14-8.66mm	1 pc	6 pairs (the clamping range are 7.14-7.39, 7.39-7.65, 7.65-7.90, 7.90-8.15, 8.15-8.41, 8.41-8.66)	19	91
7341-7S	8.66-10.31mm	1 pc	6 pairs (the clamping range are 8.66-8.92, 8.9 -9.17, 9.17-9.42, 9.42-9.70, 9.70-10.01, 10.01-10.31)	19	91
7341-8S	10.31-11.81mm	1 pc	4 pairs (the clamping range are 10.31-10.67, 10.67-11.05, 11.05-11.43, 11.43-11.81)	22	106
7341-9S	11.81-12.95mm	1 pc	3 pairs (the clamping range are 11.81-12.19, 12.19-12.57, 12.57-12.95)	22	106
7341-10S	12.95-14.71mm	1 pc	4 pairs (the clamping range are 12.95-13.51, 13.51-13.89, 13.89-14.30, 14.30-14.71)	24	115
7341-11S	14.71-16.13mm	1 pc	4 pairs (the clamping range are 14.71-15.09, 15.09-15.49, 15.49-15.88, 15.88-16.13)	24	115
7341-12S	16.13-17.88mm	1 pc	4 pairs (the clamping range are 16.13-16.66, 16.66-17.07, 17.07-17.48, 17.48-17.88)	27	118
7341-13S	17.88-19.30mm	1 pc	4 pairs (the clamping range are 17.88-18.26, 18.26-18.67, 18.67-19.05, 19.05-19.30)	27	118
7341-15S	19.30-24.80mm	1 pc	8 pairs (the clamping range are 19.30-19.84, 19.84-20.62, 20.62-21.41, 21.41-22.23, 22.23-23.03, 23.03-23.80, 23.80-24.59, 24.59-24.80)	32	133

ADJUSTABLE SNAP GAUGES

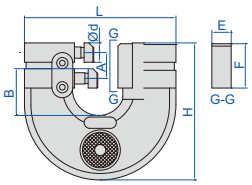
FAST AND ACCURATE MEASUREMENT OF CYLINDERS

VIDEO

(mm)

Code	Range	L	A	B	E	F	H	Ød
2187-6	0-6mm	74	15	17.5	12.2	27.2	71.5	7
2187-13	6-13mm	85	15	26	12.2	27.2	79.5	12.3
2187-19	13-19mm	93	15	27	12.2	27.2	83	12.3
2187-25	19-25mm	100	15	33.5	12.2	27.2	89.5	12.3
2187-32	25-32mm	111	18	38.5	15.2	35.2	104	15.3
2187-38	32-38mm	117	18	41.5	15.2	35.2	105	15.3
2187-44	38-44mm	123	18	44.5	15.2	35.2	109	15.3
2187-51	44-51mm	130	18	48	15.2	35.2	117	15.3

2187-19



- Used as Go/No-Go gauge by setting upper and lower limits
- Flatness of anvil: 1.5μm
- Parallelism of measuring faces:
  range 0-32mm: 3μm
  range 32-89mm: 4μm
  range 89-300mm: 5μm

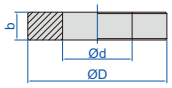
SETTING RINGS

INSPECTION CERTIFICATE

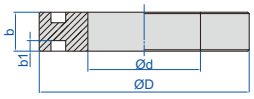
CAN SUPPLY CUSTOM SETTING RINGS FROM Ø1.50MM TO Ø400.00MM, FOR EXAMPLE, Ø17.08MM

- For zero setting of inside micrometers, three points internal micrometers and bore gauges
- The size marked on the setting ring is checked at the direction of the marking line
- Size difference (difference between the ordered size and the size marked on the setting ring when supplied): For example, the ordered size is Ø10.12mm, the size marked on the setting ring when supplied may be Ø10.130mm

6312-20



Ø1,5mm-100mm



Ø100mm-400mm

Size difference (mm)

Diameter d**	b	b1	ØD	Size difference
Ø1.5-2.5	4	-	22	±10.0μm
Ø2.5-3	5	-	22	±10.0μm
Ø3-5	5	-	22	±10.0μm
Ø5-10	8	-	32	±10.0μm
Ø10-15	10	-	38	±10.0μm
Ø15-18	12	-	45	±10.0μm
Ø18-20	12	-	45	±10.0μm
Ø20-25	14	-	53	±10.0μm
Ø25-30	16	-	63	±10.0μm
Ø30-32	16	-	63	±10.0μm
Ø32-40	18	-	71	±10.0μm
Ø40-50	20	-	85	±10.0μm
Ø50-60	20	-	100	±10.0μm
Ø60-70	24	-	112	±10.0μm
Ø70-80	24	-	125	±10.0μm
Ø80-90	24	-	140	±10.0μm
Ø90-100	24	-	160	±10.0μm
Ø100-110	30	8	164	±10.0μm
Ø110-130	34	10	192	±10.0μm

(mm)

Diameter d**	b	b1	ØD	Size difference
Ø130-150	34	10	220	±10.0μm
Ø150-170	36	10	248	±10.0μm
Ø170-190	36	10	276	±10.0μm
Ø190-210	38	10	300	±10.0μm
Ø210-230	38	10	324	±10.0μm
Ø230-250	40	12	350	±10.0μm
Ø250-270	40	12	375	±10.0μm
Ø270-290	42	12	400	±10.0μm
Ø290-300	42	12	425	±10.0μm
Ø300-320	42	12	430	±10.0μm
Ø320-330	42	12	440	±10.0μm
Ø330-340	42	12	450	±10.0μm
Ø340-350	42	12	460	±10.0μm
Ø350-360	42	12	470	±10.0μm
Ø360-370	42	12	480	±10.0μm
Ø370-380	42	12	490	±10.0μm
Ø380-390	42	12	500	±10.0μm
Ø390-400	42	12	510	±10.0μm

**For example Ø3-5mm means Ø3mm<diameter d≤Ø5mm

Roundess and taper (standard accuracy)

Diameter (mm)	Roundness	Taper
Ød≤3	0.3μm	0.3μm
3<Ød≤10	0.4μm	0.4μm
10<Ød≤18	0.5μm	0.5μm
18<Ød≤30	0.6μm	0.6μm
30<Ød≤50	0.7μm	0.7μm
50<Ød≤80	0.8μm	0.8μm
80<Ød≤120	1.0μm	1.0μm
120<Ød≤150	1.2μm	1.2μm
150<Ød≤210	1.5μm	1.5μm
210<Ød≤250	2.5μm	2.5μm
250<Ød≤300	3.0μm	3.0μm
300<Ød≤400	4.0μm	4.0μm

Roundess and taper (high accuracy)

Diameter (mm)	Roundness	Taper
1<Ød≤10	0.3μm	0.5μm
10<Ød≤50	0.4μm	0.8μm
50<Ød≤100	0.4μm	1.0μm
100<Ød≤200	0.5μm	1.5μm

Standard accuracy (meet DIN2250-1:2008 type C)

Code	Size
6312-1D5*	Ø1.5mm
6312-2*	Ø2mm
6312-2D5*	Ø2.5mm
6312-3*	Ø3mm
6312-3D5*	Ø3.5mm
6312-4*	Ø4mm
6312-4D5*	Ø4.5mm
6312-5*	Ø5mm
6312-5D5*	Ø5.5mm
6312-6*	Ø6mm
6312-6D5*	Ø6.5mm
6312-7*	Ø7mm
6312-7D5*	Ø7.5mm
6312-8*	Ø8mm
6312-8D5*	Ø8.5mm
6312-9*	Ø9mm
6312-10*	Ø10mm
6312-11*	Ø11mm
6312-12*	Ø12mm
6312-13*	Ø13mm

Code	Size
6312-14*	Ø14mm
6312-15*	Ø15mm
6312-16*	Ø16mm
6312-17*	Ø17mm
6312-18*	Ø18mm
6312-19*	Ø19mm
6312-20*	Ø20mm
6312-21*	Ø21mm
6312-22*	Ø22mm
6312-23*	Ø23mm
6312-24*	Ø24mm
6312-25*	Ø25mm
6312-26*	Ø26mm
6312-27*	Ø27mm
6312-28*	Ø28mm
6312-29*	Ø29mm
6312-30*	Ø30mm
6312-31*	Ø31mm
6312-32*	Ø32mm
6312-33*	Ø33mm

Code	Size
6312-34*	Ø34mm
6312-35*	Ø35mm
6312-36*	Ø36mm
6312-37*	Ø37mm
6312-38*	Ø38mm
6312-39*	Ø39mm
6312-40*	Ø40mm
6312-41*	Ø41mm
6312-42*	Ø42mm
6312-43*	Ø43mm
6312-44*	Ø44mm
6312-45*	Ø45mm
6312-46*	Ø46mm
6312-47*	Ø47mm
6312-48*	Ø48mm
6312-49*	Ø49mm
6312-50*	Ø50mm
6312-55*	Ø55mm
6312-60*	Ø60mm
6312-62*	Ø62mm

Code	Size
6312-65*	Ø65mm
6312-70*	Ø70mm
6312-75*	Ø75mm
6312-80*	Ø80mm
6312-85*	Ø85mm
6312-87*	Ø87mm
6312-90*	Ø90mm
6312-95*	Ø95mm
6312-100*	Ø100mm
6312-125*	Ø125mm
6312-150*	Ø150mm
6312-175*	Ø175mm
6312-200*	Ø200mm
6312-225*	Ø225mm
6312-250*	Ø250mm
6312-275*	Ø275mm
6312-300*	Ø300mm
6312-350*	Ø350mm
6312-400*	Ø400mm

To be continued

Continued from previous page

High accuracy

Code	Size	Code	Size	Code	Size	Code	Size
6312-1D5A*	Ø1.5mm	6312-13A*	Ø13mm	6312-32A*	Ø32mm	6312-55A*	Ø55mm
6312-2A*	Ø2mm	6312-14A*	Ø14mm	6312-33A*	Ø33mm	6312-60A*	Ø60mm
6312-2D5A*	Ø2.5mm	6312-15A*	Ø15mm	6312-34A*	Ø34mm	6312-62A*	Ø62mm
6312-3A*	Ø3mm	6312-16A*	Ø16mm	6312-35A*	Ø35mm	6312-65A*	Ø65mm
6312-3D5A*	Ø3.5mm	6312-17A*	Ø17mm	6312-36A*	Ø36mm	6312-70A*	Ø70mm
6312-4A*	Ø4mm	6312-18A*	Ø18mm	6312-37A*	Ø37mm	6312-75A*	Ø75mm
6312-4D5A*	Ø4.5mm	6312-19A*	Ø19mm	6312-38A*	Ø38mm	6312-80A*	Ø80mm
6312-5A*	Ø5mm	6312-20A*	Ø20mm	6312-39A*	Ø39mm	6312-85A*	Ø85mm
6312-5D5A*	Ø5.5mm	6312-21A*	Ø21mm	6312-40A*	Ø40mm	6312-87A*	Ø87mm
6312-6A*	Ø6mm	6312-22A*	Ø22mm	6312-41A*	Ø41mm	6312-90A*	Ø90mm
6312-6D5A*	Ø6.5mm	6312-23A*	Ø23mm	6312-42A*	Ø42mm	6312-95A*	Ø95mm
6312-7A*	Ø7mm	6312-24A*	Ø24mm	6312-43A*	Ø43mm	6312-100A*	Ø100mm
6312-7D5A*	Ø7.5mm	6312-25A*	Ø25mm	6312-44A*	Ø44mm	6312-125A*	Ø125mm
6312-8A*	Ø8mm	6312-26A*	Ø26mm	6312-45A*	Ø45mm	6312-150A*	Ø150mm
6312-8D5A*	Ø8.5mm	6312-27A*	Ø27mm	6312-46A*	Ø46mm	6312-175A*	Ø175mm
6312-9A*	Ø9mm	6312-28A*	Ø28mm	6312-47A*	Ø47mm	6312-200A*	Ø200mm
6312-10A*	Ø10mm	6312-29A*	Ø29mm	6312-48A*	Ø48mm		
6312-11A*	Ø11mm	6312-30A*	Ø30mm	6312-49A*	Ø49mm		
6312-12A*	Ø12mm	6312-31A*	Ø31mm	6312-50A*	Ø50mm		

*Supplied with manufacturer inspection certificate

CERAMIC MEASURING BALLS

INSPECTION CERTIFICATE

- Zirconia material, high strength and hardness, extremely wear resistance and corrosion resistance, good insulation, antistatic and magnetic resistance
- Mirror surface without holes
- Supplied with manufacturer inspection certificate

4190-40D000

Set (25 pairs)

Code	Ceramic balls included (one pair per size)
4190-S25	1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 6, 6.5, 7, 7.5, 8, 10, 11, 12, 13, 14, 15, 16, 18, 20, 22, 25mm

Individual

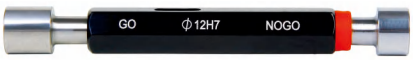
Code	Diameter	Accuracy	Roundness
4190-1D000	1.000mm	±2μm	0.5μm
4190-1D200	1.200mm	±2μm	0.5μm
4190-1D300	1.300mm	±2μm	0.5μm
4190-1D340	1.340mm	±2μm	0.5μm
4190-1D500	1.500mm	±2μm	0.5μm
4190-1D588	1.588mm (1/16")	±2μm	0.5μm
4190-1D750	1.750mm	±2μm	0.5μm
4190-2D000	2.000mm	±2μm	0.5μm
4190-2D381	2.381mm (3/32")	±2μm	0.5μm
4190-2D500	2.500mm	±2μm	0.5μm
4190-2D778	2.778mm (7/64")	±2μm	0.5μm
4190-3D000	3.000mm	±2μm	0.5μm
4190-3D175	3.175mm (1/8")	±2μm	0.5μm
4190-3D500	3.500mm	±2μm	0.5μm
4190-3D969	3.969mm (5/32")	±2μm	0.5μm
4190-4D000	4.000mm	±2μm	0.5μm
4190-4D500	4.500mm	±2μm	0.5μm
4190-4D763	4.763mm (3/16")	±2μm	0.5μm
4190-5D000	5.000mm	±2μm	0.5μm
4190-5D556	5.556mm (7/32")	±2μm	0.5μm
4190-5D953	5.953mm (15/64")	±2μm	0.5μm
4190-6D000	6.000mm	±2μm	0.5μm
4190-6D350	6.350mm (1/4")	±2μm	0.5μm
4190-6D500	6.500mm	±2μm	0.5μm
4190-6D747	6.747mm (17/64")	±2μm	0.5μm
4190-7D000	7.000mm	±2μm	0.5μm
4190-7D144	7.144mm (9/32")	±2μm	0.5μm
4190-7D500	7.500mm	±2μm	0.5μm
4190-7D938	7.938mm (5/16")	±2μm	0.5μm
4190-8D000	8.000mm	±2μm	0.5μm
4190-8D731	8.731mm (11/32")	±2μm	0.5μm

Individual

Code	Diameter	Accuracy	Roundness
4190-9D525	9.525mm (3/8")	±2μm	0.5μm
4190-10D000	10.000mm	±2μm	0.5μm
4190-10D318	10.318mm (13/32")	±2μm	0.5μm
4190-11D000	11.000mm	±2μm	0.5μm
4190-11D113	11.113mm (7/16")	±2μm	0.5μm
4190-11D509	11.509mm (29/64")	±2μm	0.5μm
4190-11D906	11.906mm (15/32")	±2μm	0.5μm
4190-12D000	12.000mm	±2μm	0.5μm
4190-12D303	12.303mm (31/64")	±2μm	0.5μm
4190-12D700	12.700mm (1/2")	±2μm	0.5μm
4190-13D000	13.000mm	±2μm	0.6μm
4190-13D494	13.494mm (17/32")	±2μm	0.6μm
4190-14D000	14.000mm	±2μm	0.6μm
4190-14D288	14.288mm (9/16")	±2μm	0.6μm
4190-15D000	15.000mm	±2μm	0.6μm
4190-15D081	15.081mm (19/32")	±2.5μm	0.6μm
4190-15D875	15.875mm (5/8 ")	±2.5μm	0.6μm
4190-16D000	16.000mm	±2.5μm	0.6μm
4190-16D669	16.669mm (21/32")	±2.5μm	0.6μm
4190-17D462	17.462mm (11/16")	±2.5μm	0.6μm
4190-18D000	18.000mm	±2.5μm	0.6μm
4190-18D256	18.256mm (23/32")	±2.5μm	0.6μm
4190-19D050	19.050mm (3/4")	±2.5μm	0.6μm
4190-19D844	19.844mm (25/32")	±2.5μm	0.6μm
4190-20D000	20.000mm	±2.5μm	0.6μm
4190-22D000	22.000mm	±2.5μm	1μm
4190-22D225	22.225mm (7/8")	±2.5μm	1μm
4190-23D812	23.812mm (15/16")	±2.5μm	1μm
4190-25D000	25.000mm	±2.5μm	1μm
4190-40D000	40.000mm	±2.5μm	1.5μm

PLAIN PLUG GAUGES

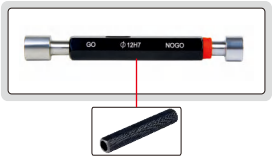
- Supplied with Go and No-Go gauges together
- Class H7
- Hardness HRC 60±2
- Standard DIN7150-2



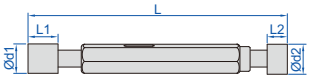
4124-12

CUSTOM-MADE
OTHER CLASSES ARE AVAILABLE, SUCH AS H8, H9
OTHER DIAMETERS ARE AVAILABLE, SUCH AS 19.003mm
OTHER LENGTHS ARE AVAILABLE, SUCH AS 70mm
KNURLED HANDLES ARE AVAILABLE FOR TYPE A

type A

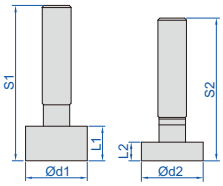


knurled handle is optional



Type A

type B



Type B

Size tolerance of H7 (mm)

Diameter Ød	Type	Size tolerance of Go gauge (μm)	Size tolerance of No-Go gauge (μm)	L1	L2	L	S1, S2
≥2, ≤3	A	+0.5 / +2.5	+9/+11	6.5	4.5	62	–
>3, ≤6	A	+0.75/+3.25	+10.75/+13.25	8	6	74	–
>6, ≤10	A	+0.75/+3.25	+13.75/+16.25	10	7	87	–
>10, ≤14	A	+1/+4	+16.5/+19.5	12	8	99	–
>14, ≤18	A	+1/+4	+16.5/+19.5	14	10	114	–
>18, ≤24	A	+1/+5	+19/+23	16	12	132	–
>24, ≤30	A	+1/+5	+19/+23	18	14	136	–
>30, ≤40	A	+1.5/+5.5	+23/+27	20	15	155	–
>40, ≤50	A	+1.5/+5.5	+23/+27	25	18	169	–
>50, ≤65	B	+1.5/+6.5	+27.5/+32.5	30	18	–	164, 152
>65, ≤80	B	+1.5/+6.5	+27.5/+32.5	35	25	–	169, 159
>80, ≤100	B	+2/+8	+32/+38	35	25	–	169, 159

Code	Diameter	Type
4124-2	2mm	A
4124-3	3mm	A
4124-4	4mm	A
4124-5	5mm	A
4124-6	6mm	A
4124-7	7mm	A
4124-8	8mm	A
4124-9	9mm	A
4124-10	10mm	A
4124-11	11mm	A
4124-12	12mm	A

Code	Diameter	Type
4124-13	13mm	A
4124-14	14mm	A
4124-15	15mm	A
4124-16	16mm	A
4124-17	17mm	A
4124-18	18mm	A
4124-19	19mm	A
4124-20	20mm	A
4124-21	21mm	A
4124-22	22mm	A
4124-23	23mm	A

Code	Diameter	Type
4124-24	24mm	A
4124-25	25mm	A
4124-26	26mm	A
4124-28	28mm	A
4124-29	29mm	A
4124-30	30mm	A
4124-31	31mm	A
4124-32	32mm	A
4124-34	34mm	A
4124-35	35mm	A
4124-36	36mm	A

Code	Diameter	Type
4124-38	38mm	A
4124-39	39mm	A
4124-40	40mm	A
4124-41	41mm	A
4124-42	42mm	A
4124-44	44mm	A
4124-45	45mm	A
4124-46	46mm	A
4124-47	47mm	A
4124-49	49mm	A
4124-50	50mm	A

Code	Diameter	Type
4124-52	52mm	B
4124-55	55mm	B
4124-60	60mm	B
4124-65	65mm	B
4124-70	70mm	B
4124-75	75mm	B
4124-80	80mm	B
4124-85	85mm	B
4124-100	100mm	B

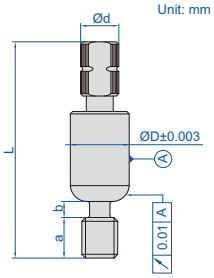
THREADED HOLE LOCATION GAUGES

INSIZE PLUS

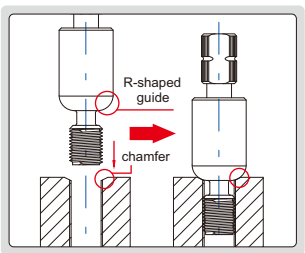
VIDEO

- Only for the workpieces that the chamfer is concentric with the screw part

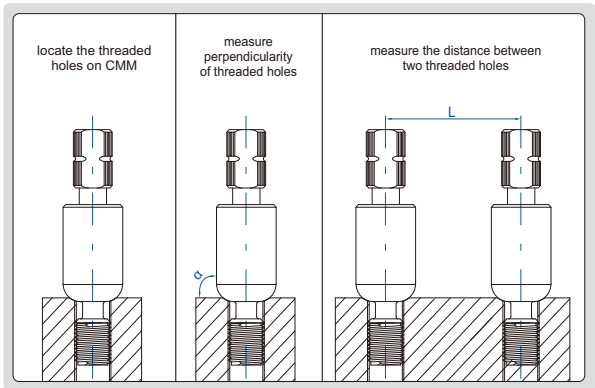
4676-12



there is a R-shaped guide, which leads the gauge to the center of the threaded holes by fitting the R-shaped guide on the chamfer of the threaded holes



application



(mm)

Code	Size	Ød	ØD	a	b	L
4676-5	M5×0.8	5.5	9	6	2	33
4676-6	M6×1.0	5.5	9	6	2	33
4676-8	M8×1.25	8.5	13	9	3.5	48
4676-10	M10×1.5	8.5	13	9	3.5	48
4676-12	M12×1.75	12	17	10	3.5	55

THREAD DEPTH GAUGES

INSIZE PLUS

INSPECTION CERTIFICATE

VIDEO

- Supplied with GO and NO-GO gauges together
- Check GO and NO-GO while measuring the depth thread holes
- The GO gauge can be replaced after wear
- Optional accessory: zero block (code **4668-SETTER**), removal tool (code **4668-TOOL**)

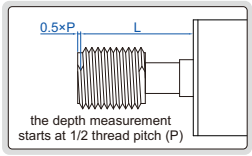
4666-6

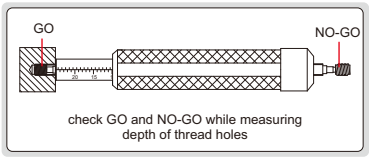
Metric thread (without vernier reading, graduation: 0.5mm, accuracy: ±0.25mm)

Code	Size (mm)	Depth range
4666-2*	M2x0.4-6H	0-8mm
4666-2D5*	M2.5x0.45-6H	0-10mm
4666-3*	M3x0.5-6H	0-11mm
4666-3D5*	M3.5x0.6-6H	0-14mm
4666-4*	M4x0.7-6H	0-16mm
4666-5*	M5x0.8-6H	0-20mm
4666-6*	M6x1-6H	0-24mm
4666-7*	M7x1-6H	0-28mm
4666-8*	M8x1.25-6H	0-32mm
4666-10*	M10x1.5-6H	0-40mm
4666-12*	M12x1.75-6H	0-48mm
4666-14*	M14x2-6H	0-56mm
4666-16*	M16x2-6H	0-64mm
4666-18*	M18x2.5-6H	0-72mm
4666-20*	M20x2.5-6H	0-80mm
4666-22*	M22x2.5-6H	0-80mm
4666-24*	M24x3-6H	0-80mm
4666-27*	M27x3-6H	0-80mm
4666-30*	M30x3.5-6H	0-80mm

Metric thread (with vernier reading, graduation: 0.1mm, accuracy: ±0.1mm)

Code	Size (mm)	Depth range
4666-2A*	M2x0.4-6H	0-8mm
4666-2D5A*	M2.5x0.45-6H	0-10mm
4666-3A*	M3x0.5-6H	0-11mm
4666-3D5A*	M3.5x0.6-6H	0-14mm
4666-4A*	M4x0.7-6H	0-16mm
4666-5A*	M5x0.8-6H	0-20mm
4666-6A*	M6x1-6H	0-24mm
4666-7A*	M7x1-6H	0-28mm
4666-8A*	M8x1.25-6H	0-32mm
4666-10A*	M10x1.5-6H	0-40mm
4666-12A*	M12x1.75-6H	0-48mm
4666-14A*	M14x2-6H	0-56mm
4666-16A*	M16x2-6H	0-64mm
4666-18A*	M18x2.5-6H	0-72mm
4666-20A*	M20x2.5-6H	0-80mm
4666-22A*	M22x2.5-6H	0-80mm
4666-24A*	M24x3-6H	0-80mm
4666-27A*	M27x3-6H	0-80mm
4666-30A*	M30x3.5-6H	0-80mm





*Supplied with manufacturer inspection certificate

DLC COATED THREAD RING GAUGES AND PLUG GAUGES

Code example:

Original code	DLC coating code
4120-12	**4120-12-DLC**
4130-4	**4130-4-DLC**

- The DLC coating has the following advantages:
  — High hardness, extremely wear resistance
  — Low friction coefficient
  — Corrosion resistance
- Plug gauges: GO is coated, NO-GO is not;
  Ring gauges: GO is coated, NO-GO is not
- The following thread ring gauges and plug gauges are available with DLC coating:
  Metric fine thread ring gauges and plug gauges (**4139**, **4129** series);
  Metric thread ring gauges and plug gauges (**4130**, **4120** series);
  American standard thread ring gauges and plug gauges (**4131**, **4121** series)

DLC coating characteristics

Hardness	6000HV
Friction coefficient	0.15
Coating color	interference color

Metric thread plug gauges

Size (mm)		Code
Nominal diameter	Pitch	Class 6H
M1	0.25	**4130-1-DLC**
M1.2	0.25	**4130-1D2-DLC**
M1.4	0.3	**4130-1D4-DLC**
M1.6	0.35	**4130-1D6-DLC**
M2	0.4	**4130-2-DLC**
M2.5	0.45	**4130-2D5-DLC**
M3	0.5	**4130-3-DLC**

Size (mm)		Code
Nominal diameter	Pitch	Class 6H
M3.5	0.6	**4130-3D5-DLC**
M4	0.7	**4130-4-DLC**
M5	0.8	**4130-5-DLC**
M6	1	**4130-6-DLC**
M8	1.25	**4130-8-DLC**
M10	1.5	**4130-10-DLC**
M12	1.75	**4130-12-DLC**

Size (mm)		Code
Nominal diameter	Pitch	Class 6H
M14	2	**4130-14-DLC**
M16	2	**4130-16-DLC**
M18	2.5	**4130-18-DLC**
M20	2.5	**4130-20-DLC**
M22	2.5	**4130-22-DLC**
M24	3	**4130-24-DLC**

To be continued

Continued from previous page

Metric thread ring gauges

Size (mm)		Code
Nominal diameter	Pitch	Class 6g
		GO
M2	0.4	4120-2-DLC
M3	0.5	4120-3-DLC
M4	0.7	4120-4-DLC
M5	0.8	4120-5-DLC
M6	1	4120-6-DLC

Size (mm)		Code
Nominal diameter	Pitch	Class 6g
		GO
M8	1.25	4120-8-DLC
M10	1.5	4120-10-DLC
M12	1.75	4120-12-DLC
M14	2	4120-14-DLC
M16	2	4120-16-DLC

Size (mm)		Code
Nominal diameter	Pitch	Class 6g
		GO
M18	2.5	4120-18-DLC
M20	2.5	4120-20-DLC
M22	2.5	4120-22-DLC
M24	3	4120-24-DLC

Metric fine thread plug gauges

Size (mm)		Code
Nominal diameter	Pitch	Class 6H
M4	0.5	4139-4G-DLC
M5	0.5	4139-5G-DLC
M6	0.5	4139-6G-DLC
M6	0.75	4139-6L-DLC
M8	0.75	4139-8L-DLC
M8	1	4139-8P-DLC
M10	0.75	4139-10L-DLC
M10	1	4139-10P-DLC
M12	1	4139-12P-DLC
M12	1.25	4139-12Q-DLC
M12	1.5	4139-12R-DLC

Size (mm)		Code
Nominal diameter	Pitch	Class 6H
M14	1	4139-14P-DLC
M14	1.25	4139-14Q-DLC
M14	1.5	4139-14R-DLC
M16	1	4139-16P-DLC
M16	1.25	4139-16Q-DLC
M16	1.5	4139-16R-DLC
M18	1	4139-18P-DLC
M18	1.25	4139-18Q-DLC
M18	1.5	4139-18R-DLC
M18	2	4139-18T-DLC
M20	1	4139-20P-DLC

Size (mm)		Code
Nominal diameter	Pitch	Class 6H
M20	1.25	4139-20Q-DLC
M20	1.5	4139-20R-DLC
M20	2	4139-20T-DLC
M22	1	4139-22P-DLC
M22	1.25	4139-22Q-DLC
M22	1.5	4139-22R-DLC
M22	2	4139-22T-DLC
M24	1	4139-24P-DLC
M24	1.25	4139-24Q-DLC
M24	1.5	4139-24R-DLC
M24	2	4139-24T-DLC

Metric fine thread ring gauges

Size (mm)		Code
Nominal diameter	Pitch	Class 6g
		GO
M4	0.5	4129-4G-DLC
M6	0.75	4129-6L-DLC
M8	1	4129-8P-DLC
M10	1	4129-10P-DLC
M10	1.25	4129-10Q-DLC
M12	1	4129-12P-DLC
M12	1.25	4129-12Q-DLC
M12	1.5	4129-12R-DLC

Size (mm)		Code
Nominal diameter	Pitch	Class 6g
		GO
M14	1	4129-14P-DLC
M14	1.5	4129-14R-DLC
M16	1	4129-16P-DLC
M16	1.5	4129-16R-DLC
M18	1	4129-18P-DLC
M18	1.5	4129-18R-DLC
M18	2	4129-18T-DLC
M20	1	4129-20P-DLC

Size (mm)		Code
Nominal diameter	Pitch	Class 6g
		GO
M20	1.5	4129-20R-DLC
M20	2	4129-20T-DLC
M22	1	4129-22P-DLC
M22	1.5	4129-22R-DLC
M22	2	4129-22T-DLC
M24	1	4129-24P-DLC
M24	1.5	4129-24R-DLC
M24	2	4129-24T-DLC

American standard thread plug gauges

Size	Code
	Class 2B
No. 0-80UNF	4131-02-DLC
No. 1-72UNF	4131-12-DLC
No. 2-56UNC	4131-21-DLC
No. 4-40UNC	4131-41-DLC
No. 6-32UNC	4131-61-DLC
No. 8-32UNC	4131-81-DLC
No. 10-24UNC	4131-101-DLC
No. 10-32UNF	4131-102-DLC
1/4-20UNC	4131-1B1-DLC
1/4-28UNF	4131-1B2-DLC

Size	Code
	Class 2B
5/16-18UNC	4131-5D1-DLC
5/16-24UNF	4131-5D2-DLC
3/8-16UNC	4131-3C1-DLC
3/8-24UNF	4131-3C2-DLC
7/16-14UNC	4131-7D1-DLC
7/16-20UNF	4131-7D2-DLC
1/2-13UNC	4131-1A1-DLC
1/2-20UNF	4131-1A2-DLC
9/16-18UNF	4131-9D2-DLC
5/8-11UNC	4131-5C1-DLC

Size	Code
	Class 2B
5/8-18UNF	4131-5C2-DLC
3/4-10UNC	4131-3B1-DLC
3/4-16UNF	4131-3B2-DLC
7/8-9UNC	4131-7C1-DLC
7/8-14UNF	4131-7C2-DLC
1-8UNC	4131-2A1-DLC
1-12UNF	4131-2A2-DLC
1 1/16-12UN	4131-1E512-DLC
1 5/16-12UN	4131-5E512-DLC

American standard thread ring gauges

Size	Code
	Class 2A
	GO
No. 4-40UNC	4121-41-DLC
No. 6-32UNC	4121-61-DLC
No. 10-32UNF	4121-102-DLC
1/4-20UNC	4121-1B1-DLC
1/4-28UNF	4121-1B2-DLC
5/16-18UNC	4121-5D1-DLC
5/16-24UNF	4121-5D2-DLC
3/8-16UNC	4121-3C1-DLC

Size	Code
	Class 2A
	GO
3/8-24UNF	4121-3C2-DLC
7/16-14UNC	4121-7D1-DLC
7/16-20UNF	4121-7D2-DLC
1/2-13UNC	4121-1A1-DLC
1/2-20UNF	4121-1A2-DLC
9/16-18UNF	4121-9D2-DLC
5/8-11UNC	4121-5C1-DLC
5/8-18UNF	4121-5C2-DLC

Size	Code
	Class 2A
	GO
3/4-10UNC	4121-3B1-DLC
3/4-16UNF	4121-3B2-DLC
7/8-9UNC	4121-7C1-DLC
7/8-14UNF	4121-7C2-DLC
1-8UNC	4121-2A1-DLC
1-12UNF	4121-2A2-DLC
1-14UNS	4121-2A514-DLC

METRIC THREAD PLUG GAUGES

INSPECTION CERTIFICATE

- Supplied with Go and No-Go gauges together
- Standard ISO1502
- Supplied with manufacturer inspection certificate

4130-10

Individual

Size (mm)		Code		
Nominal diameter	Pitch	Class 6H	Class 6G	Class 4H
M0.8	0.2	**4130-D8**	**4130-D8G**	–
M0.9	0.225	**4130-D9**	–	–
M1	0.25	**4130-1**	–	**4130-1H**
M1.2	0.25	**4130-1D2**	**4130-1D2G**	**4130-1D2H**
M1.4	0.3	**4130-1D4**	–	**4130-1D4H**
M1.6	0.35	**4130-1D6**	**4130-1D6G**	**4130-1D6H**
M1.7	0.35	**4130-1D7**	–	–
M1.8	0.35	**4130-1D8**	**4130-1D8G**	**4130-1D8H**
M2	0.4	**4130-2**	**4130-2G**	**4130-2H**
M2.2	0.45	**4130-2D2**	**4130-2D2G**	**4130-2D2H**
M2.3	0.4	**4130-2D3**	**4130-2D3G**	–
M2.5	0.45	**4130-2D5**	**4130-2D5G**	**4130-2D5H**
M2.6	0.45	**4130-2D6**	**4130-2D6G**	–
M3	0.5	**4130-3**	**4130-3G**	**4130-3H**
M3.5	0.6	**4130-3D5**	**4130-3D5G**	**4130-3D5H**
M4	0.7	**4130-4**	**4130-4G**	**4130-4H**
M4.5	0.75	**4130-4D5**	**4130-4D5G**	**4130-4D5H**
M5	0.8	**4130-5**	**4130-5G**	**4130-5H**
M6	1	**4130-6**	**4130-6G**	**4130-6H**
M7	1	**4130-7**	**4130-7G**	**4130-7H**
M8	1.25	**4130-8**	**4130-8G**	**4130-8H**
M9	1.25	**4130-9**	**4130-9G**	**4130-9H**
M10	1.5	**4130-10**	**4130-10G**	**4130-10H**
M11	1.5	**4130-11**	**4130-11G**	**4130-11H**
M12	1.75	**4130-12**	**4130-12G**	**4130-12H**
M14	2	**4130-14**	**4130-14G**	**4130-14H**
M16	2	**4130-16**	**4130-16G**	**4130-16H**
M18	2.5	**4130-18**	**4130-18G**	**4130-18H**
M20	2.5	**4130-20**	**4130-20G**	**4130-20H**
M22	2.5	**4130-22**	**4130-22G**	–
M24	3	**4130-24**	**4130-24G**	–
M27	3	**4130-27**	**4130-27G**	–
M30	3.5	**4130-30**	**4130-30G**	–
M33	3.5	**4130-33**	**4130-33G**	–
M36	4	**4130-36**	**4130-36G**	**4130-36H**
M39	4	**4130-39**	**4130-39G**	–
M42	4.5	**4130-42**	–	–
M45	4.5	**4130-45**	–	–
M48	5	**4130-48**	–	–
M52	5	**4130-52**	**4130-52G**	–
M56	5.5	**4130-56**	–	–
M60	5.5	**4130-60**	–	–

Set (class 6H)

Code	Thread plug gauges included (mm)
4130-S7	M3x0.5 (**4130-3**), M4x0.7 (**4130-4**), M5x0.8 (**4130-5**), M6x1 (**4130-6**), M8x1.25 (**4130-8**), M10x1.5 (**4130-10**), M12x1.75 (**4130-12**)

METRIC FINE THREAD PLUG GAUGES

- Supplied with Go and No-Go gauges together
- Standard ISO1502
- Supplied with manufacturer inspection certificate

4139-20G

INSPECTION CERTIFICATE

Code example:
"**-1A**" stands for "**4139-1A**"

Size (mm)		Code (4139)		
Nominal diameter	Pitch	Class 6H	Class 6G	Class 4H
M1	0.2	-1A	-	-
M1.2	0.2	-1D2A	-	-
M1.4	0.2	-1D4A	-	-
M1.6	0.2	-1D6A	-1D6AG	-
M1.8	0.2	-1D8A	-	-
M2	0.2	-2A	-2AG	-
	0.25	-2B	-2BG	-2BH
M2.5	0.2	-2D5A	-	-
	0.25	-2D5B	-	-2D5BH
	0.35	-2D5D	-	-
M3	0.25	-3B	-	-3BH
	0.35	-3D	-	-3DH
M3.5	0.25	-3D5B	-	-
	0.35	-3D5D	-	-3D5DH
	0.5	-3D5G	-	-
M4	0.25	-4B	-	-
	0.35	-4D	-	-4DH
	0.5	-4G	-4GG	-4GH
M4.5	0.35	-4D5D	-	-
	0.5	-4D5G	-4D5GG	-
M5	0.25	-5B	-	-
	0.35	-5D	-	-
	0.5	-5G	-5GG	-5GH
M5.5	0.5	-5D5G	-	-
M6	0.25	-6B	-6BG	-
	0.35	-6D	-	-
	0.5	-6G	-6GG	-6GH
M6.5	0.5	-6D5G	-	-
M7	0.35	-7D	-	-
	0.5	-7G	-7GG	-
M7.5	0.5	-7D5G	-	-
M8	0.35	-8D	-	-
	0.5	-8G	-8GG	-8GH
	1	-8P	-8PG	-8PH
M8.5	0.5	-8D5G	-	-
M9	0.35	-9D	-	-
	0.5	-9G	-9GG	-
	0.75	-9L	-9LG	-9LH
	1	-9P	-9PG	-9PH
M10	0.35	-10D	-	-
	0.5	-10G	-10GG	-10GH
	1	-10P	-10PG	-10PH
	1.25	-10Q	-10QG	-10QH
M11	0.5	-11G	-11GG	-11GH
	1	-11P	-11PG	-11PH
M12	0.5	-12G	-12GG	-12GH
	1	-12P	-12PG	-12PH
	1.25	-12Q	-12QG	-12QH
	1.5	-12R	-12RG	-12RH
M13	0.5	-13G	-	-13GH
	1	-13P	-13PG	-13PH
	1.5	-13R	-	-
M14	0.5	-14G	-14GG	-14GH
	1	-14P	-14PG	-14PH
	1.25	-14Q	-14QG	-14QH
	1.5	-14R	-14RG	-14RH

Size (mm)		Code (4139)		
Nominal diameter	Pitch	Class 6H	Class 6G	Class 4H
M15	0.5	-15G	-15GG	-
	1	-15P	-15PG	-15PH
	1.5	-15R	-15RG	-15RH
M16	0.5	-16G	-16GG	-
	1	-16P	-16PG	-16PH
	1.25	-16Q	-	-
	1.5	-16R	-16RG	-16RH
M17	0.5	-17G	-17GG	-
	1	-17P	-17PG	-17PH
	1.5	-17R	-17RG	-17RH
M18	0.5	-18G	-18GG	-
	1	-18P	-18PG	-18PH
	1.25	-18Q	-	-
	1.5	-18R	-18RG	-18RH
	2	-18T	-18TG	-18TH
M19	0.5	-19G	-	-
	1	-19P	-19PG	-19PH
	1.5	-19R	-	-19RH
M20	0.5	-20G	-20GG	-20GH
	1	-20P	-20PG	-20PH
	1.25	-20Q	-	-
	1.5	-20R	-20RG	-20RH
	2	-20T	-20TG	-20TH
M21	0.5	-21G	-	-
	1	-21P	-21PG	-21PH
	1.5	-21R	-	-
M22	0.5	-22G	-	-
	1	-22P	-22PG	-22PH
	1.25	-22Q	-	-
	1.5	-22R	-22RG	-22RH
	2	-22T	-22TG	-22TH
M23	0.5	-23G	-	-
	1	-23P	-23PG	-23PH
M24	0.5	-24G	-	-
	1	-24P	-24PG	-24PH
	1.25	-24Q	-	-
	1.5	-24R	-24RG	-24RH
	2	-24T	-24TG	-24TH
M25	0.5	-25G	-	-
	1	-25P	-25PG	-25PH
	1.5	-25R	-25RG	-25RH
	2	-25T	-25TG	-25TH
M26	0.5	-26G	-	-
	1	-26P	-26PG	-26PH
	1.5	-26R	-26RG	-26RH
	2	-26T	-26TG	-26TH
M27	0.5	-27G	-	-
	1	-27P	-27PG	-27PH
	1.5	-27R	-27RG	-27RH
	2	-27T	-27TG	-27TH
M28	0.5	-28G	-	-
	1	-28P	-28PG	-28PH
	1.5	-28R	-28RG	-28RH
	2	-28T	-28TG	-28TH
M29	0.5	-29G	-	-
	0.75	-29L	-	-

Size (mm)		Code (4139)		
Nominal diameter	Pitch	Class 6H	Class 6G	Class 4H
M29	1	-29P	-29PG	-29PH
M30	0.5	-30G	-	-
	0.75	-30L	-	-
	1	-30P	-30PG	-30PH
	1.5	-30R	-30RG	-30RH
	2	-30T	-30TG	-30TH
	3	-30V	-	-
M31	0.5	-31G	-	-
	0.75	-31L	-	-
M32	0.5	-32G	-	-
	0.75	-32L	-	-
	1	-32P	-32PG	-32PH
	1.5	-32R	-32RG	-32RH
	2	-32T	-32TG	-32TH
M33	0.5	-33G	-	-
	0.75	-33L	-	-
	1	-33P	-33PG	-33PH
	1.5	-33R	-33RG	-33RH
	2	-33T	-33TG	-33TH
	3	-33V	-	-
M34	0.75	-34L	-	-
	1	-34P	-34PG	-34PH
	1.5	-34R	-34RG	-34RH
	2	-34T	-	-
M35	0.75	-35L	-	-
	1	-35P	-35PG	-35PH
	1.5	-35R	-35RG	-35RH
	2	-35T	-	-
M36	0.75	-36L	-	-
	1	-36P	-36PG	-36PH
	1.5	-36R	-36RG	-36RH
	2	-36T	-36TG	-36TH
	3	-36V	-	-
M37	0.75	-37L	-	-
M38	0.75	-38L	-	-
	1	-38P	-38PG	-38PH
	1.5	-38R	-38RG	-38RH
	2	-38T	-38TG	-38TH
M39	0.75	-39L	-	-
	1	-39P	-	-
	1.5	-39R	-	-
	2	-39T	-39TG	-39TH
	3	-39V	-	-
M40	0.75	-40L	-	-
	1	-40P	-40PG	-40PH
	1.5	-40R	-40RG	-40RH
	2	-40T	-40TG	-40TH
	3	-40V	-	-
M42	1	-42P	-	-
	1.5	-42R	-42RG	-
	2	-42T	-	-
	3	-42V	-42VG	-
M45	1	-45P	-	-
	1.5	-45R	-45RG	-
	2	-45T	-	-

To be continued

Continued from previous page

Size (mm)		Code (4139)		
Nominal diameter	Pitch	Class 6H	Class 6G	Class 4H
M45	3	-45V	-	-
M48	1	-48P	-	-
	1.5	-48R	-	-
	2	-48T	-	-
	3	-48V	-	-
M50	1	-	-50PG	-
	1.5	-50R	-	-
	2	-50T	-	-
M52	1	-52P	-	-
M52	1.5	-52R	-	-
	2	-52T	-	-
	3	-52V	-	-
M55	4	-52X	-	-
	1.5	-55R	-	-
M56	2	-55T	-55TG	-
	1	-56P	-	-
	1.5	-56R	-	-
	2	-56T	-	-
M56	3	-56V	-	-
	4	-56X	-	-
M58	1.5	-58R	-	-
	3	-58V	-	-
M60	1	-60P	-	-
	1.5	-60R	-	-
	2	-60T	-	-
	3	-60V	-	-
	4	-60X	-	-

METRIC THREAD RING GAUGES

INSPECTION CERTIFICATE

- Standard ISO1502
- Supplied with manufacturer inspection certificate

4120-16

4120-16N

Individual

Size (mm)		Code					
		Class 6g		Class 6e		Class 6h	
Nominal diameter	Pitch	GO	NOGO	GO	NOGO	GO	NOGO
M2	0.4	4120-2	4120-2N	4120-2E	4120-2EN	4120-2H	4120-2HN
M2.2	0.45	4120-2D2	4120-2D2N	4120-2D2E	4120-2D2EN	4120-2D2H	4120-2D2HN
M2.3	0.4	4120-2D3	4120-2D3N	–	–	–	–
M2.5	0.45	4120-2D5	4120-2D5N	4120-2D5E	4120-2D5EN	4120-2D5H	4120-2D5HN
M2.6	0.45	4120-2D6	4120-2D6N	–	–	–	–
M3	0.5	4120-3	4120-3N	4120-3E	4120-3EN	4120-3H	4120-3HN
M3.5	0.6	4120-3D5	4120-3D5N	4120-3D5E	4120-3D5EN	4120-3D5H	4120-3D5HN
M4	0.7	4120-4	4120-4N	4120-4E	4120-4EN	4120-4H	4120-4HN
M4.5	0.75	4120-4D5	4120-4D5N	4120-4D5E	4120-4D5EN	4120-4D5H	4120-4D5HN
M5	0.8	4120-5	4120-5N	4120-5E	4120-5EN	4120-5H	4120-5HN
M6	1	4120-6	4120-6N	4120-6E	4120-6EN	4120-6H	4120-6HN
M7	1	4120-7	4120-7N	4120-7E	4120-7EN	4120-7H	4120-7HN
M8	1.25	4120-8	4120-8N	4120-8E	4120-8EN	4120-8H	4120-8HN
M9	1.25	4120-9	4120-9N	4120-9E	4120-9EN	4120-9H	4120-9HN
M10	1.5	4120-10	4120-10N	4120-10E	4120-10EN	4120-10H	4120-10HN
M11	1.5	4120-11	4120-11N	4120-11E	4120-11EN	4120-11H	4120-11HN
M12	1.75	4120-12	4120-12N	4120-12E	4120-12EN	4120-12H	4120-12HN
M14	2	4120-14	4120-14N	4120-14E	4120-14EN	4120-14H	4120-14HN
M16	2	4120-16	4120-16N	4120-16E	4120-16EN	4120-16H	4120-16HN
M18	2.5	4120-18	4120-18N	4120-18E	4120-18EN	4120-18H	4120-18HN
M20	2.5	4120-20	4120-20N	4120-20E	4120-20EN	4120-20H	4120-20HN
M22	2.5	4120-22	4120-22N	4120-22E	4120-22EN	4120-22H	4120-22HN
M24	3	4120-24	4120-24N	4120-24E	4120-24EN	4120-24H	4120-24HN
M27	3	4120-27	4120-27N	4120-27E	4120-27EN	4120-27H	4120-27HN
M30	3.5	4120-30	4120-30N	4120-30E	4120-30EN	4120-30H	4120-30HN
M33	3.5	4120-33	4120-33N	4120-33E	4120-33EN	4120-33H	4120-33HN
M36	4	4120-36	4120-36N	4120-36E	4120-36EN	4120-36H	4120-36HN
M39	4	4120-39	4120-39N	4120-39E	4120-39EN	4120-39H	4120-39HN
M42	4.5	4120-42	4120-42N	–	–	4120-42H	4120-42HN
M45	4.5	4120-45	4120-45N	–	–	4120-45H	4120-45HN
M48	5	4120-48	4120-48N	–	–	4120-48H	4120-48HN
M52	5	4120-52	4120-52N	–	–	4120-52H	4120-52HN
M56	5.5	4120-56	4120-56N	–	–	–	–
M60	5.5	4120-60	4120-60N	–	–	–	–

Go ring gauge set (class 6g)

Code	Thread ring gauges included (mm)
4120-S7	M3x0.5 (**4120-3**), M4x0.7 (**4120-4**), M5x0.8 (**4120-5**), M6x1 (**4120-6**), M8x1.25 (**4120-8**), M10x1.5 (**4120-10**), M12x1.75 (**4120-12**)

No Go ring gauge set (class 6g)

Code	Thread ring gauges included (mm)
4120-S7N	M3x0.5 (**4120-3N**), M4x0.7 (**4120-4N**), M5x0.8 (**4120-5N**), M6x1 (**4120-6N**), M8x1.25 (**4120-8N**), M10x1.5 (**4120-10N**), M12x1.75 (**4120-12N**)

METRIC FINE THREAD RING GAUGES

INSPECTION CERTIFICATE

- Standard ISO1502
- Supplied with manufacturer inspection certificate

4129-9P

4129-9PN

Code example:
"**-3D5G**" stands for "**4129-3D5G**"

Size (mm)		Code (4129)					
		Class 6g		Class 6e		Class 6h	
Nominal diameter	Pitch	GO	NOGO	GO	NOGO	GO	NOGO
M3	0.35	-3D	-3DN	-3DE	-3DEN	-3DH	-3DHN
M3.5	0.35	-3D5D	-3D5DN	-	-	-3D5DH	-3D5DHN
	0.35	-3D5G	-3D5GN	-	-	-	-
M4	0.5	-4G	-4GN	-4GE	-4GEN	-4GH	-4GHN
M4.5	0.5	-4D5G	-4D5GN	-4D5GE	-4D5GEN	-	-
M5	0.5	-5G	-5GN	-5GE	-5GEN	-5GH	-5GHN
M5.5	0.5	-5D5G	-5D5GN	-5D5GE	-	-	-
M6	0.5	-6G	-6GN	-6GE	-6GEN	-6GH	-6GHN
	0.75	-6L	-6LN	-6LE	-6LEN	-6LH	-6LHN
M6.5	0.5	-6D5G	-6D5GN	-	-	-	-
M7	0.5	-7G	-7GN	-7GE	-7GEN	-7GH	-7GHN
	0.75	-7L	-7LN	-7LE	-7LEN	-7LH	-7LHN
M7.5	0.5	-7D5G	-7D5GN	-	-	-	-
M8	0.5	-8G	-8GN	-8GE	-8GEN	-8GH	-8GHN
	0.75	-8L	-8LN	-8LE	-8LEN	-8LH	-8LHN
	1	-8P	-8PN	-8PE	-8PEN	-8PH	-8PHN
M8.5	0.5	-8D5G	-8D5GN	-	-	-	-
M9	0.5	-9G	-9GN	-9GE	-9GEN	-9GH	-9GHN
	0.75	-9L	-9LN	-9LE	-9LEN	-9LH	-9LHN
	1	-9P	-9PN	-9PE	-9PEN	-9PH	-9PHN
M10	0.5	-10G	-10GN	-10GE	-10GEN	-10GH	-10GHN
	0.75	-10L	-10LN	-10LE	-10LEN	-10LH	-10LHN
	1	-10P	-10PN	-10PE	-10PEN	-10PH	-10PHN
	1.25	-10Q	-10QN	-10QE	-10QEN	-10QH	-10QHN
M11	0.5	-11G	-11GN	-11GE	-11GEN	-11GH	-11GHN
	0.75	-11L	-11LN	-11LE	-11LEN	-11LH	-11LHN
	1	-11P	-11PN	-11PE	-11PEN	-11PH	-11PHN
M12	0.5	-12G	-12GN	-12GE	-12GEN	-12GH	-12GHN
	0.75	-12L	-12LN	-12LE	-12LEN	-12LH	-12LHN
	1	-12P	-12PN	-12PE	-12PEN	-12PH	-12PHN
	1.25	-12Q	-12QN	-12QE	-12QEN	-12QH	-12QHN
	1.5	-12R	-12RN	-12RE	-12REN	-12RH	-12RHN
M13	0.5	-13G	-13GN	-13GE	-13GEN	-13GH	-13GHN
	0.75	-13L	-13LN	-13LE	-13LEN	-13LH	-13LHN
	1	-13P	-13PN	-13PE	-13PEN	-13PH	-13PHN
	1.5	-13R	-13RN	-13RE	-13REN	-13RH	-13RHN
M14	0.5	-14G	-14GN	-14GE	-14GEN	-14GH	-14GHN
	0.75	-14L	-14LN	-14LE	-14LEN	-14LH	-14LHN
	1	-14P	-14PN	-14PE	-14PEN	-14PH	-14PHN
	1.25	-14Q	-14QN	-14QE	-14QEN	-14QH	-14QHN
	1.5	-14R	-14RN	-14RE	-14REN	-14RH	-14RHN
M15	0.5	-15G	-15GN	-15GE	-15GEN	-15GH	-15GHN
	0.75	-15L	-15LN	-15LE	-15LEN	-15LH	-15LHN
	1	-15P	-15PN	-15PE	-15PEN	-15PH	-15PHN
	1.5	-15R	-15RN	-15RE	-15REN	-15RH	-15RHN
M16	0.5	-16G	-16GN	-16GE	-16GEN	-16GH	-16GHN
	0.75	-16L	-16LN	-16LE	-16LEN	-16LH	-16LHN
	1	-16P	-16PN	-16PE	-16PEN	-16PH	-16PHN
	1.25	-16Q	-16QN	-	-	-	-
	1.5	-16R	-16RN	-16RE	-16REN	-16RH	-16RHN
M17	0.5	-17G	-17GN	-17GE	-17GEN	-17GH	-17GHN
	0.75	-17L	-17LN	-17LE	-17LEN	-17LH	-17LHN
	1	-17P	-17PN	-17PE	-17PEN	-17PH	-17PHN
	1.5	-17R	-17RN	-17RE	-17REN	-17RH	-17RHN

Size (mm)		Code (4129)					
		Class 6g		Class 6e		Class 6h	
Nominal diameter	Pitch	GO	NOGO	GO	NOGO	GO	NOGO
M18	0.5	-18G	-18GN	-	-	-18GH	-18GHN
	0.75	-18L	-18LN	-18LE	-18LEN	-18LH	-18LHN
	1	-18P	-18PN	-18PE	-18PEN	-18PH	-18PHN
	1.25	-18Q	-18QN	-	-	-18QH	-18QHN
	1.5	-18R	-18RN	-18RE	-18REN	-18RH	-18RHN
	2	-18T	-18TN	-18TE	-18TEN	-18TH	-18THN
M19	0.5	-19G	-19GN	-	-	-19GH	-19GHN
	0.75	-19L	-19LN	-19LE	-19LEN	-19LH	-19LHN
	1	-19P	-19PN	-19PE	-19PEN	-19PH	-19PHN
	1.5	-19R	-19RN	-	-	-	-
M20	0.5	-20G	-20GN	-	-	-20GH	-20GHN
	0.75	-20L	-20LN	-20LE	-20LEN	-20LH	-20LHN
	1	-20P	-20PN	-20PE	-20PEN	-20PH	-20PHN
	1.25	-20Q	-20QN	-	-	-20QH	-20QHN
	1.5	-20R	-20RN	-20RE	-20REN	-20RH	-20RHN
	2	-20T	-20TN	-20TE	-20TEN	-20TH	-20THN
M21	0.75	-21L	-21LN	-21LE	-21LEN	-	-
	1	-21P	-21PN	-21PE	-21PEN	-21PH	-21PHN
	1.5	-21R	-21RN	-	-	-	-
M22	0.75	-22L	-22LN	-	-	-	-
	1	-22P	-22PN	-22PE	-22PEN	-22PH	-22PHN
	1.25	-22Q	-22QN	-	-	-	-
	1.5	-22R	-22RN	-22RE	-22REN	-22RH	-22RHN
	2	-22T	-22TN	-22TE	-22TEN	-22TH	-22THN
M23	0.75	-23L	-23LN	-	-	-	-
	1	-23P	-23PN	-23PE	-23PEN	-23PH	-23PHN
M24	0.75	-24L	-24LN	-	-	-24LH	-24LHN
	1	-24P	-24PN	-24PE	-24PEN	-24PH	-24PHN
	1.25	-24Q	-24QN	-24QE	-24QEN	-	-
	1.5	-24R	-24RN	-24RE	-24REN	-24RH	-24RHN
	2	-24T	-24TN	-24TE	-24TEN	-24TH	-24THN
M25	0.75	-25L	-25LN	-	-	-25LH	-25LHN
	1	-25P	-25PN	-25PE	-25PEN	-25PH	-25PHN
	1.5	-25R	-25RN	-25RE	-25REN	-25RH	-25RHN
	2	-25T	-25TN	-25TE	-25TEN	-25TH	-25THN
M26	0.75	-26L	-26LN	-	-	-26LH	-26LHN
	1	-26P	-26PN	-26PE	-26PEN	-26PH	-26PHN
	1.5	-26R	-26RN	-26RE	-26REN	-26RH	-26RHN
	2	-26T	-26TN	-26TE	-26TEN	-26TH	-26THN
M27	0.75	-27L	-27LN	-	-	-	-
	1	-27P	-27PN	-27PE	-27PEN	-27PH	-27PHN
	1.5	-27R	-27RN	-27RE	-27REN	-27RH	-27RHN
	2	-27T	-27TN	-27TE	-27TEN	-27TH	-27THN
M28	0.75	-28L	-28LN	-	-	-	-
	1	-28P	-28PN	-28PE	-28PEN	-28PH	-28PHN
	1.5	-28R	-28RN	-28RE	-28REN	-28RH	-28RHN
	2	-28T	-28TN	-28TE	-28TEN	-28TH	-28THN
M29	0.75	-29L	-29LN	-	-	-	-
	1	-29P	-29PN	-	-	-	-
M30	0.75	-30L	-30LN	-30LE	-30LEN	-30LH	-30LHN
	1	-30P	-30PN	-30PE	-30PEN	-30PH	-30PHN
	1.5	-30R	-30RN	-30RE	-30REN	-30RH	-30RHN
	2	-30T	-30TN	-30TE	-30TEN	-30TH	-30THN

To be continued

Continued from previous page

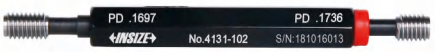
Size (mm)		Code (4129)					
		Class 6g		Class 6e		Class 6h	
Nominal diameter	Pitch	GO	NOGO	GO	NOGO	GO	NOGO
M30	3	-30V	-30VN	-	-	-	-
M31	0.75	-31L	-31LN	-	-	-	-
M32	0.75	-32L	-32LN	-	-	-	-
	1	-32P	-32PN	-32PE	-32PEN	-32PH	-32PHN
	1.5	-32R	-32RN	-32RE	-32REN	-32RH	-32RHN
	2	-32T	-32TN	-32TE	-32TEN	-32TH	-32THN
M33	0.75	-33L	-33LN	-	-	-	-
	1	-33P	-33PN	-33PE	-33PEN	-33PH	-33PHN
	1.5	-33R	-33RN	-33RE	-33REN	-33RH	-33RHN
	2	-33T	-33TN	-33TE	-33TEN	-33TH	-33THN
	3	-33V	-33VN	-	-	-	-
M34	1	-34P	-34PN	-34PE	-34PEN	-34PH	-34PHN
	1.5	-34R	-34RN	-34RE	-34REN	-34RH	-34RHN
	2	-34T	-34TN	-	-	-	-
M35	1	-35P	-35PN	-35PE	-35PEN	-35PH	-35PHN
	1.5	-35R	-35RN	-35RE	-35REN	-35RH	-35RHN
	2	-35T	-35TN	-	-	-	-
M36	1	-36P	-36PN	-36PE	-36PEN	-36PH	-36PHN
	1.5	-36R	-36RN	-36RE	-36REN	-36RH	-36RHN
	2	-36T	-36TN	-36TE	-36TEN	-36TH	-36THN
	3	-36V	-36VN	-	-	-36VH	-36VHN
M38	1	-38P	-38PN	-38PE	-38PEN	-38PH	-38PHN
	1.5	-38R	-38RN	-38RE	-38REN	-38RH	-38RHN
	2	-38T	-38TN	-38TE	-38TEN	-38TH	-38THN
M39	1	-39P	-39PN	-	-	-	-
	1.5	-39R	-39RN	-39RE	-39REN	-39RH	-39RHN
	2	-39T	-39TN	-39TE	-39TEN	-39TH	-39THN
	3	-39V	-39VN	-	-	-	-
M40	1.5	-40R	-40RN	-40RE	-40REN	-40RH	-40RHN
	2	-40T	-40TN	-40TE	-40TEN	-40TH	-40THN
	3	-40V	-40VN	-	-	-	-
M42	1.5	-42R	-42RN	-42RE	-42REN	-42RH	-42RHN

Size (mm)		Code (4129)					
		Class 6g		Class 6e		Class 6h	
Nominal diameter	Pitch	GO	NOGO	GO	NOGO	GO	NOGO
M42	2	-42T	-42TN	-42TE	-42TEN	-42TH	-42THN
	3	-42V	-42VN	-	-	-	-
M45	1.5	-45R	-45RN	-45RE	-45REN	-45RH	-45RHN
	2	-45T	-45TN	-45TE	-45TEN	-45TH	-45THN
	3	-45V	-45VN	-45VE	-	-	-
M48	1.5	-48R	-48RN	-48RE	-48REN	-48RH	-48RHN
	2	-48T	-48TN	-48TE	-48TEN	-48TH	-48THN
	3	-48V	-48VN	-	-	-48VH	-48VHN
M50	1.5	-50R	-50RN	-50RE	-50REN	-50RH	-50RHN
	2	-50T	-50TN	-50TE	-50TEN	-50TH	-50THN
	3	-50V	-50VN	-	-	-	-
M52	1.5	-52R	-52RN	-52RE	-52REN	-52RH	-52RHN
	2	-52T	-52TN	-52TE	-52TEN	-52TH	-52THN
	3	-52V	-52VN	-	-	-52VH	-52VHN
	4	-52X	-52XN	-	-	-	-
M55	1.5	-55R	-55RN	-55RE	-55REN	-55RH	-55RHN
	2	-55T	-55TN	-55TE	-55TEN	-55TH	-55THN
	3	-55V	-55VN	-	-	-	-
	4	-55X	-55XN	-	-	-	-
M56	1.5	-56R	-56RN	-56RE	-56REN	-56RH	-56RHN
	2	-56T	-56TN	-56TE	-56TEN	-56TH	-56THN
	3	-56V	-56VN	-	-	-56VH	-56VHN
	4	-56X	-56XN	-	-	-	-
M58	1.5	-58R	-58RN	-58RE	-58REN	-58RH	-58RHN
	2	-58T	-58TN	-58TE	-58TEN	-58TH	-58THN
	3	-58V	-58VN	-	-	-	-
	4	-58X	-58XN	-	-	-	-
M60	1.5	-60R	-60RN	-60RE	-60REN	-60RH	-60RHN
	2	-60T	-60TN	-60TE	-60TEN	-60TH	-60THN
	3	-60V	-60VN	-	-	-	-
	4	-60X	-60XN	-	-	-	-

AMERICAN STANDARD THREAD PLUG GAUGES

INSPECTION CERTIFICATE

- Supplied with Go and No-Go gauges together
- Standard ANSI/ASME B1.2
- Supplied with manufacturer inspection certificate



4131-102

Code example:
"**-9D1**" stands for "**4131-9D1**"

Size	Code (4131)	
	Class 2B	Class 3B
No. 0-80UNF	-02	-02B
No. 1-64UNC	-11	-11B
No. 1-72UNF	-12	-12B
No. 2-56UNC	-21	-21B
No. 2-64UNF	-22	-22B
No. 3-48UNC	-31	-31B
No. 3-56UNF	-32	-32B
No. 4-40UNC	-41	-41B
No. 4-48UNF	-42	-42B
No. 5-40UNC	-51	-51B
No. 5-44UNF	-52	-52B
No. 6-32UNC	-61	-61B
No. 6-40UNF	-62	-62B
No. 8-32UNC	-81	-81B
No. 8-36UNF	-82	-82B
No. 10-24UNC	-101	-101B
No. 10-32UNF	-102	-102B
No. 12-24UNC	-121	-121B

Size	Code (4131)	
	Class 2B	Class 3B
No. 12-28UNF	-122	122B
No. 12-32UNEF	-123	-
1/4-20UNC	-1B1	-1B1B
1/4-28UNF	-1B2	-1B2B
1/4-32UNEF	-1B3	-
1/4-36UNS	-1B4	-
5/16-18UNC	-5D1	-5D1B
5/16-24UNF	-5D2	-5D2B
5/16-32UNEF	-5D3	-5D3B
3/8-16UNC	-3C1	-3C1B
3/8-24UNF	-3C2	-3C2B
3/8-32UNEF	-3C3	-
7/16-14UNC	-7D1	-7D1B
7/16-20UNF	-7D2	-7D2B
7/16-28UNEF	-7D3	-
1/2-13UNC	-1A1	-1A1B
1/2-20UNF	-1A2	-1A2B
1/2-28UNEF	-1A3	-

Size	Code (4131)	
	Class 2B	Class 3B
9/16-12UNC	-9D1	-9D1B
9/16-18UNF	-9D2	-9D2B
9/16-24UNEF	-9D3	-9D3B
5/8-11UNC	-5C1	-5C1B
5/8-18UNF	-5C2	-5C2B
5/8-24UNEF	-5C3	-5C3B
11/16-16UN	-11D516	-
11/16-24UNEF	-11D3	-
3/4-10UNC	-3B1	-3B1B
3/4-16UNF	-3B2	-3B2B
3/4-20UNEF	-3B3	-3B3B
13/16-16UN	-13D516	-
13/16-20UNEF	-13D3	-
7/8-9UNC	-7C1	-7C1B
7/8-14UNF	-7C2	-7C2B
7/8-16UN	-7C516	-
7/8-20UNEF	-7C3	-7C3B
15/16-20UNEF	-15D3	-

Size	Code (4131)	
	Class 2B	Class 3B
1-8UNC	-2A1	-2A1B
1-12UNF	-2A2	-2A2B
1-14UNS	-2A514	-
1-20UNEF	-2A3	-
1-32UN	-2A532	-2A532B
1 1/16-12UN	-1E512	-
1 1/16-18UNEF	-1E3	-
1 1/8-7UNC	-1F1	-1F1B
1 1/8-8UN	-1F58	-1F58B
1 1/8-12UNF	-1F2	-1F2B
1 1/8-18UNEF	-1F3	-
1 3/16-12UN	-3E512	-
1 3/16-18UNEF	-3E3	-
1 1/4-7UNC	-1G1	-
1 1/4-8UN	-1G58	-1G58B
1 1/4-12UNF	-1G2	-1G2B
1 1/4-18UNEF	-1G3	-
1 5/16-12UN	-5E512	-

AMERICAN STANDARD THREAD RING GAUGES

INSPECTION CERTIFICATE

- Standard ANSI/ASME B1.2
- Class 2A
- Supplied with manufacturer inspection certificate

front back

4121-1B1

front back

4121-1B1N

Size	Code	
	GO	NOGO
No. 4-40UNC	4121-41	4121-41N
No. 4-48UNF	4121-42	4121-42N
No. 5-40UNC	4121-51	4121-51N
No. 5-44UNF	4121-52	4121-52N
No. 6-32UNC	4121-61	4121-61N
No. 6-40UNF	4121-62	4121-62N
No. 8-32UNC	4121-81	4121-81N
No. 8-36UNF	4121-82	4121-82N
No. 10-24UNC	4121-101	4121-101N
No. 10-32UNF	4121-102	4121-102N
No. 12-24UNC	4121-121	4121-121N
No. 12-28UNF	4121-122	4121-122N
No. 12-32UNEF	4121-123	4121-123N
1/4-20UNC	4121-1B1	4121-1B1N
1/4-28UNF	4121-1B2	4121-1B2N
1/4-32UNEF	4121-1B3	4121-1B3N
1/4-36UNS	4121-1B4	4121-1B4N
5/16-18UNC	4121-5D1	4121-5D1N
5/16-24UNF	4121-5D2	4121-5D2N
5/16-32UNEF	4121-5D3	4121-5D3N
3/8-16UNC	4121-3C1	4121-3C1N
3/8-24UNF	4121-3C2	4121-3C2N

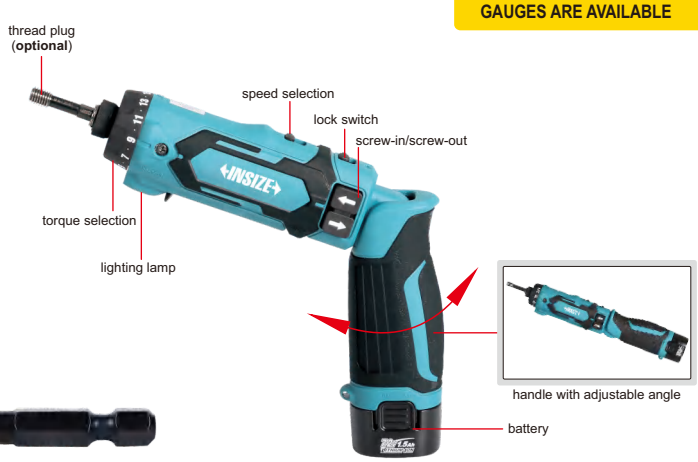
Size	Code	
	GO	NOGO
3/8-32UNEF	4121-3C3	4121-3C3N
7/16-14UNC	4121-7D1	4121-7D1N
7/16-20UNF	4121-7D2	4121-7D2N
7/16-28UNEF	4121-7D3	4121-7D3N
1/2-13UNC	4121-1A1	4121-1A1N
1/2-20UNF	4121-1A2	4121-1A2N
1/2-28UNEF	4121-1A3	4121-1A3N
9/16-12UNC	4121-9D1	4121-9D1N
9/16-18UNF	4121-9D2	4121-9D2N
9/16-24UNEF	4121-9D3	4121-9D3N
5/8-11UNC	4121-5C1	4121-5C1N
5/8-18UNF	4121-5C2	4121-5C2N
5/8-24UNEF	4121-5C3	4121-5C3N
11/16-16UN	4121-11D516	4121-11D516N
11/16-24UNEF	4121-11D3	4121-11D3N
3/4-10UNC	4121-3B1	4121-3B1N
3/4-16UNF	4121-3B2	4121-3B2N
3/4-20UNEF	4121-3B3	4121-3B3N
13/16-16UN	4121-13D516	4121-13D516N
13/16-20UNEF	4121-13D3	4121-13D3N
7/8-9UNC	4121-7C1	4121-7C1N
7/8-14UNF	4121-7C2	4121-7C2N

Size	Code	
	GO	NOGO
7/8-16UN	4121-7C516	4121-7C516N
7/8-20UNEF	4121-7C3	4121-7C3N
15/16-20UNEF	4121-15D3	4121-15D3N
1-8UNC	4121-2A1	4121-2A1N
1-12UNF	4121-2A2	4121-2A2N
1-14UNS	4121-2A514	4121-2A514N
1-20UNEF	4121-2A3	4121-2A3N
1-32UN	4121-2A532	4121-2A532N
1 1/16-12UN	4121-1E512	4121-1E512N
1 1/16-18UNEF	4121-1E3	4121-1E3N
1 1/8-7UNC	4121-1F1	4121-1F1N
1 1/8-8UN	4121-1F58	4121-1F58N
1 1/8-12UNF	4121-1F2	4121-1F2N
1 1/8-18UNEF	4121-1F3	4121-1F3N
1 3/16-12UN	4121-3E512	4121-3E512N
1 3/16-18UNEF	4121-3E3	4121-3E3N
1 1/4-7UNC	4121-1G1	4121-1G1N
1 1/4-8UN	4121-1G58	4121-1G58N
1 1/4-12UNF	4121-1G2	4121-1G2N
1 1/4-18UNEF	4121-1G3	4121-1G3N
1 5/16-12UN	4121-5E512	4121-5E512N

ELECTRIC THREAD PLUG GAUGES

CUSTOMIZED THREAD PLUG GAUGES ARE AVAILABLE

- Suitable for left-hand and right-hand threads
- Fast screw-in and screw-out
- Two speed levels: 200rpm, 650rpm
- Including 2 rechargeable batteries, 1 charger (30 minutes fast charging)



ELECTRIC DRIVER (thread plug gauges are not included)

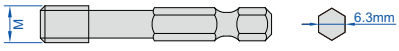
Code	Torque range	Number of torque settings
4256-HANDLE	0.3~2.9N.m	21

THREAD PLUG GAUGE-class 6H (DLC coated)

Code	Size (mm) Go
4256-3-DLC	M3×0.5
4256-3D5-DLC	M3.5×0.6
4256-4-DLC	M4×0.7
4256-5-DLC	M5×0.8
4256-6-DLC	M6×1
4256-8-DLC	M8×1.25
4256-10-DLC	M10×1.5
4256-12-DLC	M12×1.75
4256-14-DLC	M14×2
4256-16-DLC	M16×2
4256-18-DLC	M18×2.5
4256-20-DLC	M20×2.5
4256-22-DLC	M22×2.5
4256-24-DLC	M24×3
4256-27-DLC	M27×3
4256-30-DLC	M30×3.5

4256-8-DLC

4256-HANDLE



- DLC coating has the following advantages:
  - High hardness, extremely wear resistance which can extend the service life of thread gauges, life time is 3-10 times of uncoated thread plug gauges.
  - Low friction coefficient
  - Corrosion resistance

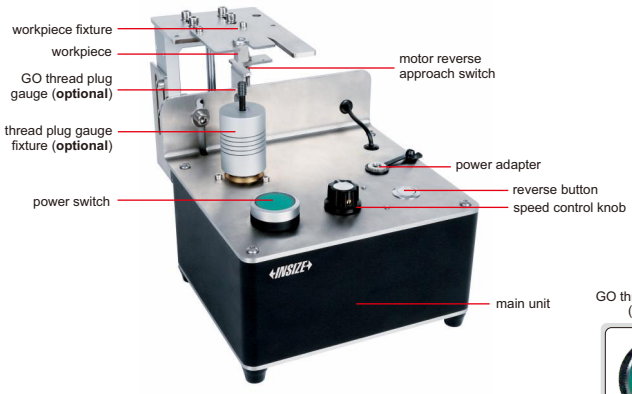
charger and battery

SEMI-AUTOMATIC THREAD INSPECTOR
CODE TGI

CUSTOM-MADE

VIDEO

- Rapid inspection of thread
- Speed and torque are adjustable
- Reverse button: if abnormal thread is detected, thread gauge will be stuck, press the reverse button to exit
- Different thread gauges and workpiece fixtures can be replaced
- Thread gauges with DLC coating, excellent wear resistance
- For different lenght of thread by adjusting the position of approach switch
- Optional accessory: GO thread plug gauges, GO thread ring gauges, thread plug gauge fixtures, custom-made workpiece fixtures



GO thread ring gauge (optional)

SPECIFICATION

Measuring range	external thread: M5~M20 (Go thread ring gauges)
	internal thread: M3~M36 (Go thread plug gauges)
Torque range	clearance fit: 0.1~0.35Nm, interference fit: 0.4~1.4Nm
Speed range	100~2200r/min
Power supply	power adapter
Rated power	24W
Net weight	3kg
Dimension	160×190×250mm

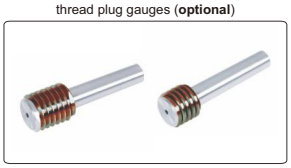
AUTOMATIC THREAD INSPECTION MACHINE
CODE TCM

CUSTOM-MADE

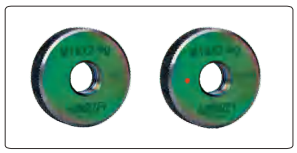
VIDEO

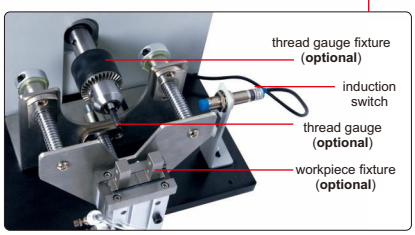
- For inspection of GO, NO-GO and depth of threads
- Can be for repair of thread defects
- Real-time display of torque, circles, OK and NG counts
- If NG thread is detected, audible and visual alarm are activated and the motor is automatically reversed to exit the thread gauge
- Different thread gauges and workpiece fixtures can be replaced
- For different length of thread by adjusting the induction switch
- Thread gauges with DLC coating, excellent wear resistance
- Optional accessory: thread plug gauges, thread ring gauges thread gauge fixtures, custom-made workpiece fixtures, foot switch (code **TCM-01**)

thread plug gauges (**optional**)



thread ring gauges (**optional**)

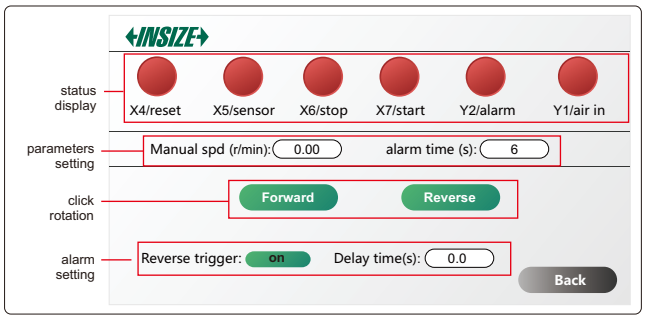


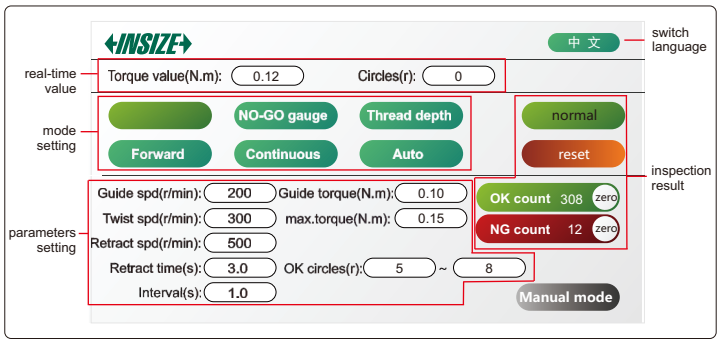


SPECIFICATION

Measuring range	thread: M1~M30
Reprocessing range	thread: M1~M20
Torque range	guide torque: 0~1.27N.m, max. torque: 0~1.27N.m
Speed range	0~3000 r/min
Time range	retract time: 0.1~99s, interval: 0.1~99s
Power supply	220V, 50/60Hz
Rated power	400W
Net weight	13kg
Dimension	460×290×330mm

manual mode





HANDHELD THREAD INSPECTION MACHINES

CUSTOMIZED THREAD PLUG GAUGES ARE AVAILABLE

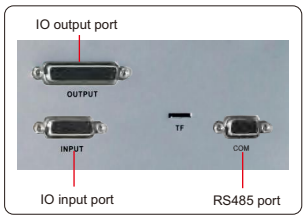
ATTENTION: TORQUE TESTERS ARE NEEDED FOR CALIBRATION

ATTENTION: SPEED SHOULD BE BELOW 100RPM FOR THE FINAL STAGE

VIDEO

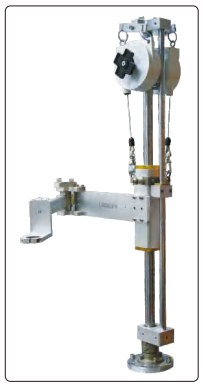
HES-TP01
main body (included)

- For inspection of left-hand and right-hand internal thread
- High precision torque+angle control
- Real-time display torque, OK counts, NG counts and pass rate
- If NG thread is detected, the alarm is activated and the corresponding NG parameter is displayed in red on the controller
- Provide programmable IO and RS485 communication port for process control and data transmission
- Thread plug gauges can be replaced with different sizes
- Thread gauges with DLC coating, excellent wear resistance
- Optional accessory: thread plug gauges, balance arm, torque tester

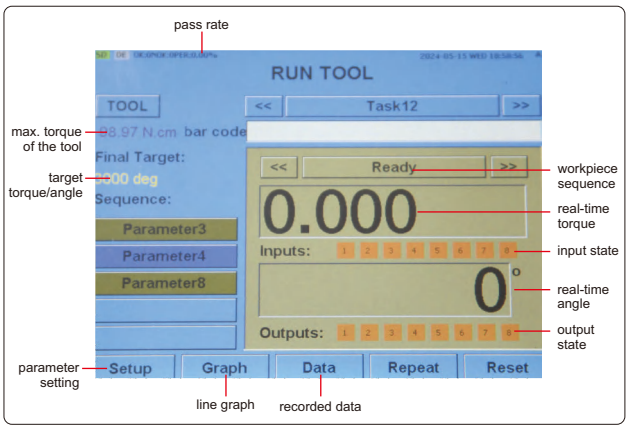


communication port (included)

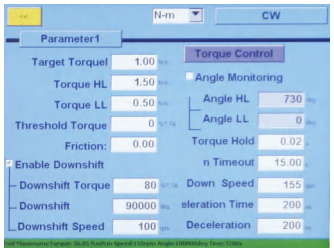
controller (included)



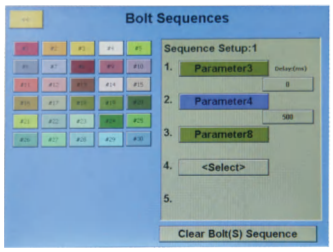
balance arm (**optional**)
code **HES-E-X**



controller (included)



interface of tightening parameter setting



interface of workpiece sequence matching parameters

SPECIFICATION

Code		HES-TP01	HES-TP02
Torque range		0.02~0.23N.m	0.15~0.90N.m
Motor power		DC40W	
Max. speed		5000rpm	1200rpm
Measuring range		internal thread: M4~M13	internal thread: M14~M30
Power supply		AC 85~264V, 47~63Hz	
Operation interface display		touch screen menu operation mode, 3 function buttons+3 LED indicators	
Torque accuracy		±5% at 30%~80% of maximum output torque, ±8% in other range	
Dimension	main body	214×64.4×38mm	231×64.4×38mm
	controller	151.5×185.8×221mm	
Net weight	main body	400g	500g
	controller	3500g	

STANDARD DELIVERY

Main body	1 pc
Controller	1 pc
USB transmission cable	1 pc

OPTIONAL ACCESSORY

Thread plug gauge (Go)	HES-TP-□□
Balance arm	HES-E-X
Torque tester	IST-HP1

THREAD PLUG GAUGE (Go)

metric

Code	Size (Go)
HES-TP-4	M4×0.7-6H
HES-TP-5	M5×0.8-6H
HES-TP-6	M6×1-6H
HES-TP-7	M7×1-6H
HES-TP-8	M8×1.25-6H
HES-TP-10	M10×1.5-6H
HES-TP-12	M12×1.75-6H
HES-TP-14	M14×2-6H
HES-TP-16	M16×2-6H
HES-TP-18	M18×2.5-6H
HES-TP-20	M20×2.5-6H
HES-TP-22	M22×2.5-6H
HES-TP-24	M24×3-6H
HES-TP-27	M27×3-6H
HES-TP-30	M30×3.5-6H

metric fine

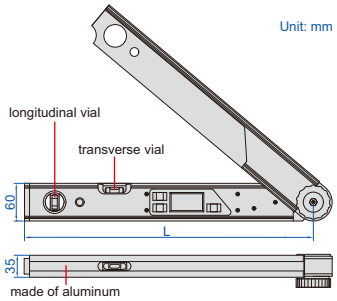
Code	Size (Go)
HES-TP-8P	M8×1-6H
HES-TP-10P	M10×1-6H
HES-TP-10Q	M10×1.25-6H
HES-TP-12P	M12×1-6H
HES-TP-12Q	M12×1.25-6H
HES-TP-12R	M12×1.5-6H
HES-TP-14P	M14×1-6H
HES-TP-14Q	M14×1.25-6H
HES-TP-14R	M14×1.5-6H
HES-TP-16P	M16×1-6H
HES-TP-16R	M16×1.5-6H
HES-TP-18P	M18×1-6H
HES-TP-18R	M18×1.5-6H
HES-TP-20P	M20×1-6H
HES-TP-20R	M20×1.5-6H
HES-TP-22P	M22×1-6H
HES-TP-22R	M22×1.5-6H
HES-TP-24P	M24×1-6H
HES-TP-24R	M24×1.5-6H
HES-TP-30R	M30×1.5-6H

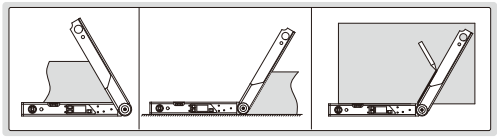
WATERPROOF DIGITAL PROTRACTOR (HEAVY DUTY)

AUTOMATIC BACKLIGHT | ABSOLUTE LEVEL | IP54 WATERPROOF

- Suitable for setting horizontal and vertical mitre angles of cutting machine
- Buttons: ON/OFF, HOLD/SUP, SPR/CNR/MTR/BVL
- IP54 dust/waterproof
- With transverse and longitudinal vials
- 2xAAA batteries
- Absolute level, zero setting is not needed when batteries are replaced
- Backlight turns off in one minute after no data changing, automatic power off in 5 minutes

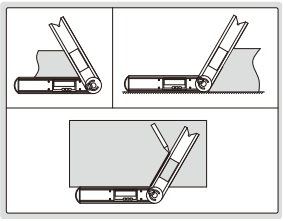
2174-225

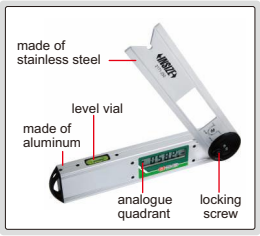




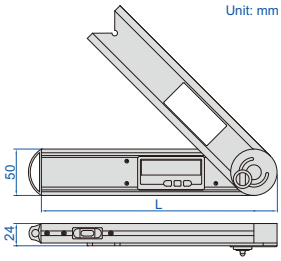
Code	Size (L)	Range	Resolution	Accuracy
2174-225	460mm	0-225°	0.05°	±0.10°

DIGITAL PROTRACTOR





2171-250



- Buttons: on/off, hold (keep the reading), zero, ABS (absolute and incremental measurement)
- Fix the locking screw at 4 positions for different measuring ranges: 0°~225°, -225°~0°, -45°~180°, -180°~45°
- Remove the locking screw for 360° range
- With level vial
- Battery CR2032
- Automatic power off

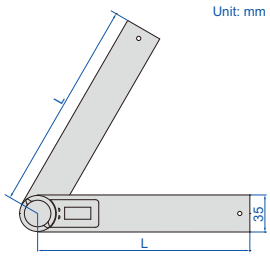
Code	Size (L)	Range	Resolution	Accuracy
2171-250	250mm	0-360°	0.05°	±0.15°

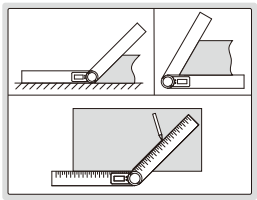
DIGITAL PROTRACTORS

- Accuracy: ±0.3°
- Resolution: 0.1°
- Buttons: on/off, zero
- With clamping screw to lock the blades
- Graduation of blade: 1mm and 1/32"
- Made of stainless steel
- CR2032 battery, automatic power off

Code	Size (L)	Range
2176-200	200mm	0-360°
2176-300	300mm	0-360°

2176-200

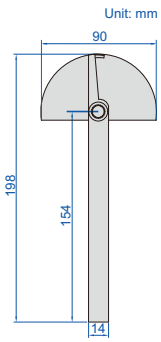




PROTRACTOR (ECONOMIC TYPE)

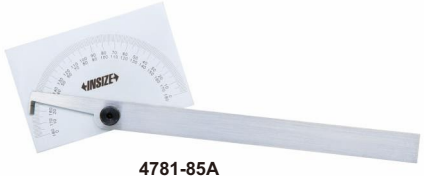
- Graduation: 1°
- Made of stainless steel
- With clamping screw

4780-85A

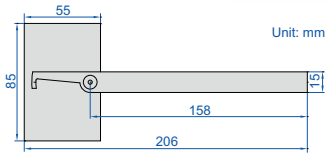


Code	Size	Range	Accuracy
4780-85A	90×154mm	0-180°	±0.5°

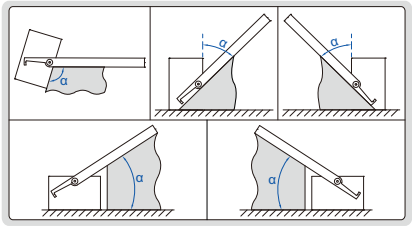
PROTRACTOR



4781-85A



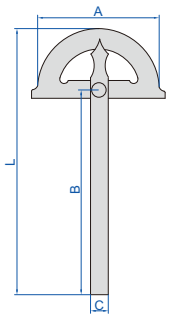
- Graduation: 1°
- Accuracy: ±0.3°
- Made of stainless steel
- Satin chrome plated scale
- With clamping screw



Code	Size	Range
4781-85A	85×158mm	0-180°

PROTRACTORS

4799-180

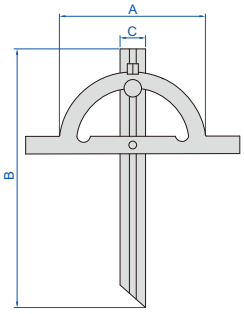


- Graduation: 1°
- Made of stainless steel
  (**4799-1300** is made of carbon steel)
- Satin chrome plated scale
- With clamping screw

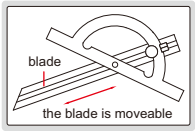
Code	Size (AxB)	Range	Accuracy	L	C
4799-180	80×120mm	0-180°	±0.3°	168mm	11mm
4799-1120	120×150mm	0-180°	±0.3°	220mm	14mm
4799-1150	150×200mm	0-180°	±0.3°	285mm	16mm
4799-1200	200×300mm	0-180°	±0.3°	413mm	20mm
4799-1300	300×500mm	0-180°	±0.3°	675mm	30mm

PROTRACTORS

4797-100

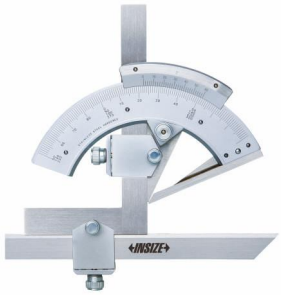


- Graduation: 1°
- Made of carbon steel
- Satin chrome plated
- With clamping screw
- The blade is moveable

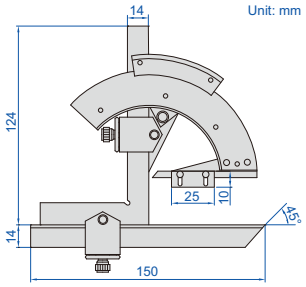


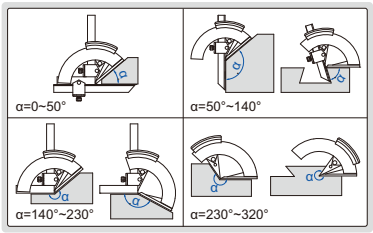
Code	Size (AxB)	Range	Accuracy	C
4797-100	100×150mm	10-170°	±0.3°	18mm
4797-150	150×300mm	10-170°	±0.3°	22mm
4797-200	200×400mm	10-170°	±0.3°	24mm
4797-250	250×500mm	10-170°	±0.3°	28mm
4797-300	300×600mm	10-170°	±0.3°	32mm

PROTRACTOR



2374-320





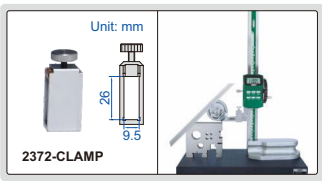
- Graduation: 2'
- Made of stainless steel
- Satin chrome plated scale

Code	Range	Accuracy
2374-320	0-320°	±2'

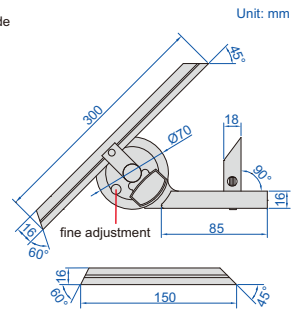
UNIVERSAL PROTRACTOR

- Parallax-free reading
- Made of stainless steel
- Optional accessory: clamp (code **2372-CLAMP**), suitable for height gauges **1156, 1150-300, 1351, 1151** and **1250**

clamp for height gauges (**optional**)



2372-360

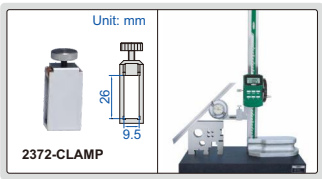


Code	Range	Graduation	Accuracy
2372-360	0-360°	5'	±5'

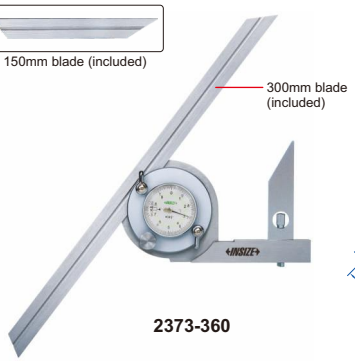
DIAL PROTRACTOR

- Made of stainless steel
- Optional accessory: clamp (code **2372-CLAMP**), suitable for height gauges **1156, 1150-300, 1351, 1151** and **1250**

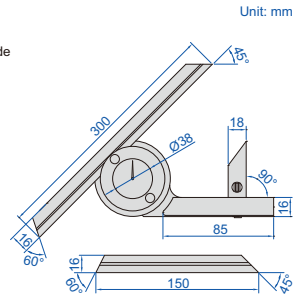
clamp for height gauges (**optional**)



150mm blade (included)



2373-360



Code	Range	Graduation	Accuracy
2373-360	0-360°	5'	±5'

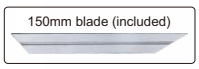
DIGITAL PROTRACTOR

POPULAR MODEL

ABSOLUTE ZERO

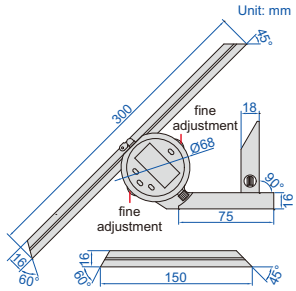
DATA OUTPUT

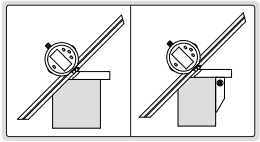
- Absolute zero, zero setting is not needed when batteries are replaced
- Button function: choose 0~90°, 0-180° or 0-360° display, change resolution, display flips over, data hold, zero, on/off supplementary angle measurement
- Battery CR2032, automatic power off
- Data output
- Made of stainless steel
- Optional square for zero setting
- Optional accessory: clamp (code **2372-CLAMP**), suitable for height gauges **1156**, **1150-300**, **1351**, **1250** and **1151**, wireless transmitter code **7315-2771** (receiver is needed)



150mm blade (included)

2771-360





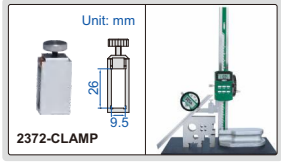
Code	Range	Resolution	Accuracy
2771-360	0-360°	1'/0.01°	±5'

Square (for zero setting, optional)

Code
2771-S90

square (**optional**)

clamp for height gauges (**optional**)



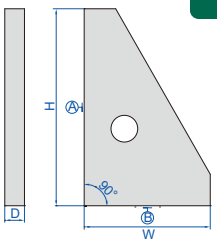
GRANITE SQUARES

CUSTOM-MADE
SUPPLY SPECIAL SIZES ACCORDING TO CUSTOMER'S REQUEST

- DIN875 grade 000

Code	Size (HxW)	Flatness of A	Flatness of B	Squareness of A to B	D
4141-250	250×160mm	1μm	1μm	2μm	25mm
4141-400	400×250mm	1.5μm	1μm	3μm	40mm
4141-630	630×400mm	2μm	1.5μm	4μm	63mm

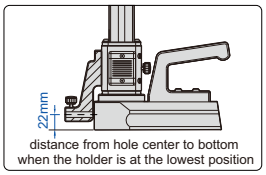
4141-250

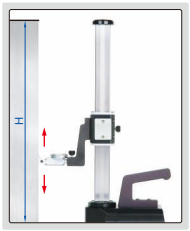


PERPENDICULARITY TESTERS

VIDEO

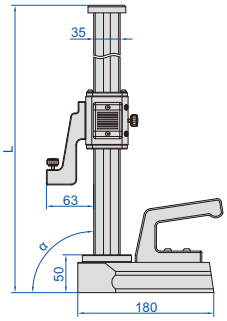
- Optional accessory: dial test indicators (graduation: 1μm or 2μm)

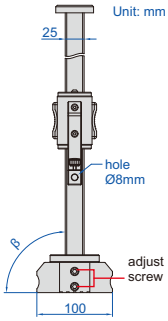




dial test indicator is optional

4770-300



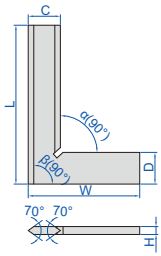


Code	Range (H)	Perpendicularity (α)	Side perpendicularity (β)	L
4770-300	0-300mm	3μm	10μm	460mm
4770-600	0-600mm	5μm	20μm	760mm

90° BEVELED EDGE SQUARES

- Satin chrome plating
- Beveled edges for inside and outside measurement
- Made of hardened stainless steel

4790-0100



DIN875 grade 00 (mm)

Code	Size (LxW)	Squareness		C	D	H
		Inside (α)	Outside (β)			
4790-050	50×40mm	2.4μm	2.5μm	13	13	4
4790-075	75×50mm	2.6μm	2.8μm	15	15	4
4790-0100	100×70mm	2.8μm	3.0μm	20	20	5
4790-0150	150×100mm	3.2μm	3.5μm	30	30	6
4790-0200	200×130mm	3.7μm	4.0μm	34	34	7
4790-0300	300×200mm	4.6μm	5.0μm	40	40	8

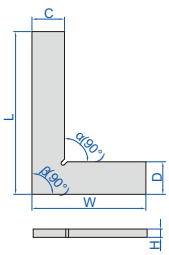
DIN875 grade 0 (mm)

Code	Size (LxW)	Squareness		C	D	H
		Inside (α)	Outside (β)			
4790-500	50×40mm	6μm	6μm	13	13	4
4790-750	75×50mm	6μm	7μm	15	15	4
4790-1000	100×70mm	7μm	7μm	20	20	5
4790-1500	150×100mm	7μm	8μm	30	30	6
4790-2000	200×130mm	8μm	9μm	34	34	7
4790-3000	300×200mm	10μm	11μm	40	40	8

90° FLAT EDGE SQUARES

- Made of stainless steel

4791-100



DIN875 grade 1 (hardened) (mm)

Code	Size (LxW)	Squareness		C	D	H
		Inside (α)	Outside (β)			
4791-501	50×40mm	12μm	13μm	12	12	5
4791-751	75×50mm	13μm	14μm	15	15	5
4791-1001	100×70mm	14μm	15μm	20	20	5
4791-1501	150×100mm	16μm	18μm	25	25	5
4791-2001	200×130mm	19μm	20μm	30	30	6
4791-2501	250×165mm	21μm	23μm	35	35	7
4791-3001	300×200mm	23μm	25μm	40	40	8

DIN875 grade 0 (hardened) (mm)

Code	Size (LxW)	Squareness		C	D	H
		Inside (α)	Outside (β)			
4791-50	50×40mm	6μm	6μm	15	15	4
4791-75	75×50mm	6μm	7μm	15	15	4
4791-100	100×70mm	7μm	7μm	20	20	5
4791-150	150×100mm	7μm	8μm	30	30	6
4791-200	200×130mm	8μm	9μm	30	30	7
4791-250	250×165mm	9μm	10μm	35	35	7
4791-300	300×200mm	10μm	11μm	40	40	8

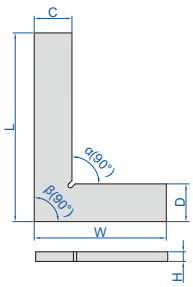
DIN875 grade 2 (not hardened) (mm)

Code	Size (LxW)	Squareness		C	D	H
		Inside (α)	Outside (β)			
4791-502	50×40mm	24μm	25μm	12	12	5
4791-752	75×50mm	26μm	28μm	15	15	5
4791-1002	100×70mm	28μm	30μm	20	20	5
4791-1502	150×100mm	33μm	35μm	25	25	5
4791-2002	200×130mm	38μm	40μm	30	30	6
4791-2502	250×165mm	43μm	45μm	35	35	7
4791-3002	300×200mm	47μm	50μm	40	40	8

MACHINIST SQUARES (ECONOMIC TYPE)

ATTENTION: NO ANTI-RUST TREATMENT, NOT HARDEND

4796-150



- DIN875 grade 2
- Made of carbon steel, no anti-rust treatment, not hardened

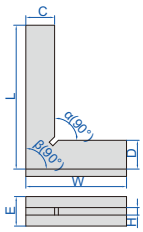
(mm)

Code	Size (LxW)	Squareness		C	D	H
		Inside (α)	Outside (β)			
4796-50	50×40mm	24μm	25μm	12	12	5
4796-75	75×50mm	26μm	28μm	15	15	5
4796-100	100×70mm	28μm	30μm	20	20	5
4796-125	125×80mm	30μm	33μm	22	22	5
4796-150	150×100mm	33μm	35μm	25	25	5
4796-200	200×130mm	37μm	40μm	30	30	6
4796-250	250×165mm	42μm	45μm	35	35	7
4796-300	300×200mm	46μm	50μm	40	40	8
4796-350	350×200mm	51μm	55μm	38	38	6
4796-400	400×250mm	56μm	60μm	45	45	9
4796-450	450×250mm	58μm	65μm	38	38	9
4796-500	500×330mm	65μm	70μm	50	50	9

90° FLAT EDGE SQUARES WITH WIDE BASE

- Made of hardened stainless steel

4793-100



DIN875 grade 1 (mm)

Code	Size (LxW)	Squareness		C	D	H	E
		Inside (α)	Outside (β)				
4793-501	50×40mm	12μm	13μm	15	15	4	13
4793-751	75×50mm	13μm	14μm	15	15	4	15
4793-1001	100×70mm	14μm	15μm	20	20	5	20
4793-1501	150×100mm	16μm	18μm	30	30	6	30
4793-2001	200×130mm	19μm	20μm	30	30	7	30
4793-2501	250×165mm	21μm	23μm	35	35	7	35
4793-3001	300×200mm	23μm	25μm	40	40	8	40

DIN875 grade 0 (mm)

Code	Size (LxW)	Squareness		C	D	H	E
		Inside (α)	Outside (β)				
4793-50	50×40mm	6μm	6μm	15	15	4	13
4793-75	75×50mm	6μm	7μm	15	15	4	15
4793-100	100×70mm	7μm	7μm	20	20	5	20
4793-150	150×100mm	7μm	8μm	30	30	6	30
4793-200	200×130mm	8μm	9μm	30	30	7	30
4793-250	250×165mm	9μm	10μm	35	35	7	35
4793-300	300×200mm	10μm	11μm	40	40	8	40

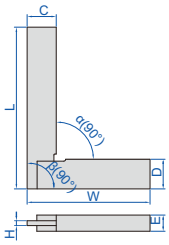
DIN875 grade 2 (mm)

Code	Size (LxW)	Squareness		C	D	H	E
		Inside (α)	Outside (β)				
4793-502	50×40mm	24μm	25μm	15	15	4	13
4793-752	75×50mm	26μm	28μm	15	15	4	15
4793-1002	100×70mm	28μm	30μm	20	20	5	20
4793-1502	150×100mm	33μm	35μm	30	30	6	30
4793-2002	200×130mm	38μm	40μm	30	30	7	30
4793-2502	250×165mm	43μm	45μm	35	35	7	35
4793-3002	300×200mm	47μm	50μm	40	40	8	40

90° FLAT EDGE SQUARES WITH WIDE BASE

- DIN875 grade 0
- Made of hardened stainless steel

4792-100



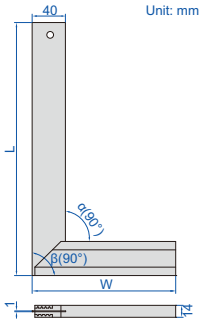
(mm)

Code	Size (LxW)	Squareness		C	D	H	E
		Inside (α)	Outside (β)				
4792-50	50×40mm	6μm	6μm	12	12	3	10
4792-75	75×50mm	6μm	7μm	14	14	3	10
4792-100	100×70mm	7μm	7μm	18	18	3	10
4792-150	150×100mm	8μm	8μm	22	22	4	12
4792-200	200×130mm	9μm	9μm	25	25	4	12

TRY SQUARE

- Graduation: 1mm
- Stainless steel blade, aluminum base

2275-300

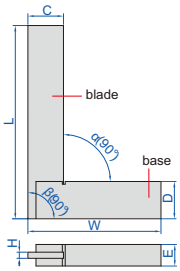


Code	Size (LxW)	Squareness	
		Inside (α)	Outside (β)
2275-300	300×170mm	0.5mm	0.5mm

MACHINIST SQUARES WITH WIDE BASE (ECONOMIC TYPE)

ATTENTION: NO ANTI-RUST TREATMENT, NOT HARDEND

4707-100



- DIN875 grade 2
- Made of carbon steel, no anti-rust treatment, not hardend

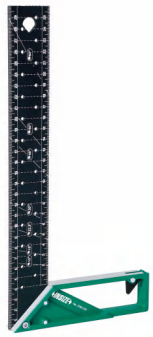
(mm)

Code	Size (LxW)	Squareness		C	D	H	E
		Inside (α)	Outside (β)				
4707-50	50×40mm	24μm	25μm	16	12	3	9
4707-75	75×50mm	26μm	28μm	16	16	3	9
4707-100	100×70mm	28μm	30μm	19	19	3	12
4707-150	150×100mm	33μm	35μm	25	25	3	16
4707-200	200×130mm	37μm	40μm	30	32	4	16
4707-250	250×165mm	42μm	45μm	30	32	4	19
4707-300	300×200mm	47μm	50μm	32	32	4	19
4707-400	400×250mm	56μm	60μm	38	38	5	22
4707-500	500×300mm	65μm	70μm	45	50	6	25
4707-600	600×350mm	75μm	80μm	50	50	6	30
4707-750	750×400mm	90μm	95μm	55	55	6	50
4707-900	900×500mm	103μm	110μm	65	75	9	50
4707-1000	1000×550mm	113μm	120μm	65	75	9	50

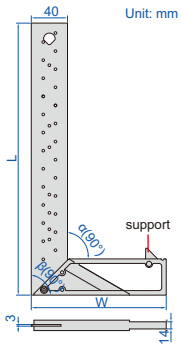
TRY SQUARE

- Graduation: 1mm
- Aluminum blade and base
- 4 milled surfaces
- Retractable metal ledge support
- Etchings and holes for beveling and framing: 10°, 15°, 22.5°, 30°, 45°, 50° and 60°
- Etchings and holes every cm for fluid pencil marking

Code	Size (LxW)	Squareness	
		Inside (α)	Outside (β)
2280-300	300×150mm	0.5mm	0.5mm



2280-300



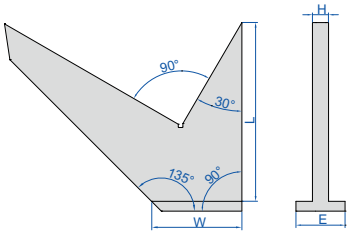
SPECIAL SQUARES

- DIN875 grade 2
- Made of stainless steel, not hardened

(mm)

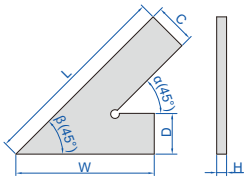
Code	Size (L×W)	Angle	Accuracy	H	E
4765-110	110×59mm	30°,90°,135°	33μm	5	25
4765-175	175×94mm	30°,90°,135°	38μm	6	25

4765-110



45° SQUARES

- Made of stainless steel, not hardened



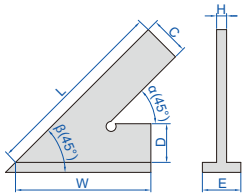
4745-1100

(mm)

Code	Size (LxW)	Accuracy		C	D	H
		Inside (α)	Outside (β)			
4745-1100	100×70mm	27μm	30μm	20	20	5
4745-1120	120×80mm	29μm	32μm	20	20	5
4745-1150	150×100mm	32μm	35μm	20	20	5
4745-1200	200×130mm	36μm	40μm	25	25	5

45° SQUARES WITH WIDE BASE

- Made of stainless steel, not hardened



4747-150

(mm)

Code	Size (LxW)	Accuracy		C	D	H	E
		Inside (α)	Outside (β)				
4747-150	150×100mm	32μm	35μm	20	20	5	20
4747-200	200×130mm	36μm	40μm	25	25	5	25

STRAIGHT EDGES

4700-100

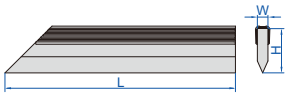
- DIN874
- Beveled edge
- Made of hardened stainless steel
- Satin chrome plating

(mm)

Code	Size (L)	Straightness	W	H
4700-100	100mm	2.4μm	5	25
4700-150	150mm	2.6μm	6	30
4700-200	200mm	2.8μm	6	30
4700-300	300mm	3.2μm	8	40

STRAIGHT EDGES (ECONOMIC TYPE)

4715-100

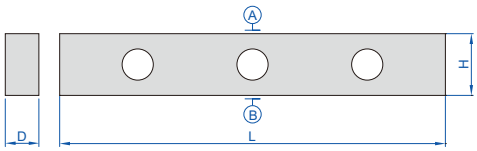


- DIN874
- Beveled edge
- Made of hardened stainless steel

Code	Size (L)	Straightness	W	H
4715-100	100mm	2μm	5mm	20mm
4715-150	150mm	3μm	6mm	20mm
4715-200	200mm	3μm	6mm	25mm
4715-300	300mm	3μm	8mm	35mm

GRANITE STRAIGHT EDGES

4147-500A



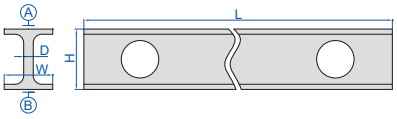
Code	Length (L)	Flatness of A and B	Parallelism between A and B	D	H
4147-500A	500mm	2.1μm	3.2μm	50mm	80mm
4147-1000A	1000mm	3.0μm	4.5μm	60mm	120mm

MAGNALIUM STRAIGHT EDGES

LIGHT WEIGHT

4180-1500

- Made of magnalium, light weight, non-deform, no rusty

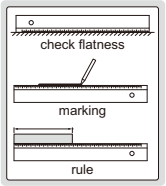


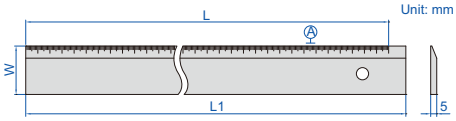
(mm)

Code	Length (L)	Flatness of A and B	Parallelism between A and B	H	W	D	Net weight
4180-500	500mm	3μm	4μm	60	30	5	1kg
4180-1000	1000mm	5μm	8μm	60	30	5	1.5kg
4180-1500	1500mm	15μm	22μm	100	40	7	4.5kg
4180-2000	2000mm	18μm	27μm	100	40	7	6kg
4180-3000	3000mm	48μm	72μm	150	80	8	21kg

STRAIGHT EDGES

7111-300A



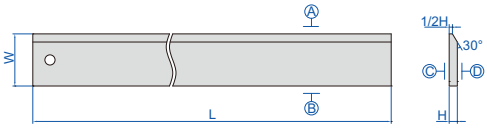


- Check flatness and straightness, as well as for marking
- Graduation on the beveled edge
- Made of hardened tool steel
- Chrome plated
- Graduation: 1mm

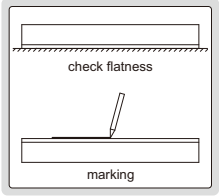
Code	Range (L)	Straightness of A	L1	W
7111-300A	300mm	0.02mm	310mm	40mm
7111-500A	500mm	0.03mm	510mm	40mm

PRECISION STRAIGHT EDGES WITH BEVELED EDGE

7118-300



- Check flatness and for marking
- Made of tool steel



Code	Range (L)	Flatness of A and B	Flatness of C and D	W	H
7118-300	305mm	0.005mm	0.05mm	41mm	6.3mm
7118-600	610mm	0.006mm	0.06mm	51mm	7.9mm
7118-900	914mm	0.007mm	0.06mm	64mm	9.5mm

OPTICAL FLATS

CAN BE CUSTOM-MADE

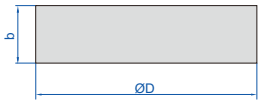
VIDEO

- Check flatness
- Single working face, the arrow indicates the working face

4191-45B

Code	b	ØD	Flatness
4191-45A	12mm	45mm	0.03μm
4191-60A	15mm	60mm	0.03μm

Code	b	ØD	Flatness
4191-45B	12mm	45mm	0.1μm
4191-60B	15mm	60mm	0.1μm



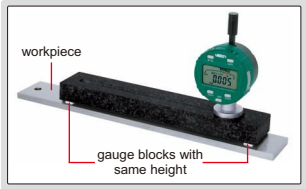
STRAIGHTNESS/FLATNESS GAUGE

VIDEO

DATA OUTPUT

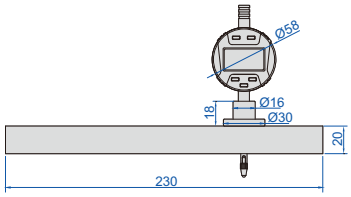
GRANITE HOLDER CAN BE CUSTOMIZED ACCORDING TO WORKPIECES

application



2144-200

Unit: mm



- Optional accessory: wireless transmitter code **7315-50M** (receiver is needed)

Code	Range	Digital indicator resolution	Straightness measurement accuracy	Parallelism of top and botton surfaces of granite holder	Flatness of top and botton surfaces of granite holder
2144-200	200mm	0.001mm/0.00005"	3μm	2μm	1.5μm

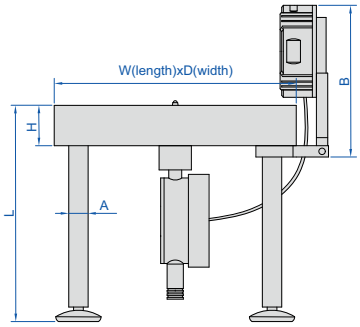
FLATNESS MEASUREMENT STANDS

GRANITE PLATE CAN BE CUSTOMIZED ACCORDING TO WORKPIECES

VIDEO

DATA OUTPUT

6852-150



application

display can be rotated

- Digital indicator resolution: 0.001mm/0.00005"
- Optional accessory: wireless transmitter code **7315-50M** (receiver is needed)

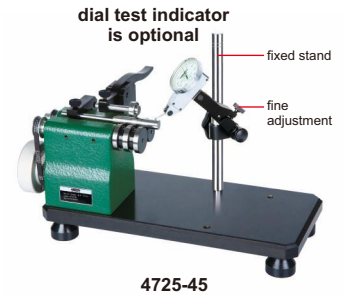
(mm)

Code	Flatness measurement accuracy	Flatness of granite plate	W	D	H	L	A	B
6852-150	2μm	2μm	150	150	25	135	12	100
6852-300	2μm	2μm	300	300	50	210	20	135

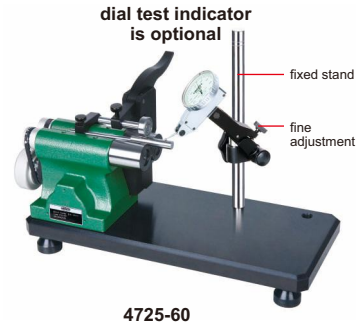
CONCENTRICITY GAUGES

VIDEO

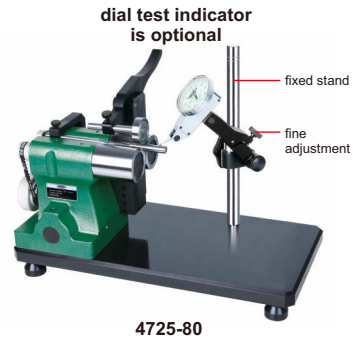
HIGH STABILITY, LONG WORKING LIFE



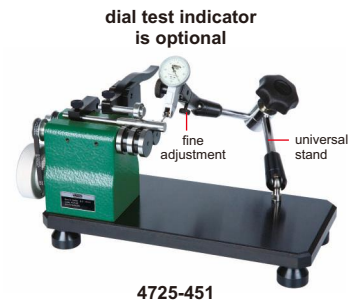
4725-45



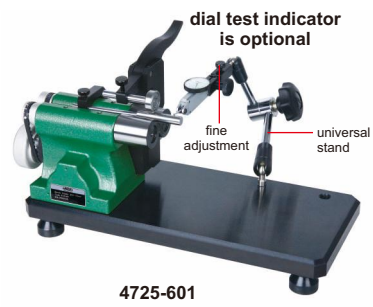
4725-60



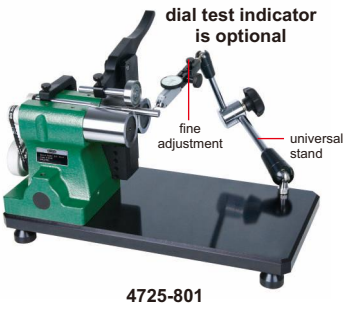
4725-80



4725-451

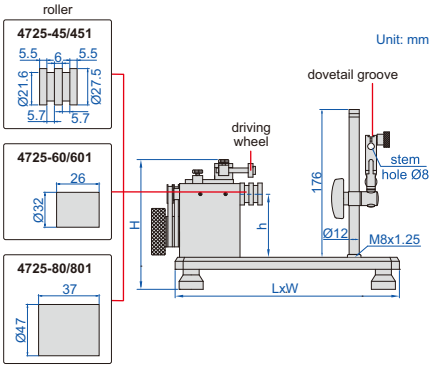


4725-601

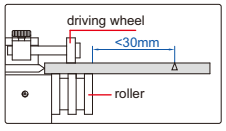


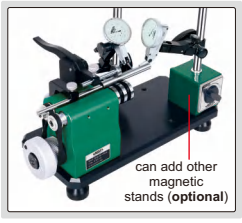
4725-801

- With ball bearing, high stability, long working life
- Accuracy: 2μm
- Optional accessory: dial test indicator



to ensure the accuracy 2μm, the distance between measuring point and roller should be <30mm



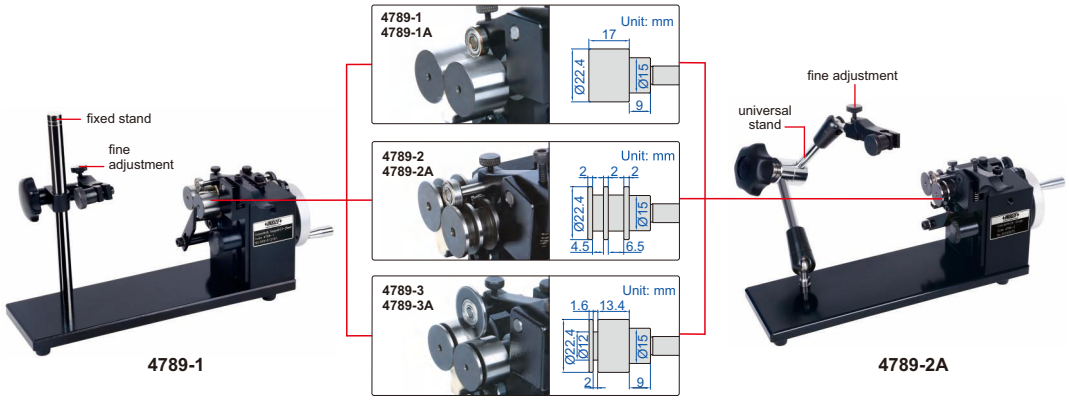


Code	Diameter range	Center height (h)	LxWxH	Net weight	Remark
4725-45	Ø3-45mm	80mm	280x130x170mm	6kg	fixed stand, good rigidity
4725-60	Ø8-60mm	90mm	350x160x190mm	15.6kg	
4725-80	Ø8-80mm	130mm	400x200x250mm	25kg	
4725-451	Ø3-45mm	80mm	280x130x170mm	6kg	universal stand, convenient operation
4725-601	Ø8-60mm	90mm	350x160x190mm	15.6kg	
4725-801	Ø8-80mm	130mm	400x200x250mm	25kg	

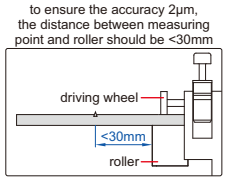
CONCENTRICITY GAUGES

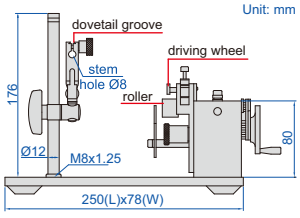
VIDEO

- Accuracy 2μm
- Optional accessory: dial test indicator



Code	Applicable diameter	Remark
4789-1	Ø3.5mm-25mm	fixed stand, good rigidity
4789-2	Ø1mm-25mm	
4789-3	Ø1mm-25mm	
4789-1A	Ø3.5mm-25mm	universal stand, convenient operation
4789-2A	Ø1mm-25mm	
4789-3A	Ø1mm-25mm	



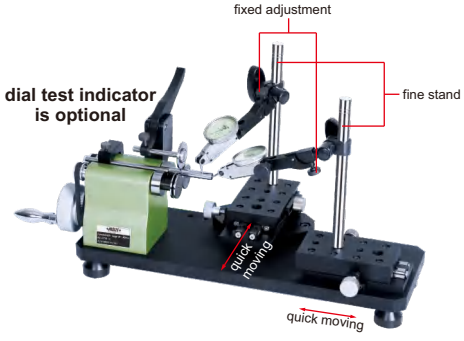


4789-1

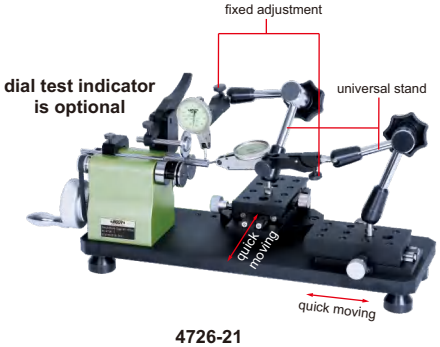
CONCENTRICITY GAUGES

QUICK-POSITIONING, SUITABLE FOR MASS MEASUREMENT

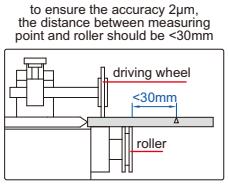
VIDEO



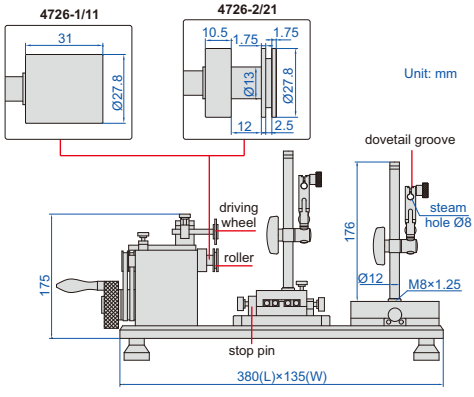
4726-2



4726-21



- With ball bearing, high stability, long working life
- Accuracy: 2μm
- Optional accessory: dial test indicator

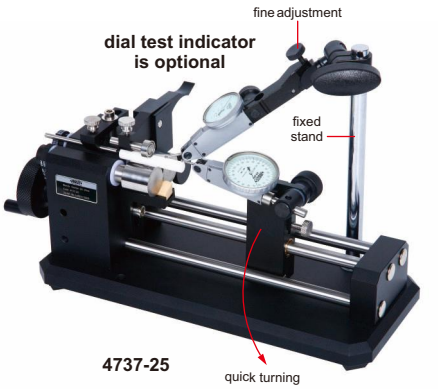


Code	Applicable diameter	Remark
4726-1	Ø4-40mm	fixed stand, good rigidity
4726-2	Ø2-40mm	fixed stand, good rigidity
4726-11	Ø4-40mm	universal stand, convenient operation
4726-21	Ø2-40mm	universal stand, convenient operation

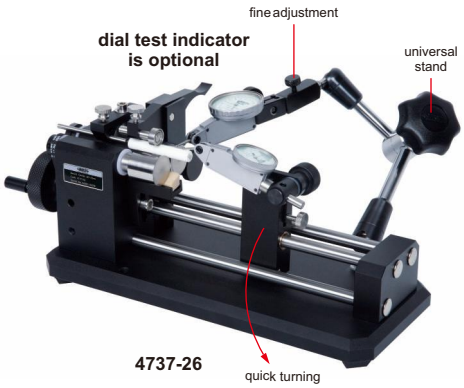
QUICK POSITIONING CONCENTRICITY GAUGES

VIDEO

QUICK-POSITIONING, SUITABLE FOR MASS MEASUREMENT



4737-25

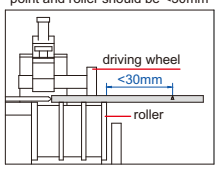


4737-26

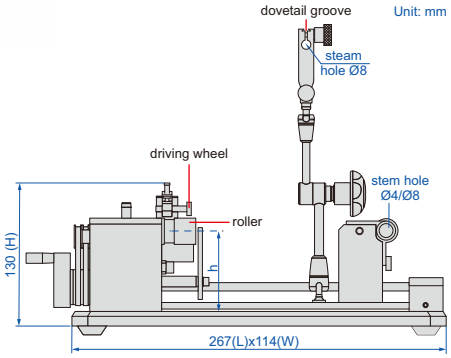
standard rod (included)

- Quick positioning, suitable for mass measurement
- Supplied with standard rod to verify accuracy
- Optional accessory: dial test indicators

to ensure the accuracy 2μm, the distance between measuring point and roller should be <30mm



Unit: mm

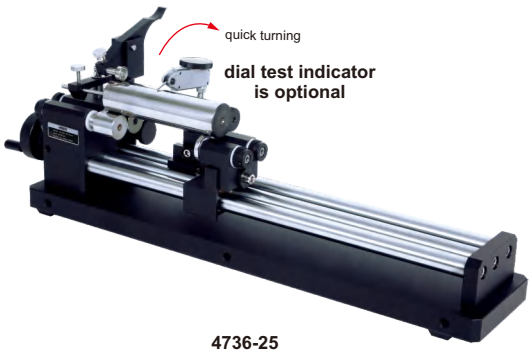


4737-26

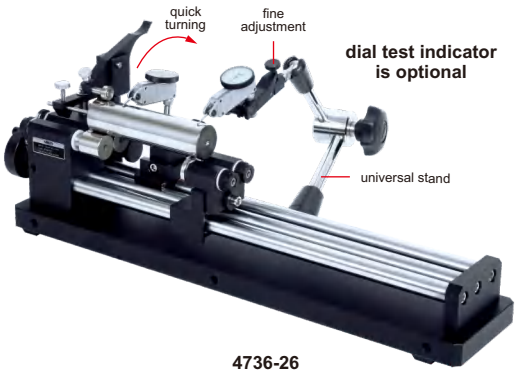
Code	Diameter range	Workpiece length	Accuracy	Center height (h)	L×W×H	Net weight	Remark
4737-25	Ø3-25mm	15-100mm	2μm	70mm	267×114×130mm	3kg	fixed stand, good rigidity
4737-26	Ø3-25mm	15-100mm	2μm	70mm	267×114×130mm	3kg	universal stand, convenient operation

CONCENTRICITY GAUGES

VIDEO

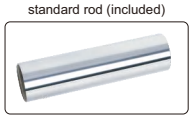


4736-25



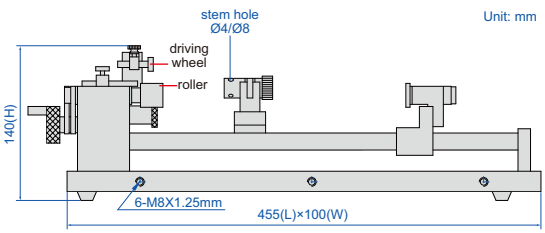
4736-26

standard rod (included)

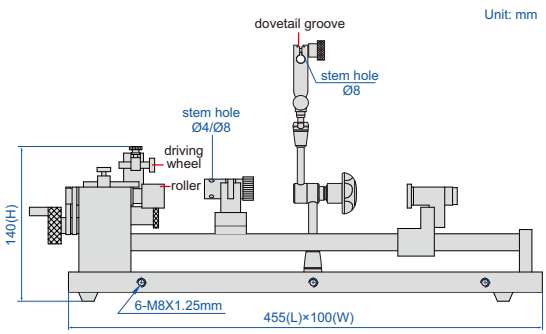


- Quick positioning, suitable for mass measurement
- Supplied with standard rod to verify accuracy
- Optional accessory: dial test indicators

Unit: mm



4736-25



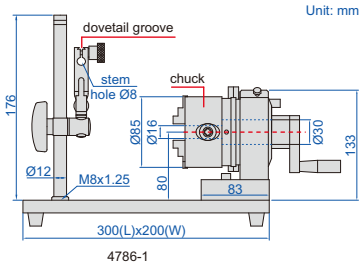
4736-26

Code	Diameter range	Workpiece length	Accuracy	L×W×H	Net weight	Remark
4736-25	Ø3-35mm	15-305mm	2μm	455×100×140mm	6kg	without universal stand
4736-26	Ø3-35mm	15-305mm	2μm	455×100×140mm	6.5kg	with universal stand

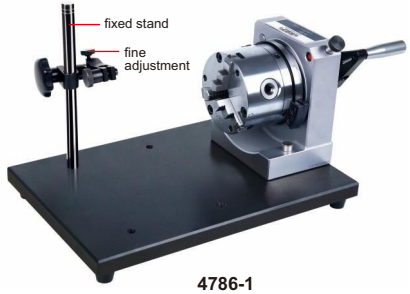
CONCENTRICITY GAUGES

ATTENTION: CALIBRATE BEFORE MEASUREMENT
CALIBRATE WITH SETTING RING FOR TUBES
CALIBRATE WITH CALIBRATION CYLINDER FOR CYLINDERS

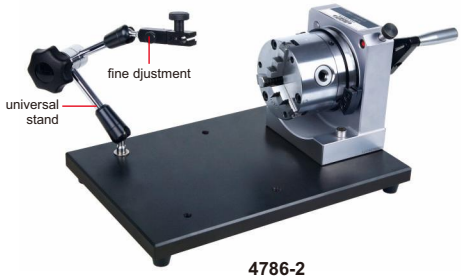
VIDEO



4786-1

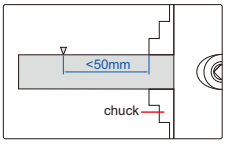


4786-1



4786-2

to ensure the accuracy 3μm, the distance between measuring point and roller should be <50mm



- Accuracy: 3μm
- Ø50mm setting ring and Ø55mm calibration cylinder are included
- Optional accessory: dial test indicator

for cylinder

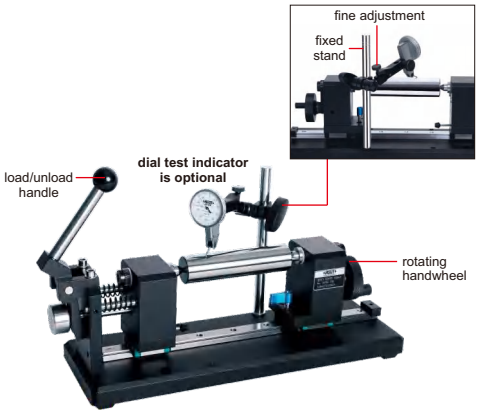
for tube

Code	Applicable inside diameter	Applicable outside diameter	Remark
4786-1	Ø24-64mm	Ø2-70mm	fixed stand, good rigidity
4786-2	Ø24-64mm	Ø2-70mm	universal stand, convenient operation

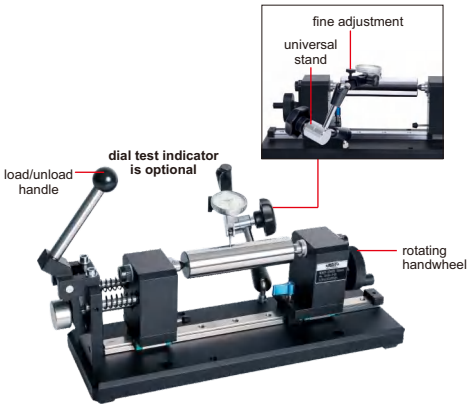
BENCH CENTERS

VIDEO

POPULAR MODEL



4739-150

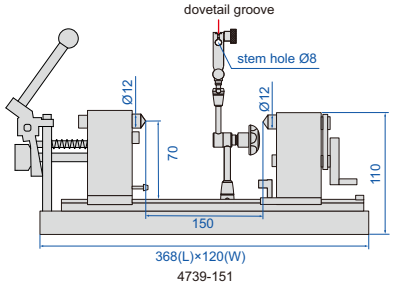


4739-151

- Quick positioning, suitable for mass measurement
- Suitable for cylinders with outside diameter Ø3-140mm or inside diameter Ø1-12mm
- Supplied with standard rod to verify accuracy
- Optional accessory: dial test indicators (code **2880-02**, **2880-02R**, **2897-02**, **2380-02**, **2381-02**, **2381-021**)

standard rod (included)

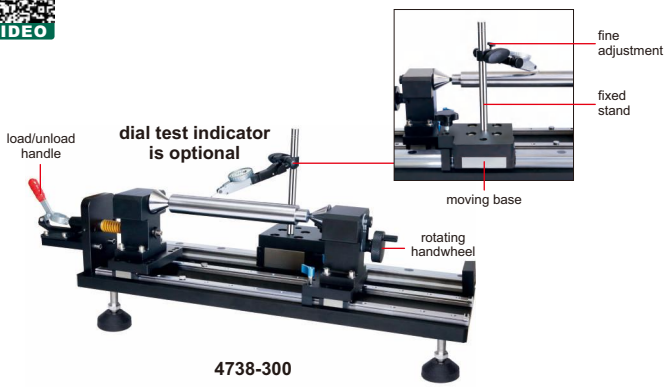
Unit: mm



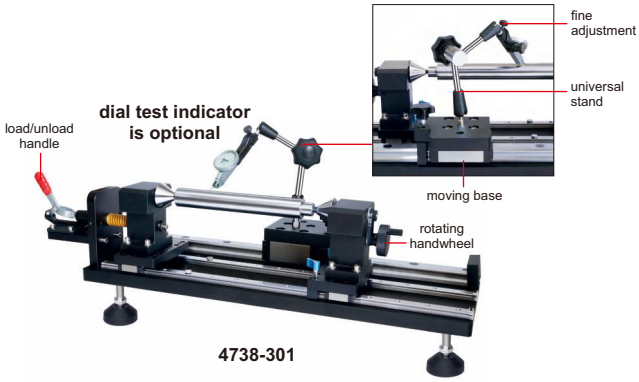
4739-151

Code	Center height	Distance between two centers	Runout accuracy	Net weight	Load	Remark
4739-150	70mm	150mm	2μm	6.5kg	15kg	fixed stand, good rigidity
4739-151	70mm	150mm	2μm	6.5kg	15kg	universal stand, convenient operation

BENCH CENTERS



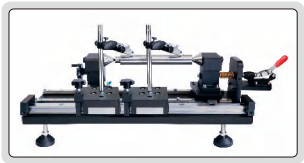
4738-300



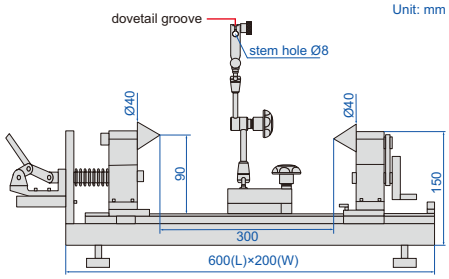
4738-301

standard rod (included)

dual base (**optional**)



Unit: mm

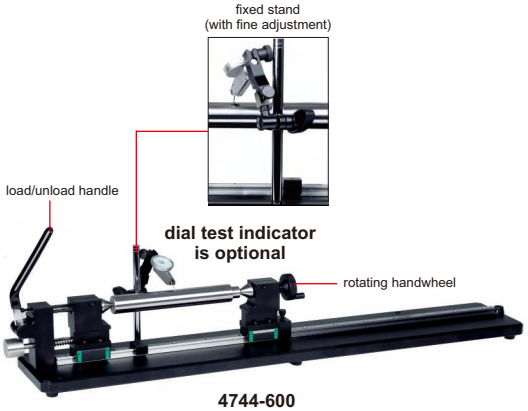


4738-301

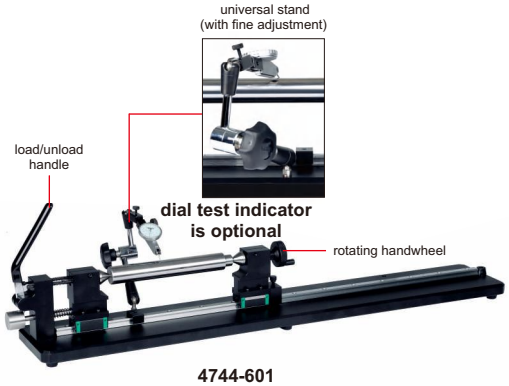
- Quick positioning, suitable for mass measurement
- Suitable for cylinders with outside diameter Ø3-180mm or inside diameter Ø1-40mm
- Supplied with standard rod to verify accuracy
- Optional accessory: dial test indicators

Code	Center height	Distance between two centers	Runout accuracy	Net weight	Load	Remark
4738-300	90mm	300mm	2μm	15kg	20kg	fixed stand, good rigidity
4738-301	90mm	300mm	2μm	15kg	20kg	universal stand, convenient operation

BENCH CENTERS



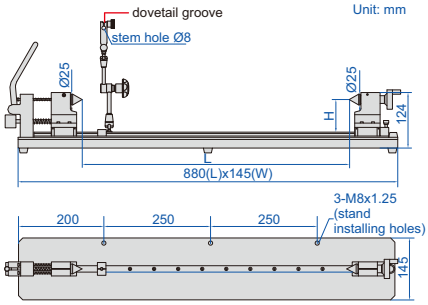
4744-600



4744-601

- Quick positioning, suitable for mass measurement
- Suitable for cylinders with outside diameter Ø3-120mm or inside diameter Ø1-25mm
- Fixed/universal stand can be optionally installed on request, up to 3
- Optional accessory: dial test indicators (code **2880-02**, **2880-02R**, **2897-02**, **2380-02**, **2381-02**, **2381-021**), fixed stand, universal stand

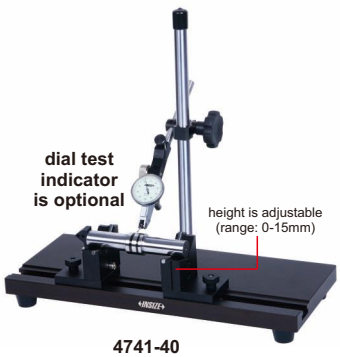
Unit: mm



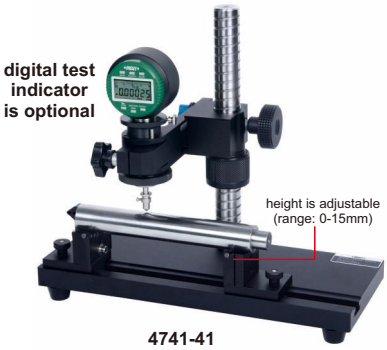
Code	Runout accuracy	Center height (H)	Distance between two centers (L)	Net weight	Load	Remark
4744-600	3μm	60mm	600mm	10.7kg	6kg	fixed stand, good rigidity
4744-601	3μm	60mm	600mm	10.7kg	6kg	universal stand, convenient operation

BENCH CENTERS

VIDEO

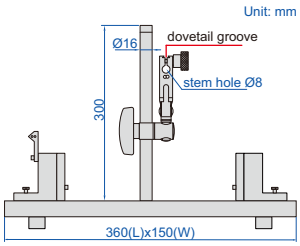


4741-40

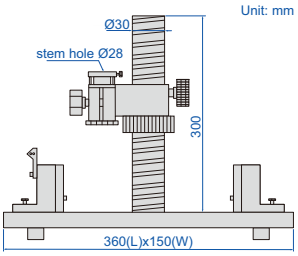


4741-41

- Accuracy: 2μm
- Quick positioning, suitable for mass measurement
- **4741-40** optional accessory:
  dial test indicators
- **4741-41** optional accessory: high precision digital indicators (code **2140-6**, **2140-6WL**)



4741-40



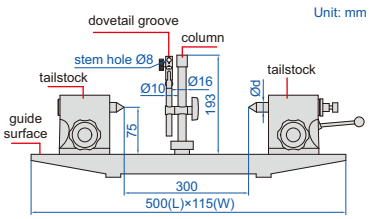
4741-41

Code	Stem hole	Diameter range	Workpiece length
4741-40	Ø8mm	Ø3-40mm	15-300mm
4741-41	Ø28mm	Ø3-40mm	15-300mm

BENCH CENTER (BASIC TYPE)

- Hardened cast-iron guide surface
- Movable column

4742-300



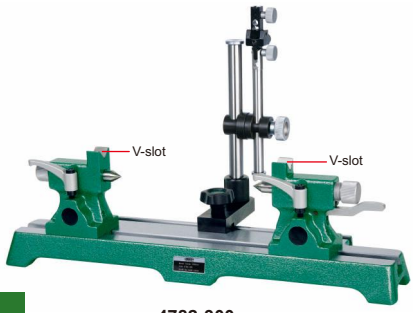
Code	Parallelism*	Runout accuracy	Center height	Distance between two centers	Diameter of center (Ød)	Load
4742-300	0.02mm	2μm	75mm	300mm	Ø16mm	15kg

*Parallelism of two centers to the guide surface

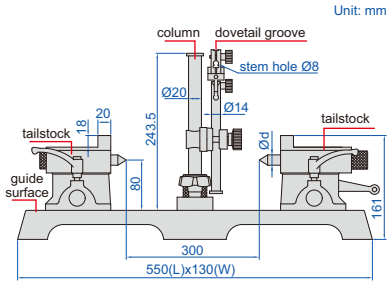
BENCH CENTER

VIDEO

- Distance between two centers: 300mm
- Hardened cast-iron guide surface
- Movable column
- V-slot for cylinder Ø4~Ø22mm



4782-300



Code	Parallelism*	Runout accuracy	Center height	Diameter of center (Ød)	Load
4782-300	0.01mm	2μm	80mm	Ø16mm	25kg

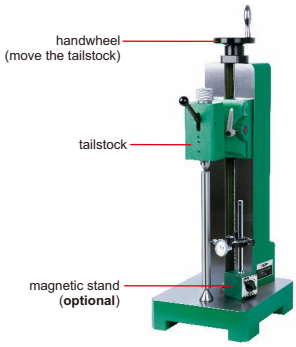
*Parallelism of two centers to the guide surface

VERTICAL BENCH CENTER

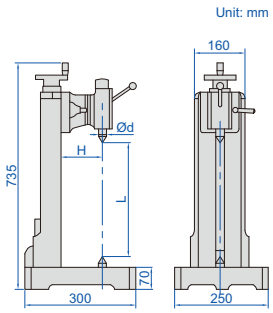
- Runout accuracy: 2μm
- Distance between two centers (L): 360mm
- Diameter of center (Ød): 24.1mm
- Taper of center: MT3
- Hardened cast-iron guide surface
- Use handwheel to move the tailstock
- Optional accessory:
  magnetic stands, dial test indicators

Code	Parallelism*	Center height (H)	Net weight	Load
4728-360	0.01mm	130mm	85kg	80kg

*Parallelism of two centers to the guide surface



4728-360

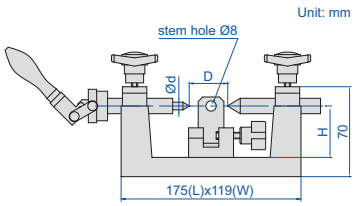


MINI BENCH CENTER

- Distance between two centers (D): 35-100mm
- Diameter of center (Ød): 6mm
- Taper of center: MT1

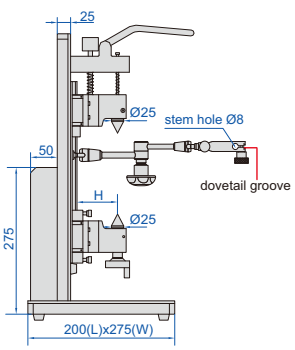
Code	Runout accuracy	Center height (H)	Net weight	Load
4721-75A	2μm	40mm	4.5kg	4kg

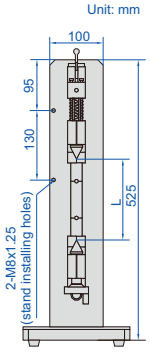
4721-75A

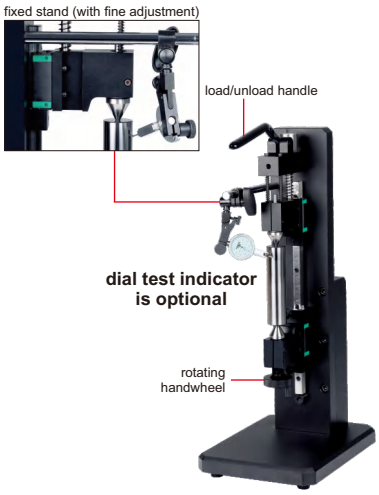


VERTICAL BENCH CENTERS

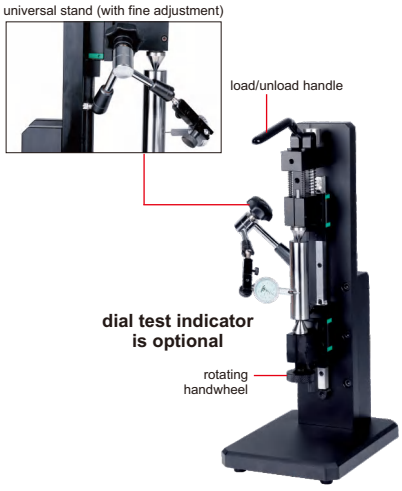
VIDEO





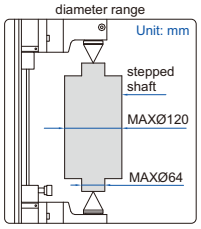


4743-170



4743-171

- Quick positioning, suitable for mass measurement
- Suitable for cylinders with outside diameter Ø3-64mm, and stepped shaft workpieces with a maximum mid-shaft diameter of Ø120mm (centering hole diameter Ø1-25mm)
- Additional fixed/universal stand (optional) can be installed on request, up to 2pcs
- Optional accessory: dial test indicators (code **2880-02**, **2880-02R**, **2897-02**, **2380-02**, **2381-02**, **2381-021**), fixed stand, universal stand



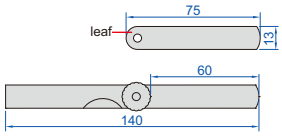
Code	Runout accuracy	Center height (H)	Distance between two centers (L)	Net weight	Load	Remark
4743-170	2μm	60mm	170mm	11.4kg	20kg	fixed stand, good rigidity
4743-171	2μm	60mm	170mm	11.4kg	20kg	universal stand, convenient operation

FEELER GAUGE

4601-25

- Range: 0.04-1.00mm
- Made of hardened alloy steel
- Meet DIN2275/grade TC1
- Accuracy: ±(3+T/80)μm,
  'T' is the thickness of leaves in μm

Unit: mm



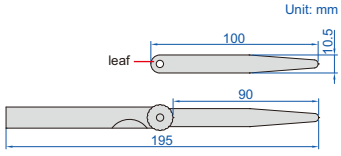
Code	Thickness of leaves included (mm)	Quantity of leaves
4601-25	0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.15, 0.20, 0.25, 0.30, 0.35, 0.40, 0.45, 0.50, 0.55, 0.60, 0.65, 0.70, 0.75, 0.80, 0.85, 0.90, 0.95, 1.00	25

FEELER GAUGES

- Made of hardened alloy steel
- Meet DIN2275/grade TC1
- Accuracy: ±(3+T/80) μm,
  'T' is the thickness of leaves in μm

4602-20

Unit: mm



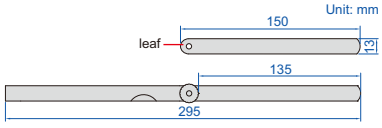
Code	Range	Thickness of leaves included (mm)	Quantity of leaves
4602-13A	0.03-0.50mm	0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.15, 0.20, 0.30, 0.40, 0.50	13
4602-13	0.05-1.00mm	0.05, 0.10, 0.15, 0.20, 0.25, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 1.00	13
4602-17	0.02-1.00mm	0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.15, 0.20, 0.25, 0.30, 0.40, 0.50, 0.75, 1.00	17
4602-20	0.05-1.00mm	0.05, 0.10, 0.15, 0.20, 0.25, 0.30, 0.35, 0.40, 0.45, 0.50, 0.55, 0.60, 0.65, 0.70, 0.75, 0.80, 0.85, 0.90, 0.95, 1.00	20
4602-28	0.05-1.00mm	0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.11, 0.12, 0.13, 0.14, 0.15, 0.20, 0.25, 0.30, 0.35, 0.40, 0.45, 0.50, 0.55, 0.60, 0.65, 0.70, 0.75, 0.80, 0.85, 0.90, 0.95, 1.00	28
4602-32	0.03-1.00mm	0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.13, 0.15, 0.18, 0.20, 0.23, 0.25, 0.28, 0.30, 0.33, 0.35, 0.38, 0.40, 0.45, 0.50, 0.55, 0.60, 0.63, 0.65, 0.70, 0.75, 0.80, 0.85, 0.90, 1.00	32
4602-15	0.05-2.00mm	0.05, 0.10, 0.15, 0.20, 0.25, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 1.00, 1.50, 2.00	15

LONG FEELER GAUGES

- Range: 0.05-1.00mm
- Made of hardened alloy steel
- Meet DIN2275/grade TC1
- Accuracy: ±(3+T/80) μm,
  'T' is the thickness of leaves in μm

4605-20

Unit: mm



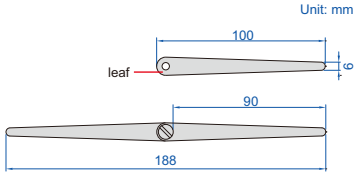
Code	Range	Thickness of leaves included (mm)	Quantity of leaves	L	A	B
4605-13	0.05-1.00mm	0.05, 0.10, 0.15, 0.20, 0.25, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 1.00	13	150mm	135mm	295mm
4605-131	0.05-1.00mm		13	200mm	185mm	395mm
4605-132	0.05-1.00mm		13	300mm	285mm	590mm
4605-20	0.05-1.00mm	0.05, 0.10, 0.15, 0.20, 0.25, 0.30, 0.35, 0.40, 0.45, 0.50, 0.55, 0.60, 0.65, 0.70, 0.75, 0.80, 0.85, 0.90, 0.95, 1.00	20	150mm	135mm	295mm
4605-201	0.05-1.00mm		20	200mm	185mm	395mm
4605-202	0.05-1.00mm		20	300mm	285mm	590mm

PLASTIC FEELER GAUGES

- Accuracy: ±0.04mm (thickness of leaves: 0.25mm)
  ±0.05mm (thickness of leaves: 0.5mm)
  ±0.08mm (thickness of leaves: ≥1mm)

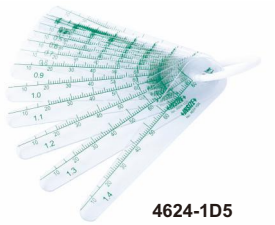
4623-2

Unit: mm



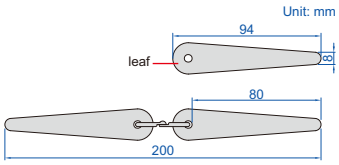
Code	Range	Thickness of leaves included	Quantity of leaves
4623-2	0.25-2.00mm	2.00mm (0.078"), 1.00mm (0.039"), 0.50mm (0.020"), 0.50mm (0.020"), 0.50mm (0.020"), 0.25mm (0.010"), 0.25mm (0.010"), 1.00mm (0.039"), 2.00mm (0.078"), 1.00mm (0.039"), 2.00mm (0.078"), 1.00mm (0.039"), 2.00mm (0.078")	13
4623-5	0.25-5.00mm	1.00mm (0.039"), 0.25mm (0.010"), 0.50mm (0.020"), 1.50mm (0.059"), 2.00mm (0.078"), 2.50mm (0.098"), 3.00mm (0.118"), 3.50mm (0.138"), 4.00mm (0.157"), 4.50mm (0.177"), 5.00mm (0.196")	11

PLASTIC FEELER GAUGE



4624-1D5

- Accuracy: ±0.02mm (thickness of leaves: 0.05-0.1mm)
  ±0.03mm (thickness of leaves: 0.15-0.6mm)
  ±0.04mm (thickness of leaves: ≥0.7mm)

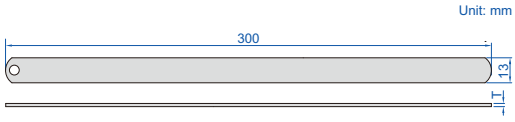


Code	Range	Thickness of leaves included (mm)	Quantity of leaves
4624-1D5	0.05-1.5mm	0.05, 0.1, 0.15, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.0, 1.1, 1.2, 1.3, 1.4, 1.5	17

FEELER GAUGE STOCKS

- Used as shims to accurately set spacing
- Made of hardened alloy steel
- Length 300mm
- Width 13mm
- 10 pcs per package

4622-10



Code	Thickness (T)	Accuracy
4622-02	0.02mm	±3μm
4622-03	0.03mm	±3μm
4622-04	0.04mm	±4μm
4622-05	0.05mm	±4μm
4622-06	0.06mm	±4μm
4622-07	0.07mm	±4μm
4622-08	0.08mm	±4μm
4622-09	0.09mm	±4μm
4622-10	0.10mm	±4μm
4622-12	0.12mm	±5μm

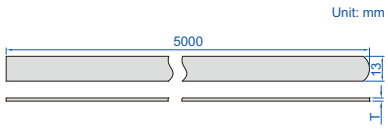
Code	Thickness (T)	Accuracy
4622-15	0.15mm	±5μm
4622-18	0.18mm	±6μm
4622-20	0.20mm	±6μm
4622-25	0.25mm	±6μm
4622-30	0.30mm	±7μm
4622-35	0.35mm	±7μm
4622-40	0.40mm	±8μm
4622-45	0.45mm	±9μm
4622-50	0.50mm	±9μm
4622-55	0.55mm	±10μm

Code	Thickness (T)	Accuracy
4622-60	0.60mm	±11μm
4622-65	0.65mm	±11μm
4622-70	0.70mm	±12μm
4622-75	0.75mm	±12μm
4622-80	0.80mm	±13μm
4622-85	0.85mm	±14μm
4622-90	0.90mm	±14μm
4622-95	0.95mm	±15μm
4622-100	1.00mm	±16μm

FEELER GAUGE ROLLS

- Used as shims to accurately set spacing
- Made of hardened alloy steel
- Length 5m
- Width 13mm

4621-30



Code	Thickness (T)	Accuracy
4621-01	0.01mm	±4μm
4621-02	0.02mm	±4μm
4621-03	0.03mm	±4μm
4621-04	0.04mm	±4μm
4621-05	0.05mm	±4μm
4621-06	0.06mm	±4μm
4621-07	0.07mm	±5μm
4621-08	0.08mm	±5μm
4621-09	0.09mm	±5μm

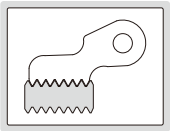
Code	Thickness (T)	Accuracy
4621-10	0.10mm	±5μm
4621-12	0.12mm	±5μm
4621-15	0.15mm	±6μm
4621-18	0.18mm	±7μm
4621-20	0.20mm	±8μm
4621-25	0.25mm	±9μm
4621-30	0.30mm	±9μm
4621-35	0.35mm	±11μm
4621-40	0.40mm	±12μm

Code	Thickness (T)	Accuracy
4621-45	0.45mm	±12μm
4621-50	0.50mm	±14μm
4621-55	0.55mm	±14μm
4621-60	0.60mm	±14μm
4621-65	0.65mm	±14μm
4621-70	0.70mm	±17μm
4621-75	0.75mm	±17μm
4621-80	0.80mm	±19μm
4621-90	0.90mm	±22μm

PITCH GAUGES (LOW ACCURACY)

- Identify the pitch of screw thread
- Made of medium carbon steel

4820-124



Metric 60° screw

Code	Range	Pitch of leaves included (mm)	Quantity of leaves
4820-124	0.25-7mm	0.25, 0.3, 0.35, 0.4, 0.5, 0.7, 0.75, 0.8, 0.9, 1, 1.25, 1.5, 1.75, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7	24

Unified 60° screw

Code	Range	Pitch of leaves included	Quantity of leaves
4820-230	4-42TPI	4, 4-1/2, 5, 5-1/2, 6, 7, 8, 9, 10, 11, 11-1/2, 12, 13, 14, 15, 16, 18, 20, 22, 24, 26, 27, 28, 30, 32, 34, 36, 38, 40, 42TPI	30

Metric 60° and Whitworth 55° screw

Code	Range	Pitch of leaves included (mm)	Quantity of leaves
4820-452	0.25-6mm	0.25, 0.3, 0.35, 0.4, 0.45, 0.5, 0.6, 0.7, 0.75, 0.8, 0.9, 1, 1.25, 1.5, 1.75, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6	52
	4-62TPI	4, 4-1/2, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 18, 19, 20, 22, 24, 25, 26, 28, 30, 32, 36, 40, 48, 60, 62TPI	

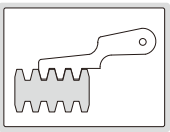
Metric 60° and Unified 60° screw

Code	Range	Pitch of leaves included (mm)	Quantity of leaves
4820-552	0.4-7mm	0.4, 0.5, 0.6, 0.7, 0.75, 0.8, 0.9, 1, 1.25, 1.5, 1.75, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7	52
	4-42TPI	4, 4-1/2, 5, 5-1/2, 6, 7, 8, 9, 10, 11, 11-1/2, 12, 13, 14, 15, 16, 18, 20, 22, 24, 26, 27, 28, 30, 32, 34, 36, 38, 40, 42TPI	

PITCH GAUGE

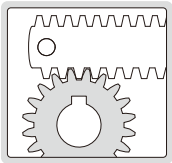
- Accuracy: ±0.07mm
- Check the pitch of screw thread
- Made of medium carbon steel

4824-12



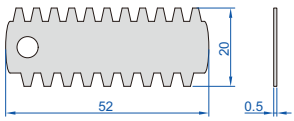
Code	Range	Thread type	Pitch of leaves included	Quantity of leaves
4824-12	2-20mm	Tr30°	2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 16, 20mm	12

GEAR TOOTH PITCH GAUGES



4860-245

Unit: mm



- Check the module pitch of gear tooth
- Accuracy of pitch: ±0.1mm
- Made of hardened stainless steel

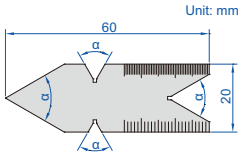
Code	Range	Pressure angle	Quantity of leaves
4860-145	0.35-4.5mm	14.5°	15
4860-245	0.35-4.5mm	20°	15
4860-112	5-12mm	14.5°	8
4860-212	5-12mm	20°	8

CENTER GAUGES

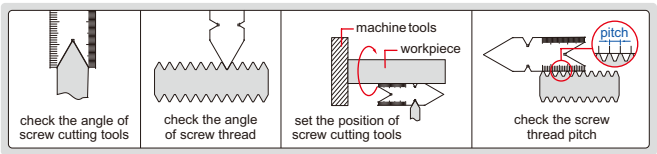
- To check and set screw cutting tools, and check the angle and pitch of screw thread
- Angle accuracy: ±30min.
- Made of stainless steel

4810-601

Unit: mm



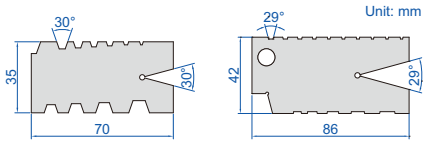
Code	Thread type	Angle (α)	Graduation
4810-601	METRIC 60°	60°	0.5mm and 1mm
4810-55	WHITWORTH 55°	55°	14ths and 20ths on front side, 24ths and 32ths on back side



THREAD GAUGES

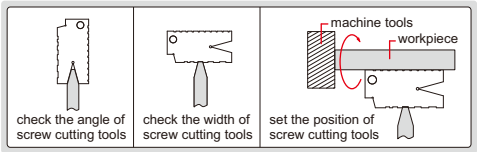
- To check and set screw cutting tools
- Made of medium carbon steel

4812-E

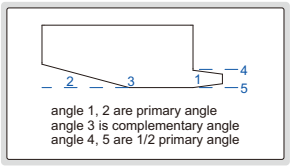


4812-12 4812-E

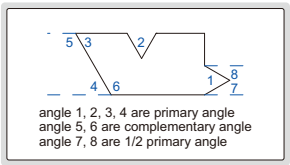
Code	Range	Thread type	Pitch
4812-12	2-12mm	Tr 30°	2, 3, 4, 5, 6, 7, 8, 9, 10, 12mm
4812-E	1-10TPI	ACME 29°	1, 1-1/3, 1-1/2, 1-3/4, 2, 2-1/2, 3, 4, 5, 6, 7, 8, 9, 10TPI



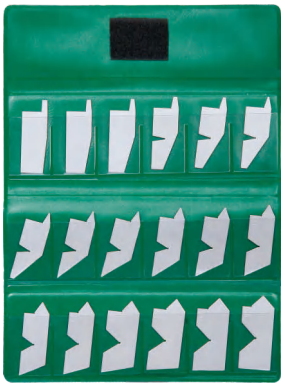
ANGLE GAUGE SET



type A



type B



4807

Code	Quantity of leaves	Accuracy
4807	18	±10'

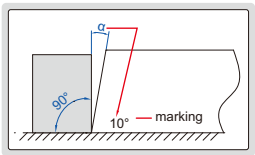
Primary angle	½ primary angle	Complementary angle	Type
5°	2°30'	175°	A
10°	5°	170°	A
15°	7°30'	165°	A
20°	10°	160°	B
25°	12°30'	155°	B
30°	15°	150°	B
35°	17°30'	145°	B
40°	20°	140°	B
45°	22°30'	135°	B
50°	25°	130°	B
55°	27°30'	125°	B
60°	30°	120°	B
65°	32°30'	115°	B
70°	35°	110°	B
75°	37°30'	105°	B
80°	40°	100°	B
85°	42°30'	95°	B
90°	45°	90°	B

- Each blade checks primary, 1/2 primary and complementary angles
- Made of medium carbon steel

ANGLE GAUGE

- Accuracy: ±30'
- To check complementary angles
- Made of stainless steel

4806-20

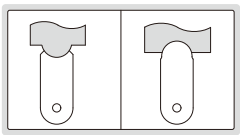


Code	Range (α)	Angle of leaves included	Quantity of leaves
4806-20	1°-45°	1°, 2°, 3°, 4°, 5°, 6°, 7°, 8°, 9°, 10°, 12°, 14°,16°, 18°, 20°, 25°, 30°, 35°, 40°, 45°	20

RADIUS GAUGES (LOW ACCURACY)

- Made of medium carbon steel

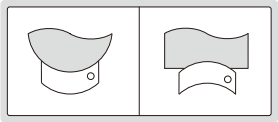
4801-17



Code	Range	Radius of leaves included (mm)	Quantity of leaves (internal+external)
4801-17	1-7mm	1, 1.25, 1.5, 1.75, 2, 2.25, 2.5, 2.75, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7	17+17
4801-16	7.5-15mm	7.5, 8, 8.5, 9, 9.5, 10, 10.5, 11, 11.5, 12, 12.5, 13, 13.5, 14, 14.5, 15	16+16
4801-15	15.5-25mm	15.5, 16, 16.5, 17, 17.5, 18, 18.5, 19, 19.5, 20, 21, 22, 23, 24, 25	15+15

RADIUS GAUGES

- Made of stainless steel
- Accuracy: ±0.042mm (range: 25mm)
  ±0.20mm (range: 25.5-50mm)
  ±0.50mm (range: 51-100mm)

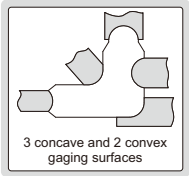


Code	Range	Radius of leaves included (mm)	Quantity of leaves
4802-31A	25-40mm	25, 25.5, 26, 26.5, 27, 27.5, 28, 28.5, 29, 29.5, 30, 30.5, 31, 31.5, 32, 32.5, 33, 33.5, 34, 34.5, 35, 35.5, 36, 36.5, 37, 37.5, 38, 38.5, 39, 39.5, 40	31
4802-41	41-50mm	41, 42, 43, 44, 45, 46, 47, 48, 49, 50	10
4802-51	51-60mm	51, 52, 53, 54, 55, 56, 57, 58, 59, 60	10
4802-61	61-70mm	61, 62, 63, 64, 65, 66, 67, 68, 69, 70	10
4802-71	71-80mm	71, 72, 73, 74, 75, 76, 77, 78, 79, 80	10
4802-81	81-90mm	81, 82, 83, 84, 85, 86, 87, 88, 89, 90	10
4802-91	91-100mm	91, 92, 93, 94, 95, 96, 97, 98, 99, 100	10

4802-31A

4802-51

RADIUS GAUGE SET



4804-26

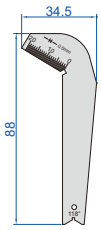
- Each piece has 3 concave and 2 convex gaging surfaces
- Supplied with handle
- Made of medium carbon steel

Code	Range	Radius of leaves included (mm)	Quantity of leaves
4804-26	0.5-13mm	0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8, 8.5, 9, 9.5, 10, 10.5, 11, 11.5, 12, 12.5, 13	26

DRILL POINT GAUGE

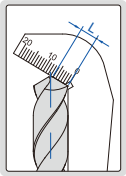
4843-1

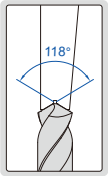
Unit: mm



- For twist drills with 118° angle, to check if the center of tip is concentric with the drill body
- Made of stainless steel

Code	Accuracy	
	Angle	Length
4843-1	±0.5°	±0.5mm

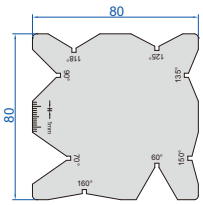




DRILL ANGLE GAUGE

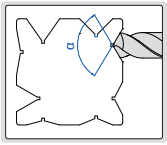
4842-1

Unit: mm



- Check drills with angle 60°, 70°, 90°, 118°, 125°, 135°, 150° or 160°
- Made of stainless steel

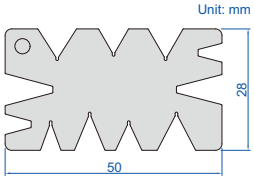
Code	Accuracy
4842-1	±0.5°



ANGLE GAUGE

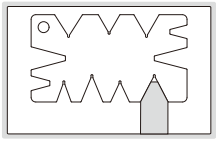
4854-1

Unit: mm



- Accuracy: ±10'
- Made of stainless steel

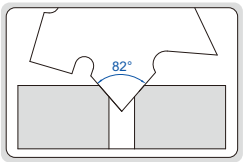
check the angle of screw cutting tools



Code	Range
4854-1	29°, 30°, 40°, 45°, 50°, 55°, 60°

ANGLE GAUGE OF COUNTERSUNK HOLES

application

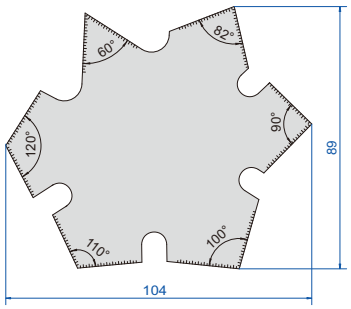


- For measurement of countersunk hole angles
- With graduation (graduation 1mm)
- Made of stainless steel

Code	Range	Accuracy
4856-1	60°, 82°, 90°, 100°, 110°, 120°	±0.5°

4856-1

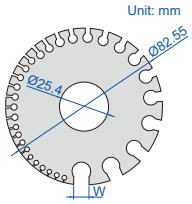
Unit: mm



U.S. STANDARD SHEET METAL GAUGE

4809

Unit: mm



No.	W	No.	W
0	7.938mm/0.3125"	18	1.270mm/0.0500"
1	7.144mm/0.2813"	19	1.111mm/0.0438"
2	6.747mm/0.2656"	20	0.953mm/0.0375"
3	6.350mm/0.2500"	21	0.873mm/0.0344"
4	5.953mm/0.2344"	22	0.794mm/0.0313"
5	5.556mm/0.2188"	23	0.714mm/0.0281"
6	5.159mm/0.2031"	24	0.635mm/0.0250"
7	4.763mm/0.1875"	25	0.556mm/0.0219"
8	4.366mm/0.1719"	26	0.476mm/0.0188"
9	3.969mm/0.1563"	27	0.437mm/0.0172"
10	3.572mm/0.1406"	28	0.397mm/0.0156"
11	3.175mm/0.1250"	29	0.357mm/0.0141"
12	2.778mm/0.1094"	30	0.318mm/0.0125"
13	2.381mm/0.0938"	31	0.278mm/0.0109"
14	1.984mm/0.0781"	32	0.258mm/0.0102"
15	1.786mm/0.0703"	33	0.238mm/0.0094"
16	1.588mm/0.0625"	34	0.218mm/0.0086"
17	1.429mm/0.0563"	35	0.198mm/0.0078"
		36	0.179mm/0.0070"

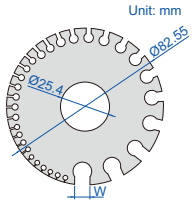
- For gaging sheet metal, plate iron and steel
- Hardened to HRC50-57

Code	Range
4809	0-36 (7.938-0.179mm/0.3125-0.0070")

AMERICAN STANDARD WIRE GAUGE

4808

Unit: mm



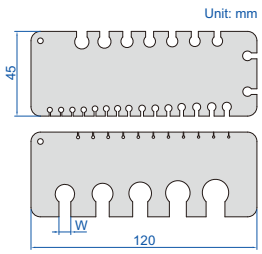
No.	W	No.	W
0	8.250mm/0.3249"	18	1.020mm/0.0403"
1	7.350mm/0.2893"	19	0.912mm/0.0359"
2	6.540mm/0.2576"	20	0.813mm/0.0320"
3	5.830mm/0.2294"	21	0.724mm/0.0285"
4	5.190mm/0.2043"	22	0.643mm/0.0253"
5	4.620mm/0.1819"	23	0.574mm/0.0226"
6	4.110mm/0.1620"	24	0.511mm/0.0201"
7	3.670mm/0.1443"	25	0.440mm/0.0179"
8	3.260mm/0.1285"	26	0.404mm/0.0159"
9	2.910mm/0.1144"	27	0.361mm/0.0142"
10	2.590mm/0.1019"	28	0.320mm/0.0126"
11	2.300mm/0.0907"	29	0.287mm/0.0113"
12	2.050mm/0.0808"	30	0.254mm/0.0100"
13	1.820mm/0.0720"	31	0.226mm/0.0089"
14	1.630mm/0.0641"	32	0.203mm/0.0080"
15	1.450mm/0.0571"	33	0.180mm/0.0071"
16	1.290mm/0.0508"	34	0.160mm/0.0063"
17	1.150mm/0.0453"	35	0.142mm/0.0056"
		36	0.127mm/0.0050"

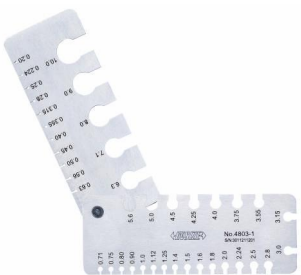
- For gaging non-ferrous wire and metals such as copper, brass and aluminum
- Hardened to HRC50-57

Code	Range
4808	0-36 (8.250-0.127mm/0.3249-0.0050")

WIRE GAUGE

Unit: mm





4803-1

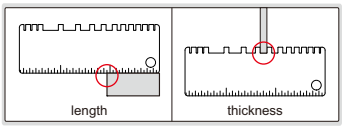
- For gaging non-ferrous wire and metals such as copper, brass and aluminum
- Hardened to HRC51-53
- Including 2 pcs wire gauges

Code	Range
4803-1	0.2-10mm

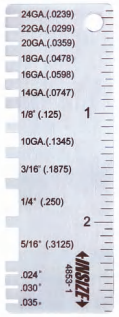
Wire diameter (W)	Wire diameter (W)	Wire diameter (W)
0.200mm	0.900mm	3.55mm
0.224mm	1.000mm	3.75mm
0.250mm	1.120mm	4.00mm
0.280mm	1.250mm	4.25mm
0.315mm	1.400mm	4.50mm
0.355mm	1.500mm	5.00mm
0.400mm	1.60mm	5.60mm
0.450mm	1.80mm	6.30mm
0.500mm	2.00mm	7.10mm
0.560mm	2.24mm	8.00mm
0.630mm	2.50mm	9.00mm
0.710mm	2.80mm	10.00mm
0.750mm	3.00mm	
0.800mm	3.15mm	

THICKNESS GAUGE

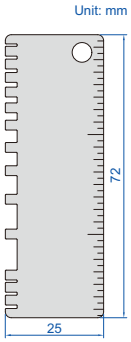
- Made of stainless steel



Code	Measurement	Range	Graduation	Accuracy
4853-1	length	0-2 3/4"	1/16"	1/32"
	thickness	24GA. (0.0239"), 22GA. (0.0299"), 20GA.(0.0359")	—	±0.002"
		18GA. (0.0478"), 16GA. (0.0598"), 14GA. (0.0747"), 1/8" (0.125"),10GA. (0.1345"), 3/16" (0.1875"), 1/4" (0.250"), 5/16" (0.3125")		±0.004"
		0.024", 0.030", 0.035"		±0.002"



4853-1



DIGITAL TAPER SLOT GAUGES

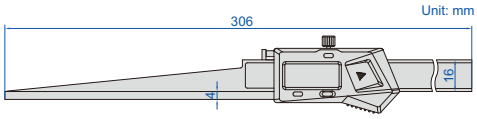
DIRECT READING, CALCULATION IS NOT REQUIRED

DATA OUTPUT

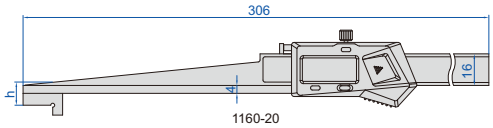
VIDEO

1160-10

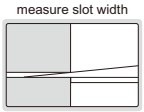
- Non waterproof
- Measuring opening, slot width
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory:
  wireless transmitter code **7315-22** (receiver is needed)



1160-10



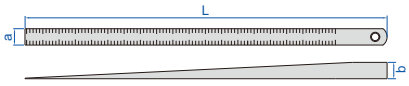
1160-20



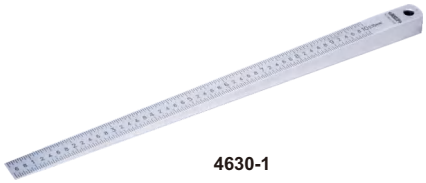
Code	Range	Accuracy	h
1160-10	0.2-10mm/0.01-0.39"	±0.03mm	—
1160-20	10-20mm/0.39-0.79"	±0.05mm	10mm

TAPER SLOT GAUGES

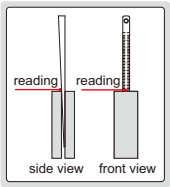
- For quick measurement of slot width
- Made of stainless steel
- Satin chrome plated reading surface



Code	Range	Graduation	Accuracy	L	a	b
4630-1	0.5-10mm	0.05mm	±0.07mm	220mm	10mm	10.5mm
4630-2	0.5-15mm	0.1mm	±0.08mm	184mm	12.5mm	16.5mm
4630-3	0.4-6mm	0.05mm	±0.04mm	164mm	12.5mm	6.5mm

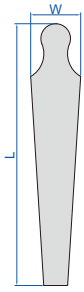


4630-1



TAPER GAUGES

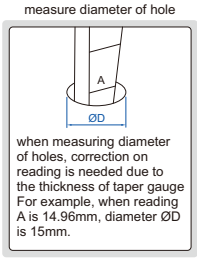
- Measure opening, slot width, hole diameter, etc.
- Diameter correction table on the back
  (only for **4833-1**, **4833-2**)
- Made of stainless steel



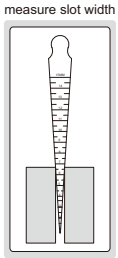
front back

4833-2

measure diameter of hole



measure slot width



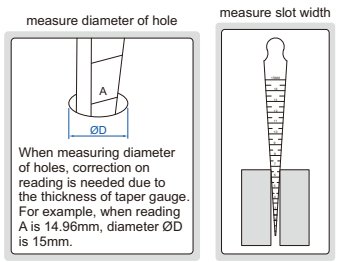
Code	Range	Accuracy	Graduation	L	W
4833-1	0.8-15mm	±0.05mm	0.1mm	146mm	17mm
4833-2	15-30mm	±0.05mm	0.1mm	159mm	30.4mm
4833-3	30-45mm	±0.05mm	0.1mm	166mm	45.4mm
4833-4	45-60mm	±0.05mm	0.1mm	170mm	60.5mm

TAPER GAUGE SET

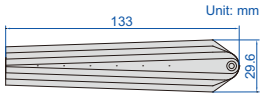
- Accuracy: ±0.05mm
- Include 4 pcs (1-8mm, 8-15mm, 15-22mm, 22-29mm)
- Measure opening, slot width, hole diameter, etc.
- Diameter correction table on the back
- Made of stainless steel

front back

4837-1

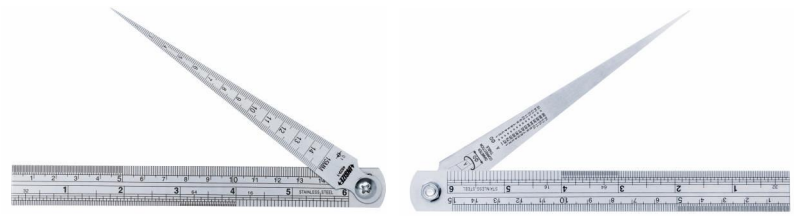


Unit: mm



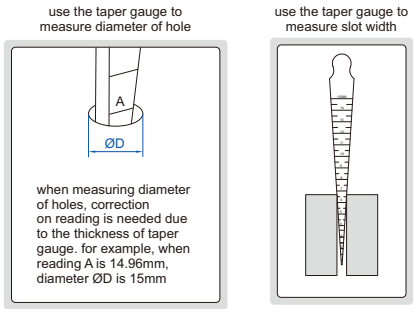
Code	Range	Graduation
4837-1	1-29mm	0.05mm

TAPER GAUGE AND STEEL RULER SET



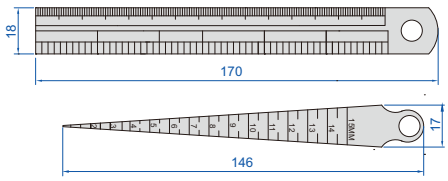
front back

4829-1



- Diameter correction table on the taper gauge back
- Made of stainless steel

Unit: mm



Code	Tool	Range	Graduation	Accuracy
4829-1	taper gauge	0.8-15mm	0.1mm	±0.05mm
	steel ruler	150mm/6"	1.0mm	±0.18mm

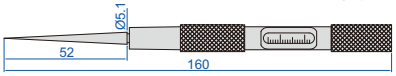
SMALL TAPER BORE GAUGE

- Quick measurement of small bore diameter
- Hardened working face
- Supplied with protection cap

4855-5

supplied with protection cap

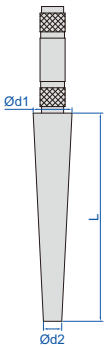
Unit: mm



Code	Range	Graduation	Accuracy
4855-5	0.1-5mm	0.01mm	±0.03mm

TAPER BORE GAUGES

4852-15

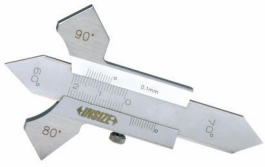


(mm)

Code	Range	L	Ød1	Ød2
4852-1	1-6.5mm	62.5	7	0.8
4852-3	3-16mm	143	17	2.8
4852-15	15-30mm	165	31	14.7
4852-30	30-45mm	165	46	29.6

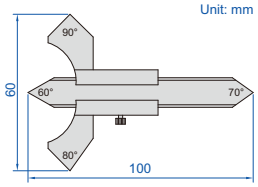
- Graduation: 0.1mm
- Accuracy: ±0.05mm
- Quick measurement of bore diameter
- Hardened steel, HRC50-58
- Satin chrome plated surface
- Aluminium oxided handle

WELDING GAUGE

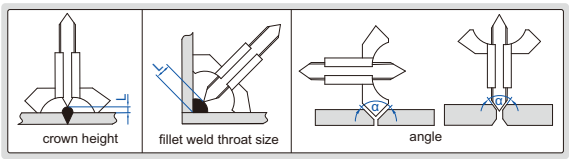


4830

Unit: mm



- Made of stainless steel
- Satin chrome plated reading surface



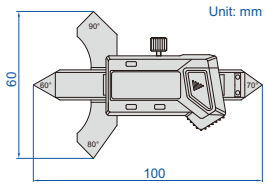
Code	Measurement	Range	Graduation	Accuracy
4830	crown height	0-8mm	0.1mm	±0.1mm
	fillet weld throat size	0-20mm	0.1mm	±0.3mm
	angle	60°, 70°, 80°, 90°	—	±1°

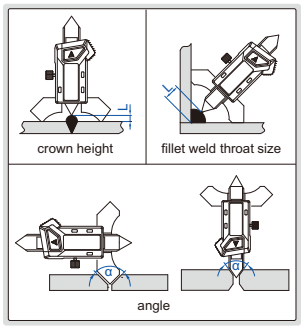
DIGITAL WELDING GAUGE

ATTENTION:
NO DATA OUTPUT

- Non waterproof
- Buttons: zero, mm/inch, on/off
- Battery LR44
- Made of stainless steel

4831-20A

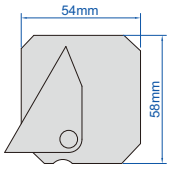




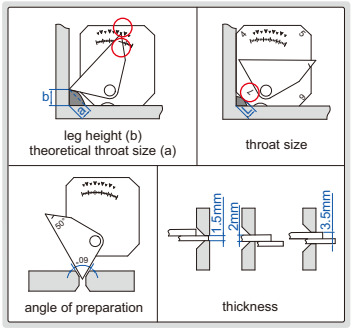
Code	Measurement	Range	Resolution	Accuracy
4831-20A	crown height	0-7mm	0.01mm/0.0005"	±0.03mm
	fillet weld throat size	0-20mm	0.01mm/0.0005"	±0.1mm
	angle	60°, 70°, 80°, 90°	—	±1°

WELDING GAUGE

4850-1

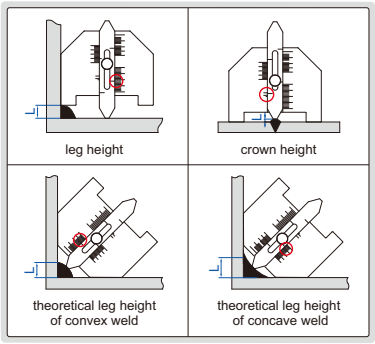


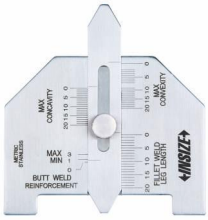
- Made of stainless steel



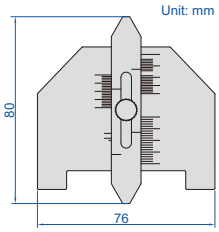
Code	Measurement	Range	Graduation	Accuracy
4850-1	leg height (b)	0-18mm	1mm	±0.5mm
	theoretical throat size (a)	2-12mm	1mm	±0.5mm
	throat size	4, 5, 6, 7mm	—	±0.5mm
	angle of preparation	50°, 60°	—	±1°
	thickness	1.5, 2, 3.5mm	—	±0.2mm

WELDING GAUGE





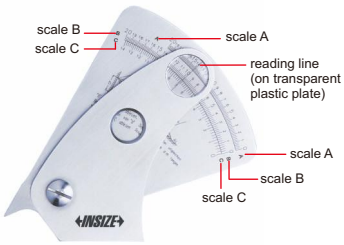
4851-1



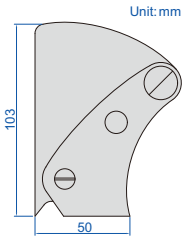
- Accuracy: ±0.5mm
- Made of stainless steel

Code	Measurement	Range	Graduation
4851-1	leg height	0-20mm	1mm
	crown height	0-3mm	—
	theoretical leg height of convex weld	0-20mm	1mm
	theoretical leg height of concave weld	0-20mm	1mm

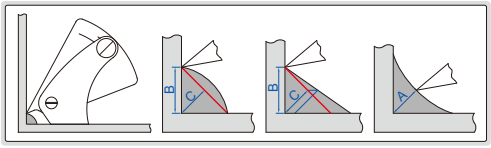
WELDING GAUGE



4840-1



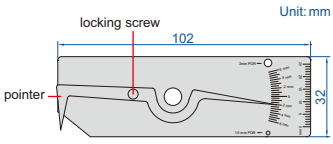
- Made of stainless steel



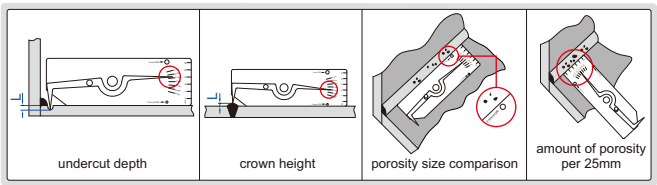
Code	Graduation	Accuracy
4840-1	0.2mm	±0.3mm

WELDING GAUGE

4834-1



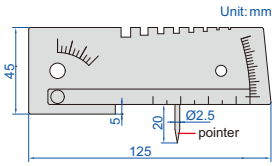
- Pointer can be locked for later reference
- Made of stainless steel

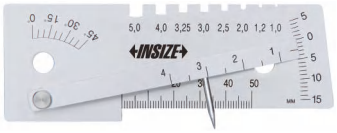


Code	Measurement	Range	Graduation	Accuracy
4834-1	undercut depth	0-6mm	0.5mm	±0.5mm
	crown height	0-6mm	0.5mm	±0.5mm
	porosity size comparison	1.5mm, 3mm	—	±0.2mm
	amount of porosity per 25mm	25mm	1mm	—

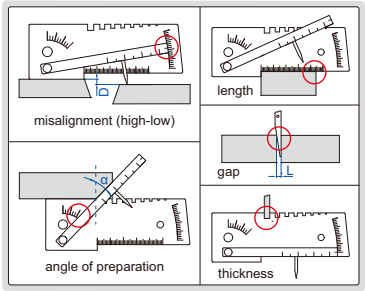
WELDING GAUGE

- Made of stainless steel





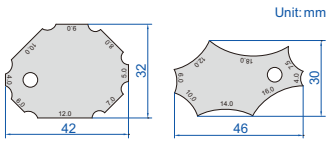
4848-1

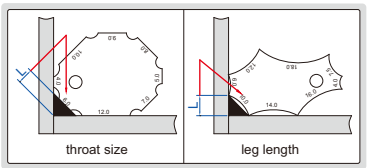


Code	Measurement	Range	Graduation	Accuracy
4848-1	misalignment (high-low)	-5mm~+15mm	1mm	±0.5mm
	angle of preparation	0°-45°	5°	±2.5°
	length	0-50mm	1mm	±0.5mm
	gap	1-4mm	0.5mm	±0.25mm
	thickness	1, 1.2, 2.0, 2.5, 3.0, 3.25, 4.0, 5.0mm	—	±0.1mm

FILLET WELDING GAUGE

4832-1



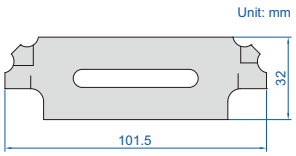


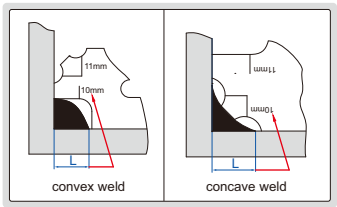
- Made of stainless steel
- Sizes marked on both faces

Code	Throat size (mm)	Leg length (mm)	Accuracy
4832-1	4, 5, 6, 7, 8, 9, 10, 12	4, 6, 7.5, 10, 12, 14, 16, 18	±0.5mm

FILLET WELDING GAUGE

4836-1

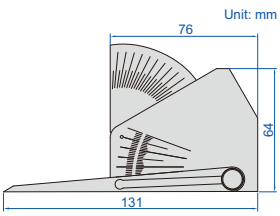




- Measure concave and convex weld sizes
- 7 blades are included
- Made of stainless steel

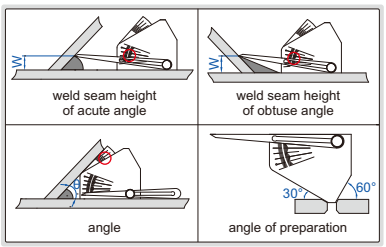
Code	Size (mm)	Accuracy
4836-1	3, 4, 5, 6, 8, 9, 10, 11, 12, 14, 16, 19, 22, 25	±0.5mm

FILLET WELDING GAUGE

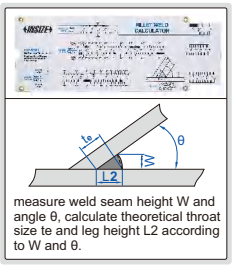


4846-1

- Calculating card is included
- Made of stainless steel



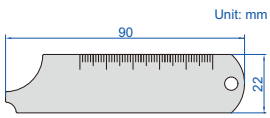
calculating card (included)



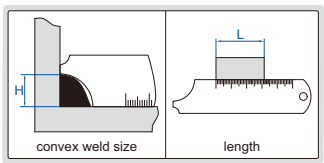
Code	Measurement	Range	Graduation	Accuracy
4846-1	weld seam height W	0-50mm/0-2"	2mm/0.05"	±1mm
	angle θ	30°~90°	2.5°	±1°
	60° angle	—	—	±0.5°

FILLET WELDING GAUGE

- Measure convex weld sizes
- 3 blades are included
- Made of stainless steel



4847-1



Code	Measurement	Range	Graduation	Accuracy
4847-1	convex weld size	4, 6, 8, 10, 12, 14mm	—	±0.5mm
	length	0-50mm	1mm	±0.5mm

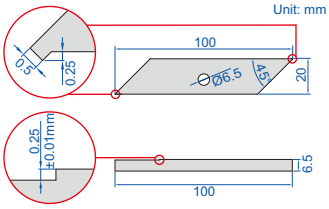
WELDING UNDERCUT GAUGE

- Measure undercut
- Calibration block is included
- Made of stainless steel

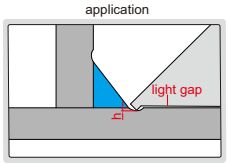
Code
4849-1

calibration block (included)

4849-1

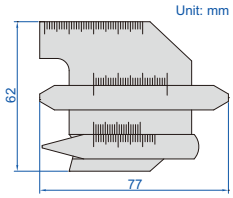


application



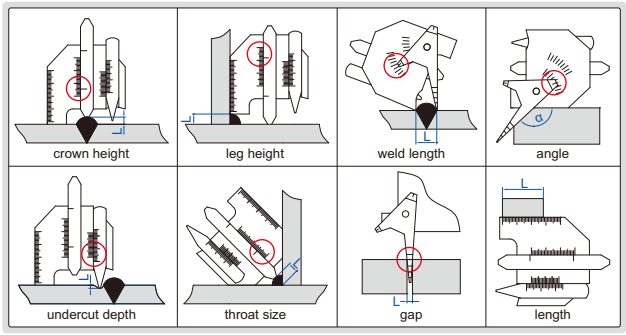
when there is a light gap, h<0.25mm;
when there is no light gap, h≥0.25mm

WELDING GAUGE



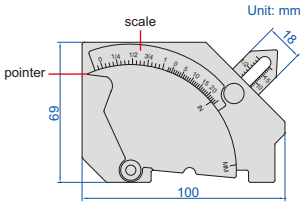
4838-1

- Made of stainless steel



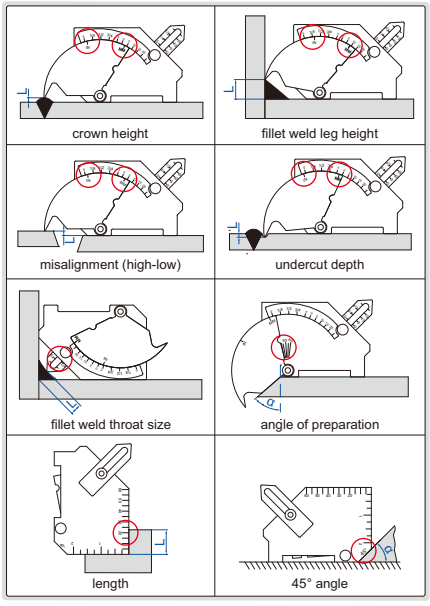
Code	Measurement	Range	Graduation	Accuracy
4838-1	crown height	0-10mm	1mm	±0.5mm
	leg height	0-14mm	1mm	±0.5mm
	undercut depth	0-5mm	0.05mm	±0.05mm
	throat size	0-13mm	1mm	±0.5mm
	weld length	0-40mm	1mm	±1mm
	angle	90°-150°	5°	±1°
	gap	0.5-5mm	1mm	±0.5mm
	length	0-40mm	1mm	±0.5mm

WELDING GAUGE



4835-1

- Adjustable scale to compensate pointer wear
- Made of stainless steel

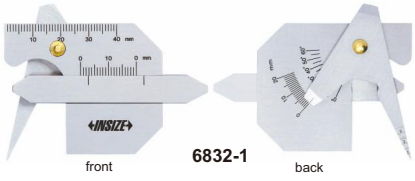


Code	Measurement	Range	Graduation	Accuracy
4835-1	crown height	0-25mm (0-1")	1mm (1/16")	±0.5mm
	fillet weld leg height	0-25mm (0-1")	1mm (1/16")	±0.5mm
	misalignment (high-low)	0-25mm (0-1")	1mm (1/16")	±0.5mm
	undercut depth	0-2mm (0-1/8")	1mm (1/16")	±0.5mm
	fillet weld throat size	0-20mm (0-3/4")	1mm (1/16")	±0.5mm
	angle of preparation	0-60°	5°	±1°
	length	0-60mm (0-2")	1mm (1/16")	±0.5mm
	45° angle	—	—	±1°

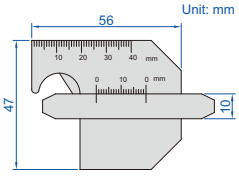
WELDING GAUGE

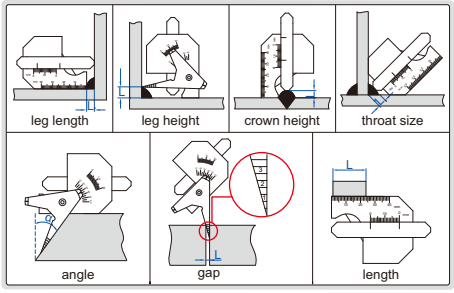
- Made of stainless steel
- Satin chrome plated surface

Code	Measurement	Range	Graduation	Accuracy
6832-1	leg length	0-20mm	1mm	±0.3mm
	leg height	0-20mm	1mm	±0.3mm
	crown height	0-20mm	1mm	±0.3mm
	throat size	0-10mm	1mm	±0.3mm
	angle	0°-60°	5°	±1°
	gap	1-3.5mm	0.5mm	±0.2mm
	length	0-40mm	1mm	±0.3mm



6832-1

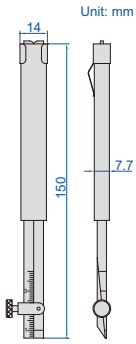


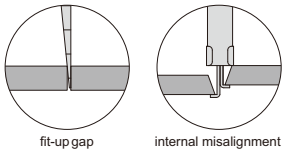


PIPE WELDING GAUGE

- Made of stainless steel

4841-1

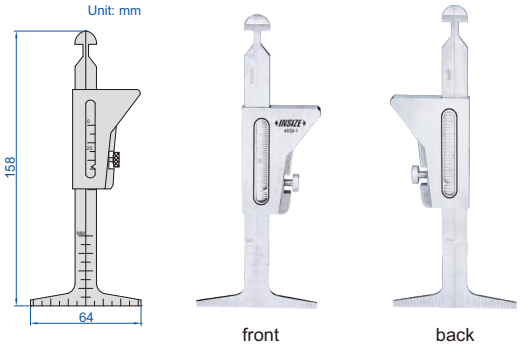




Code	Measurement	Range	Graduation	Accuracy
4841-1	internal misalignment	0-30mm	1mm	±0.5mm
	fit-up gap	0.7-4mm	0.1mm	±0.1mm

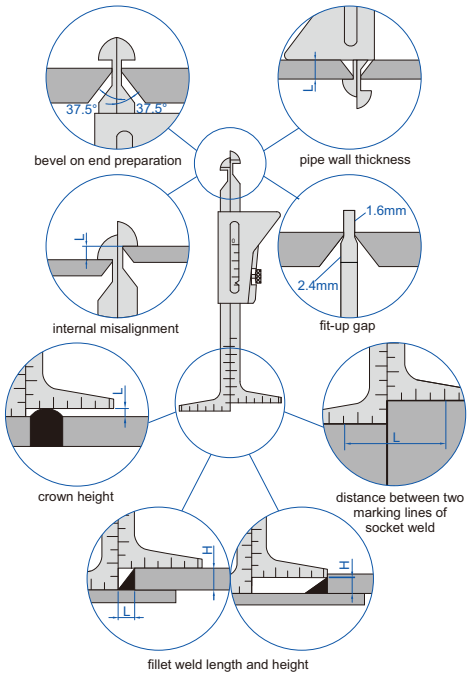
PIPE WELDING GAUGE

- Made of stainless steel



front back

4839-1



Code	Measurement	Range	Graduation	Accuracy
4839-1	bevel on end preparation	37.5°	—	±1°
	pipe wall thickness	0-45mm (0~1-3/4")	1mm (1/16")	±0.5mm
	internal misalignment	0-35mm (0~1-3/8")	1mm (1/32")	±0.5mm
	fit-up gap	1.6mm, 2.4mm	—	±0.5mm
	crown height	0-35mm (0~1-3/8")	1mm (1/32")	±0.1mm
	distance between two marking lines of socket weld	0-60mm (0~2-3/8")	1mm (1/16")	±0.5mm
	fillet weld length	0-30mm (0~1-1/4")	1mm (1/16")	±0.5mm
	fillet weld height	0-35mm (0~1-3/8")	1mm (1/32")	±0.5mm

6-PIECE WELDING GAUGE SET

- Includes:
  1) Welding gauge (code **4834-1**)
  2) Fillet welding gauge, size 3~25mm, 7 blades (code **4836-1**)
  3) Pipe welding gauge (code **4841-1**)
  4) Telescoping inspection mirror, size of mirror Ø32mm, length 178~505mm (code **7160-1**)
  5) Pocket ruler with sliding clip, range 150mm/6", graduation 1mm, 1/64" (code **7119-150**)
  6) LED flashlight (code **ISGF-0501**)

5064

Code
5064

7-PIECE WELDING GAUGE SET

- Includes:
  1) Welding gauge (code **4834-1**)
  2) Welding gauge (code **4851-1**)
  3) Pipe welding gauge (code **4839-1**)
  4) Outside micrometer, range 0-25mm, graduation 0.01mm (code **3203-25A**)
  5) Telescoping inspection mirror, size of mirror Ø32mm, length 178~505mm (code **7160-1**)
  6) Magnifier with illumination, magnification 4X (code **7513-4**)
  7) Steel ruler, range 150mm/6", graduation 0.5mm, 1mm, 1/64", 1/32", 1/16" (code **7110-150**)

5071

Code
5071

7-PIECE WELDING GAUGE SET

- Includes:
  1) Welding gauge (code **4834-1**)
  2) Welding gauge (code **4851-1**)
  3) Fillet welding gauge, size 3~25mm, 7 blades (code **4836-1**)
  4) Outside micrometer, range 0-25mm, graduation 0.01mm (code **3203-25A**)
  5) Digital caliper, range 0-150mm/0-6", resolution 0.01mm/0.005" (code **1108-150**)
  6) Pocket ruler with sliding clip, range 150mm/6", graduation 1mm, 1/64" (code **7119-150**)
  7) Magnifier with illumination, magnification 4X (code **7513-4**)

5072

Code
5072

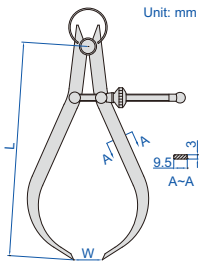
7-PIECE WELDING GAUGE SET

- Includes:
  1) Welding gauge (code **4851-1**)
  2) Welding gauge (code **4835-1**)
  3) Taper gauge and steel ruler set, taper gauge, range 0.8-15mm, steel ruler, range 150mm/6" (code **4829-1**)
  4) Pipe welding gauge (code **4839-1**)
  5) Magnifier with illumination, magnification 4X (code **7513-4**)
  6) Telescoping inspection mirror, size of mirror Ø32mm, length 178~505mm (code **7160-1**)
  7) LED flashlight (code **ISGF-0501**)

5074

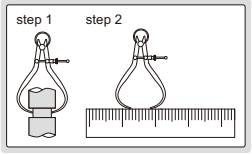
Code
5074

OUTSIDE SPRING CALIPERS

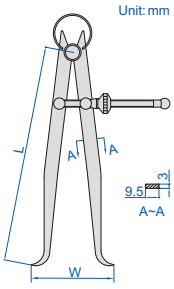


7262-150

Code	Size (L)	Range (W)
7262-150	155mm	0-150mm
7262-200	210mm	0-200mm
7262-250	265mm	0-250mm
7262-300	310mm	0-300mm



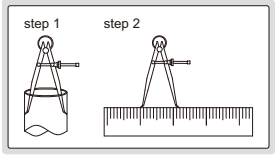
INSIDE SPRING CALIPERS



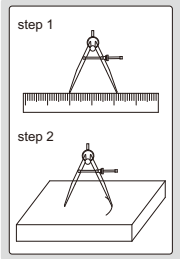
7261-150

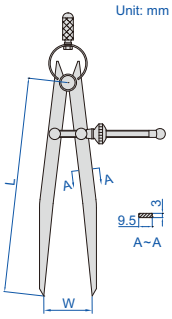
- Made of carbon steel

Code	Size (L)	Range (W)
7261-150	150mm	20-150mm
7261-200	200mm	22-200mm
7261-300	300mm	30-300mm



SPRING DIVIDERS





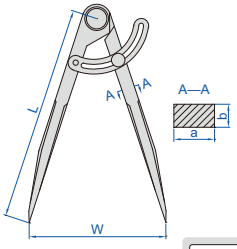
7260-150

Code	Size (L)	Range (W)
7260-150	150mm	0-150mm
7260-200	200mm	0-210mm
7260-250	245mm	0-250mm
7260-300	300mm	0-300mm

- Made of carbon steel
- Hardened points

DIVIDERS

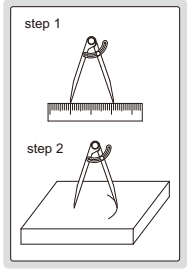
7247-150



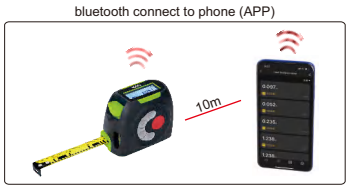
- Made of carbon steel
- Hardened points

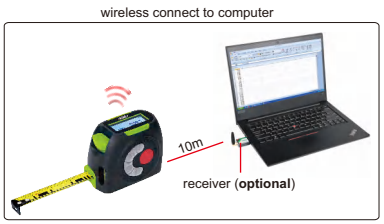
(mm)

Code	Size (L)	Range (W)	a	b
7247-150	150mm	0-140mm	8.5	7
7247-200	200mm	0-190mm	10	7
7247-300	300mm	0-290mm	12	7



WIRELESS DIGITAL MEASURING TAPES + LASER DISTANCE METERS





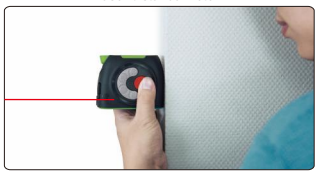
- Two transmission modes:
  Bluetooth: data transmission to mobile APP
  Wireless: data transmission to Excel, WORD, Txt via receiver
- Transmission distance is 10 meters (no obstacles, no electromagnetic interference)
- Built-in bluetooth or wireless transmission
- Display with backlight
- Automatic power off: laser 30s, main unit 180s
- Can work continuously for 5 hours
- Can store 50 groups of measurement data

SPECIFICATION

Code		9563-C40	9563-C60	9563-WL40	9563-WL60
Output		bluetooth (data can be transmitted to APP)		wireless (optional receiver needed: code **7315-2/3/6/7/8/9**) (data can be transmitted to excel, word, txt etc.)	
Digital measuring tape	range	5m			
	resolution	0.001m			
	digital measurement accuracy	±1mm			
	graduation accuracy	±(0.5+D/5000)mm, D: measured distance rounded to whole meters, when D<1m, D takes to 1m			
	digital measurement units	m, ft, in, ft+in			
	graduation units	m, ft			
	blade width	19mm			
	horizontal stand-out	≥1.8m			
	measurement function	single size, area, volume			
Laser distance meter	range	40m	60m	40m	60m
	resolution	0.001m			
	accuracy	±(3+D/20)mm, D: measured distance, unit: m			
	units	m, ft, in, ft+in			
	laser type	630~670nm, <1mW, class 2			
	measurement function	single, continuous, area, volume, pythagoras measurement			
Operation temperature		0~40°C			
Storage temperature		-10~60°C			
Power supply		built-in rechargeable lithium battery			
Dimension (L×W×H)		95×56×74mm			
Net weight		313g			

digital measuring tape

laser distance meter



DIGITAL MEASURING TAPES

SPECIFICATION

Code	9570-B5	9570-BM5
Output	no	
Range	5m/16ft	
Digital resolution	0.001m, 0.001ft, 1/16"	1mm
Digital measurement accuracy	±1mm	
Blade graduation	1mm, 1/16"	
Blade graduation accuracy	±(0.5+D/5)mm, D: measured distance rounded to whole metres, when D<1m, D takes to 1m	
Blade width	19mm	
Horizontal stand-out	≥1.8m	
Measurement function	single size, area, volume	
Operation temperature	0~40°C	
Storage temperature	-10~60°C	
Storage	30 groups of measurement data	
Power supply	built-in rechargeable lithium battery	
Dimension (L×W×H)	91×56×74mm	
Net weight	313g	

- Display with backlight
- Up to 5 hours of continuous use on one charge

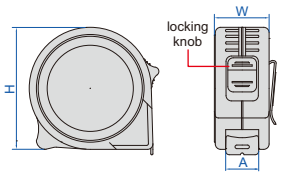
MEASURING TAPES

EG II

- With TPR round case
- Non-glare nylon surface for wear resistance
- Accuracy: ±(0.3+0.2L)mm (L is the measured length rounded up to the next whole meter), meet MI-008 of DIRECTIVE 2014/32/EU

7140-5

graduation



Code	Range	Graduation	Width of tape A	W	H
7140-3	0-3m	1mm	16mm	28mm	62mm
7140-5	0-5m	1mm	19mm	30mm	68mm
7140-8	0-8m	1mm	25mm	38mm	78mm

MEASURING TAPES (ECONOMIC TYPE)

EG II

- With TPR round case
- Non-glare nylon surface for wear resistance
- Accuracy: ±(0.3+0.2L)mm (L is the measured length rounded up to the next whole meter), meet MI-008 of DIRECTIVE 2014/32/EU

7147-5

7147-5S

Individual

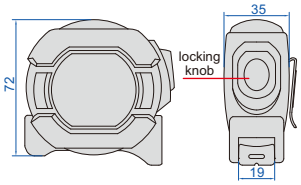
Code	Range	Graduation	Width of tape
7147-5	0-5m	1mm	19mm

Set

Code	Range	Graduation	Width of tape	Remark
7147-5S	0-5m	1mm	19mm	include 12pcs **7147-5**

graduation

Unit: mm



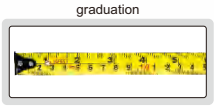
MEASURING TAPE

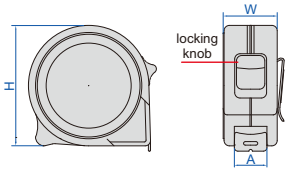
EG II

- Non-glare nylon coating tape, wear resistance
- Accuracy: ±(0.3+0.2L)mm (L is the measured length rounded up to the next whole meter), meet MI-008 of DIRECTIVE 2014/32/EU

7142-5

graduation





Code	Range	Graduation	Width of tape A	W	H
7142-5	0-5m/0-16ft	1mm, 1/16"	19mm	31mm	64mm

MEASURING TAPES (ECONOMIC TYPE)

EG II

- Matte coating
- Accuracy: ±(0.3+0.2L)mm (L is the measured length rounded up to the next whole meter), meet MI-008 of DIRECTIVE 2014/32/EU

7148-5

7148-5S

Individual

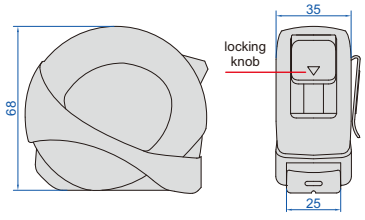
Code	Range	Graduation	Width of tape
7148-5	0-5m	1mm	25mm

Set

Code	Range	Graduation	Width of tape	Remark
7148-5S	0-5m	1mm	25mm	include 12pcs **7148-5**

graduation

Unit: mm



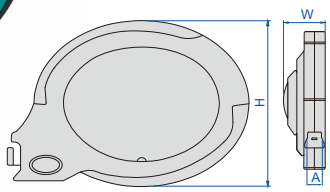
MEASURING TAPES

EG II

- Steel tape, non-glare nylon surface for wear resistance
- Accuracy: ±(0.3+0.2L)mm (L is the measured length rounded up to the next whole meter), meet MI-008 of DIRECTIVE 2014/32/EU

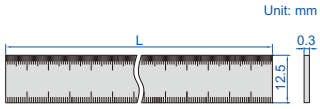
Code	Range	Graduation	Width of tape (A)	W	H
7149-10	0-10m	1mm	9.5mm	41mm	107mm
7149-15	0-15m	1mm	9.5mm	41mm	107mm
7149-30	0-30m	1mm	9.5mm	41mm	107mm

7149-30



SELF ADHESIVE MEASURING ROLLS

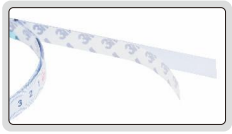
- Self adhesive back
- Steel tape, non-glare coating, wear resistance



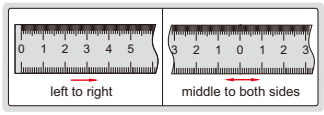
Code	Range (L)	Graduation	Accuracy	Type of reading
7139-50	50-0-50cm	1mm	±0.2mm	middle to both sides
7139-100	0-100cm	1mm	±0.4mm	left to right

7139-50

self adhesive back



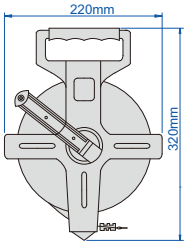
type of reading



LONG MEASURING TAPE

EG II

- High tensile strength fibreglass tape
- Nylon coating tape, wear resistance
- Accuracy: ±(0.3+0.2L)mm (L is the measured length rounded up to the next whole meter), meet MI-008 of DIRECTIVE 2014/32/EU

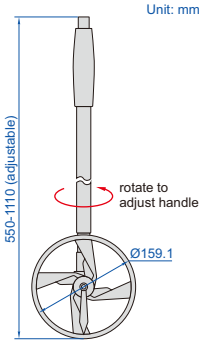


Code	Range	Graduation	Width of tape
7143-50	0-50m/0-165ft	1mm, 1/8"	13mm

7143-50

graduation

MEASURING WHEEL (BASIC TYPE)



7144-1

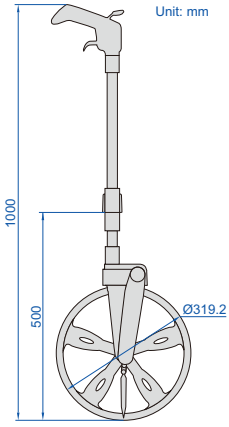
- ABS plastic frame, wear-resistant PU tire
- Three-section adjustable handle

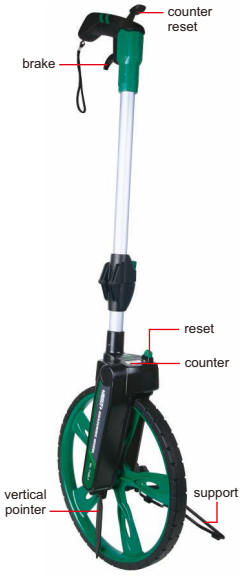
Code	Range	Resolution
7144-1	0.1-9999.9m	0.1m

MEASURING WHEEL

after folding

backpack (included)





7145-1

- ABS plastic frame, wear-resistant PU tire
- Two-section foldable handle

Code	Range	Resolution
7145-1	0.1-9999.9m	0.1m

DIGITAL MEASURING WHEEL

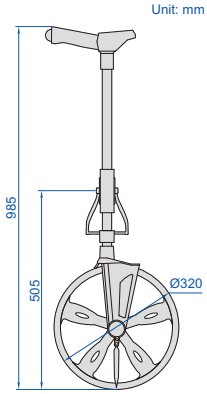
BACKLIGHT

- Button function: on/off, m/ft, HOLD, reset, stake out, memory
- Nylon+glass fiber plastic frame, wear-resistant TPU tire
- Can store 99 groups of measurement data
- Three AAA batteries

after folding

backpack (included)

Unit: mm



7171-D1

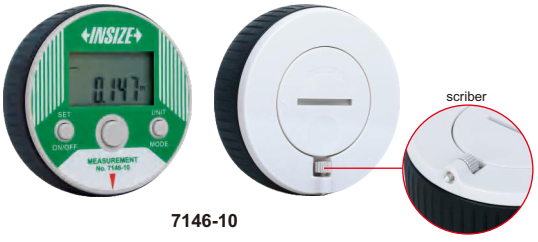
Code	Range	Resolution	Accuracy
7171-D1	0-9999.99m/0-9999.99ft	0.01m/0.01ft	±0.3%L (L is the measured length)
	10000.0-99999.9m/10000.0-99999.9ft	0.1m/0.1ft	
	100000-999999m/100000-999999ft	1m/1ft	

DIGITAL MEASURING WHEEL

VIDEO

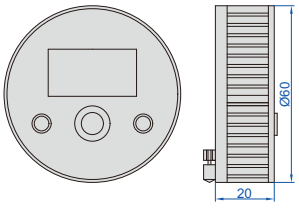
IP40 WATERPROOF

- IP40 dust/waterproof
- Measuring length of curve
- Four measurement modes: length, rectangle area, diameter of circle, cube
- Resolution: 0.001m/0.01ft
- Button function: on/off, mm/inch, one or two sides set, measurement mode conversion, measurement
- Battery CR2032, automatic power off



7146-10

Unit: mm



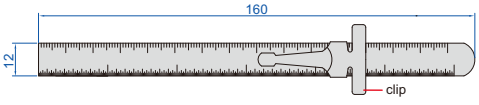
Code	Range	Accuracy
7146-10	0-10m/0-32.8ft	±0.3%L (L is the measured length)

POCKET RULER WITH SLIDING CLIP

- Accuracy: ±0.30mm
- With sliding clip, clip can be inserted in the pocket, also can be used as depth gauge base
- Inch/metric conversion table on the back
- Made of stainless steel

7119-150

Unit: mm



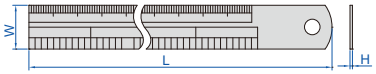
Code	Range	Graduation
7119-150	150mm/6"	1mm, 1/64"

STEEL RULERS

POPULAR MODEL

- Graduation: 0.5mm, 1mm, 1/64", 1/32", 1/16"
- Rigid rulers
- Made of stainless steel
- Non-glare surface

7110-300



Individual (1 pc per package) (mm)

Code	Range	Accuracy	L	W	H	Remark
7110-150	150mm/6"	±0.18mm	170	18	1.0	metric graduation on front and inch graduation on back
7110-200	200mm/8"	±0.18mm	220	18	1.0	metric graduation on front and inch graduation on back
7110-300	300mm/12"	±0.27mm	330	25	1.0	metric graduation on front and inch graduation on back
7110-3001	300mm/12"	±0.27mm	325	30	1.0	metric graduation on front and inch graduation on back
7110-500	500mm/20"	±0.40mm	530	30	1.2	metric graduation on front and inch graduation on back
7110-600	600mm/24"	±0.50mm	630	30	1.2	metric graduation on front and inch graduation on back
7110-1000	1000mm/40"	±0.50mm	1040	32	1.5	metric graduation on front and inch graduation on back
7110-1200	1200mm/48"	±0.80mm	1240	35	1.8	metric and inch graduation on front
7110-1500	1500mm/60"	±1.00mm	1550	38	1.8	metric and inch graduation on front
7110-2000	2000mm/80"	±1.00mm	2065	40	2.0	metric and inch graduation on front

Set (mm)

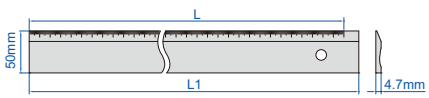
Code	Range	Accuracy	L	W	H	Remark	Quantity per package
7110-150A	150mm/6"	±0.18mm	170	18	1.0	metric graduation on front and inch graduation on back	10 pcs
7110-200A	200mm/8"	±0.18mm	220	18	1.0	metric graduation on front and inch graduation on back	10 pcs
7110-300A	300mm/12"	±0.27mm	330	25	1.0	metric graduation on front and inch graduation on back	5 pcs
7110-3001A	300mm/12"	±0.27mm	325	30	1.0	metric graduation on front and inch graduation on back	5 pcs
7110-500A	500mm/20"	±0.40mm	530	30	1.2	metric graduation on front and inch graduation on back	5 pcs
7110-600A	600mm/24"	±0.50mm	630	30	1.2	metric graduation on front and inch graduation on back	5 pcs
7110-1000A	1000mm/40"	±0.50mm	1040	32	1.5	metric graduation on front and inch graduation on back	5 pcs
7110-1200A	1200mm/48"	±0.80mm	1240	35	1.8	metric and inch graduation on front	5 pcs
7110-1500A	1500mm/60"	±1.00mm	1550	38	1.8	metric and inch graduation on front	5 pcs
7110-2000A	2000mm/80"	±1.00mm	2065	40	2.0	metric and inch graduation on front	5 pcs

ALUMINUM RULERS

- Made of aluminum, oxidized surface

Code	Range (L)	Accuracy	Graduation	L1
7123-300	300mm	±0.5mm	1mm	321mm
7123-600	600mm	±0.9mm	1mm	624mm
7123-1000	1000mm	±1.0mm	1mm	1024mm

7123-300



DIGITAL SCALE WITH MICROSCOPE

DATA OUTPUT

- Including microscope
- Optional accessory:
  wireless transmitter code **7315-22** (receiver is needed)

7100-500

Code	Range	Accuracy	Total length	Remark
7100-500	450mm	±0.05mm	690mm	without sliding support blocks

SPECIFICATION OF DIGITAL SCALE

Resolution	0.01mm/0.0005"
Buttons	on/off, zero, mm/inch, ABS, data preset
Data output	Micro USB
Power supply	Battery CR2032

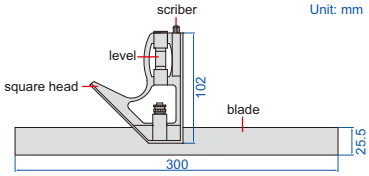
SPECIFICATION OF MICROSCOPE

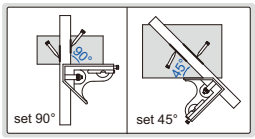
Display resolution	1024×600
Sensor	1/3" CMOS
Single pixel size	2μm×2μm
Magnification	1X~16X
Power supply	built-in lithium battery

COMBINATION SQUARE (ECONOMIC TYPE)

- Square head (made of zinc): to set the blade at 90° or 45° to an edge of a workpiece accuracy: ±0.5°
- Blade (made of stainless steel): range: 300mm/12", graduation: 1mm and 1/32" on front face, 1mm and 1/16" on back face

2276-300





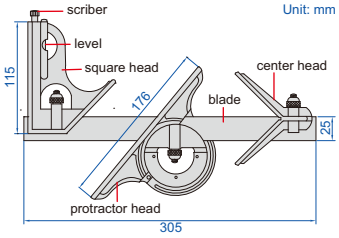
Code
2276-300

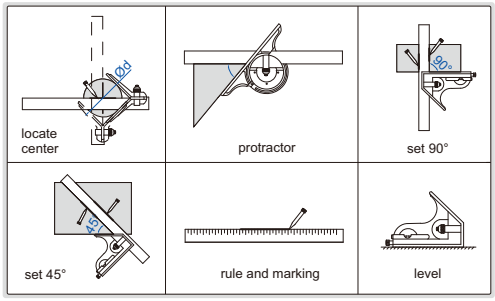
COMBINATION SQUARE SETS (CLOSE TYPE PROTRACTOR)

- Center head (made of cast iron): to locate center of cylinder with diameter (Ød): 30-100mm accuracy: ±0.15mm
- Protractor head (made of cast iron): to set the blade at desired angle to an edge of a workpiece, and can be used to measure angles range: 0-180°, accuracy: ±20min.
- Square head (made of cast iron): to set the blade at 90° or 45° to an edge of a workpiece accuracy: ±8min for 90° square, ±10min for 45° square
- Blade (made of stainless steel): range: 300mm/12", graduation: 0.5mm and 1/32" on front face, 1mm and1/64" on back face
- Optional accessory: rigid rule (code **7113**)

2278-2

2278-180



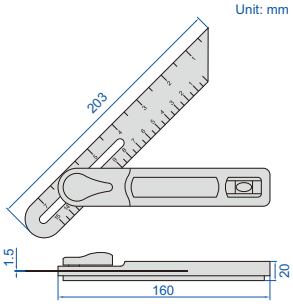


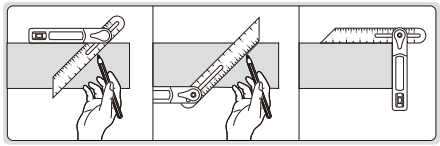
Code	Remark
2278-2	2-piece set
2278-180	4-piece set

T-BEVEL

- Easy-to-read vial
- The blade can move and can be locked by the clamping screw
- Stainless steel blade
- Tough rubber handle
- Centimeter/inch graduations

2281-360



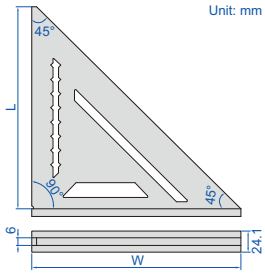


Code	Angle mark	Accuracy of angle
2281-360	15°, 30°, 45°, 60°, 90°	±1°

PLASTIC ANGLE SQUARE

- Length range: 0-7", graduation: 1/8"
- Angel range: 0-90°, graduation: 1°

2282-180

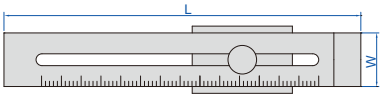


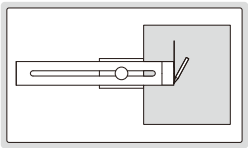
Code	Size (L×W)	Accuracy of angle
2282-180	180×185mm	±0.3°

MARKING GAUGES

7120-200A

- Made of hardened stainless steel
- Satin chrome plated



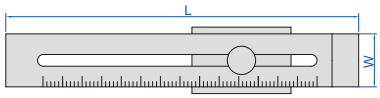


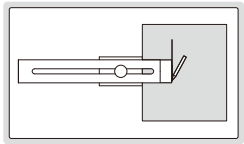
Code	Range	Graduation	Accuracy	L	W
7120-200A	0-200mm	0.1mm	±0.1mm	250mm	40mm
7120-250A	0-250mm	0.1mm	±0.1mm	300mm	40mm
7120-300A	0-300mm	0.1mm	±0.1mm	350mm	40mm

MARKING GAUGES (ECONOMIC TYPE)

7154-200

- Made of carbon steel
- Stain chrome plated

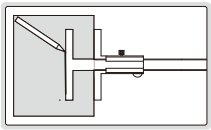


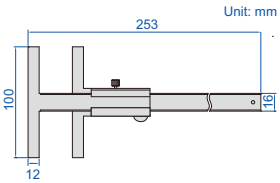


Code	Range	Graduation	Accuracy	L	W
7154-200	0-200mm	0.1mm	±0.1mm	250mm	40mm
7154-250	0-250mm	0.1mm	±0.1mm	300mm	40mm
7154-300	0-300mm	0.1mm	±0.1mm	350mm	40mm

T-SHAPE MARKING GAUGE

1275-150B

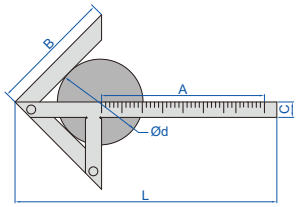




- Made of stainless steel
- Satin chrome plated reading surface

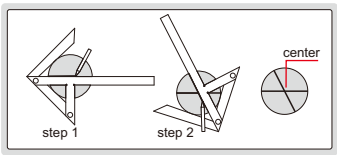
Code	Range	Graduation	Accuracy
1275-150B	0-150mm	0.02mm	±0.04mm

CENTER MARKING GAUGES



7205-100

- Accuracy: ±0.15mm
- Marking the center of round plates and shafts
- Made of stainless steel
- Satin chrome plated

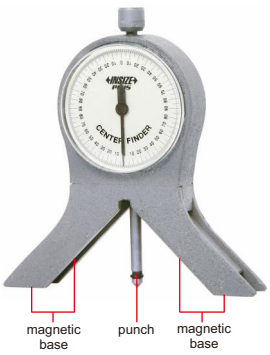


Code	Size (A×B)	Diameter of shafts (Ød)	C	L
7205-100	100×70mm	4-90mm	12mm	153mm
7205-150	150×130mm	4-190mm	15mm	245mm
7205-200	200×150mm	6-220mm	15mm	310mm

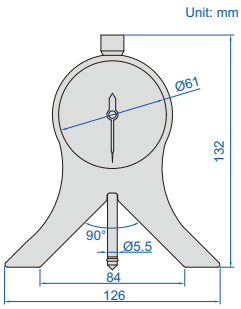
LOCATOR

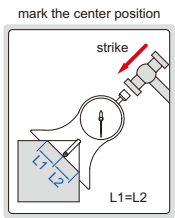
INSIZE PLUS

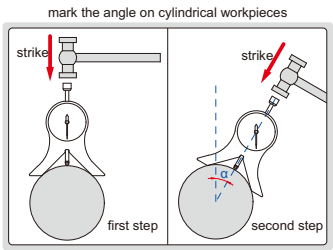
- Mark the position when drilling, milling or welding, suitable for cylindrical and rectangular workpieces
- The punch hardness is HRC59-63
- Optional accessory: punch (code **2849-P1**)



2849-90





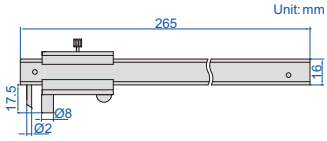


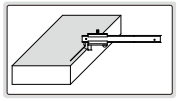
Code	Range	Graduation	Accuracy	Dial reading
2849-90	4×90°	1°	±1°	0-90-0-90-0

SCRIBING CALIPER

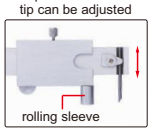
- Accuracy: ±0.1mm
- Graduation: 0.1mm, 1/128"
- Made of stainless steel
- Satin chrome plated reading surface
- Carbide scriber tip
- Optional accessory: carbide scriber tip (code **SP-SCRIBER-7202**)

7202-200A





the position of scriber tip can be adjusted



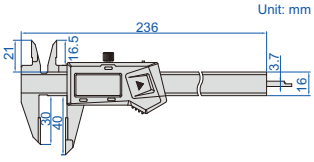
Code	Range
7202-200A	0-200mm/0-8"

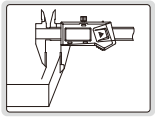
DIGITAL SCRIBING CALIPER

DATA OUTPUT

1166-150A

- Non waterproof
- Resolution: 0.01mm/0.0005"
- The carbide-tipped jaws facilitate scribing on workpieces
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel



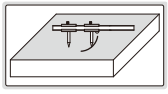


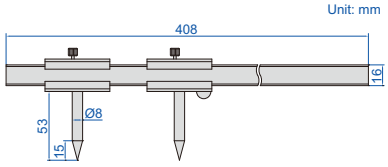
Code	Range	Accuracy
1166-150A	0-150mm/0-6"	±0.03mm

SCRIBING CALIPER

7203-300A

- Accuracy: ±0.1mm
- Graduation: 0.1mm
- Made of stainless steel
- Satin chrome plated reading surface
- Hardened scriber tips

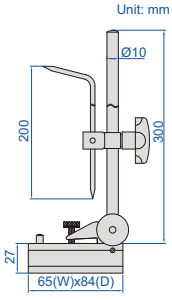




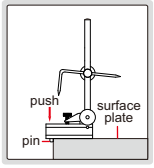
Code	Range
7203-300A	51-300mm

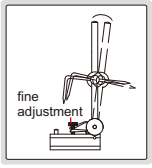
HEIGHT SCRIBER

- Grooved bottom for cylinder
- Two pins to be set against the edge of surface plate



6990-300A





Code
6990-300A

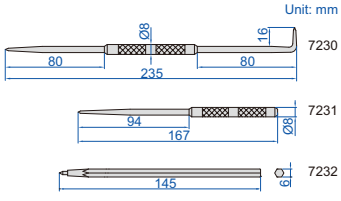
SCRIBERS

7230

7231

7232

- **7230** and **7231** are nickel plated, **7232** is zinc-plated



Code	Tip
7230	hardened tips
7231	hardened tip
7232	carbide tip

PRECISION SCREWDRIVER SET CODE ISGF-0901

ISGF-0901

- Includes:
  4 pcs "–": 1.4mm, 2.0mm, 2.4mm, 3.0mm
  2 pcs "+": 0#, 1#
- Rotating cap
- Material: CRV, hardness: HRC52~56

packaging

2-PIECE MEASURING TOOL SET

- Includes:
  1) Digital caliper, range 0-150mm/0-6", resolution 0.01mm/0.0005" (code **1108-150**)
  2) Digital outside micrometer, range 0-25mm/0-1", resolution 0.001mm/0.00005" (code **3109-25A**)

5022

Code
5022

2-PIECE MEASURING TOOL SET

- Includes:
  1) Dial test indicator, range 0.8mm, graduation 0.01mm (code **2380-08**)
  2) Magnetic stand

5023

Code
5023

2-PIECE MEASURING TOOL SET

- Includes:
  1) Dial indicator, range 10mm, graduation 0.01mm (code **2308-10A**)
  2) Magnetic stand (code **6201-60**)

5024

Code
5024

4-PIECE MEASURING TOOL SETS

- Includes:
  1) Vernier caliper, range 0-150mm/0-6" graduation 0.05mm/1/128" (code **1205-150S**) for **5041**, graduation 0.02mm/0.001" (code **1205-1502S**) for **5041-2**
  2) Outside micrometer, range 0-25mm, graduation 0.01mm (code **3202-25A**)
  3) 90° beveled edge square, 100x70mm, grade 0 (code **4790-1000**)
  4) Steel ruler, 150mm/6" (code **7110-150**)

5041

Code	Remark
5041	vernier caliper, graduation 0.05mm/1/128" (code **1205-150S**)
5041-2	vernier caliper, graduation 0.02mm/0.001" (code **1205-1502S**)

4-PIECE MEASURING TOOL SET

- Includes:
  1) Digital caliper, range 0-150mm/0-6", resolution 0.01mm/0.0005" (code **1108-150**)
  2) Outside micrometer, range 0-25mm, graduation 0.01mm (code **3202-25A**)
  3) 90° beveled edge square, 100x70mm, grade 0 (code **4790-1000**)
  4) Steel ruler, 150mm/6" (code **7110-150**)

5042

Code
5042

5-PIECE MEASURING TOOL SET

- Includes:
  1) Digital caliper, range 0-150mm/0-6", resolution 0.01mm/0.0005" (code **1108-150**)
  2) Digital outside micrometer, range 0-25mm/0-1", resolution 0.001mm/0.00005" (code **3109-25A**)
  3) Digital indicator, range 12.7mm/0.5", resolution 0.01mm/0.0005" (code **2112-10**)
  4) Magnetic stand (code **6201-60**)
  5) Micrometer stand (code **6300**)

5052

Code
5052

6-PIECE MEASURING TOOL SET

- Includes:
  1) Digital caliper, range 0-150mm/0-6", resolution 0.01mm/0.0005" (code **1108-150**)
  2) Outside micrometer, range 0-25mm, graduation 0.01mm (code **3202-25A**)
  3) Dial indicator, range 10mm, graduation 0.01mm (code **2308-10FA**)
  4) 90° beveled edge square, 100x70mm, grade 0 (code **4790-1000**)
  5) Scriber (code **7230**)
  6) Steel ruler, 150mm/6" (code **7110-150**)

5061

Code
5061

6-PIECE MEASURING TOOL SETS

- Includes:
  1) Vernier caliper, range 0-150mm/0-6" graduation 0.05mm/1/128" (code **1205-150S**) for **5063**, graduation 0.02mm/0.001" (code **1205-1502S**) for **5063-2**
  2) Outside micrometer, range 0-25mm graduation 0.01mm (code **3202-25A**)
  3) 90° beveled edge square, 100x70mm grade 00 (code **4790-0100**)
  4) Straight edge, 100mm (code **4700-100**)
  5) Spring divider, 150mm (code **7260-150**)
  6) Steel ruler, 200mm/8" (code **7110-200**)

5063

Code	Remark
5063	vernier caliper, graduation 0.05mm/1/128" (code **1205-150S**)
5063-2	vernier caliper, graduation 0.02mm/0.001" (code **1205-1502S**)

9-PIECE MEASURING TOOL SET

- Includes:
  1) Digital caliper, range 0-150mm/0-6", resolution 0.01mm/0.0005" (code **1108-150**)
  2) Outside micrometer, range 0-25mm, graduation 0.01mm (code **3202-25A**)
  3) Protractor, range 0-180°, graduation 1° (code **4799-180**)
  4) Pitch gauge, range 0.25-7mm, 24 pcs, metric 60° thread (code **4820-124**)
  5) Radius gauge, range 1-7mm (code **4801-17**)
  6) Feeler gauge, range 0.05-1.00mm, 20 pcs (code **4602-20**)
  7) 90° beveled edge square, 100x70mm, grade 0 (code **4790-1000**)
  8) Scriber (code **7230**)
  9) Steel ruler, 150mm/6" (code **7110-150**)

5091

Code
5091

13-PIECE MEASURING TOOL SET

- Includes:
  1) Digital caliper, range 0-150mm/0-6", resolution 0.01mm/0.0005" (code **1108-150**)
  2) Outside micrometer, range 0-25mm, graduation 0.01mm (code **3202-25A**)
  3) Dial indicator, range 10mm, graduation 0.01mm (code **2308-10A**)
  4) Magnetic stand (code **6201-60**)
  5) Protractor, range 0-180°, graduation 1° (code **4799-180**)
  6) Pitch gauge, range 0.25-7mm, 24 pcs, metric 60° thread (code **4820-124**)
  7) Radius gauge, range 1-7mm (code **4801-17**)
  8) Feeler gauge, range 0.05-1.00mm, 20 pcs (code **4602-20**)
  9) 90° beveled edge square, 100x70mm, grade 0 (code **4790-1000**)
  10) Scriber (code **7230**)
  11) Steel ruler, 150mm/6" (code **7110-150**)
  12) Depth base attachment (code **6140**)
  13) Zero setting bar for depth base attachment

5013

Code
5013

GRANITE SURFACE PLATES

INSPECTION CERTIFICATE

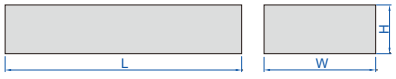
CUSTOM-MADE
SUPPLY SPECIAL SIZES ACCORDING TO CUSTOMER'S REQUEST

- Made of Indian granite, high hardness, free from deterioration or dimensional change over time, minimal changes in dimension due to temperature changes
- Meet DIN876, grade 00 is for inspection room or lab, grade 0 is for workshop
- Optional accessory:
  stand for granite surface plate (code **6902**),
  jack for granite surface plate (code **6903-B**)

6900-132

Physical characteristics of granite

Shore hardness	94HS
Flexural strength	28MPa
Compressive strength	236MPa
Elastic modulus	9.88×10^4MPa
Poisson's ratio	0.33
Volume density	3000kg/m^3
Water absorption rate	0.05%
Linear expansion coefficient	6×10^{-6}/°C



Grade 00

Code	Size (L×W×H)	Flatness	Net weight (kg)	Max. load (kg)
6900-132*	300×200×60mm	2.7μm	11	30
6900-142*	400×250×60mm	2.9μm	18	50
6900-144*	400×400×60mm	3.1μm	29	60
6900-153*	500×315×70mm	3.2μm	33	60
6900-164*	630×400×80mm	3.5μm	60	65
6900-166*	630×630×100mm	3.8μm	119	75
6900-185*	800×500×100mm	3.9μm	120	100
6900-1106*	1000×630×140mm	4.4μm	265	200
6900-1107*	1000×750×150mm	4.5μm	337	300
6900-1101*	1000×1000×150mm	4.8μm	450	400
6900-1128*	1200×800×160mm	4.9μm	461	500
6900-1161*	1600×1000×180mm	5.8μm	864	600

Grade 0

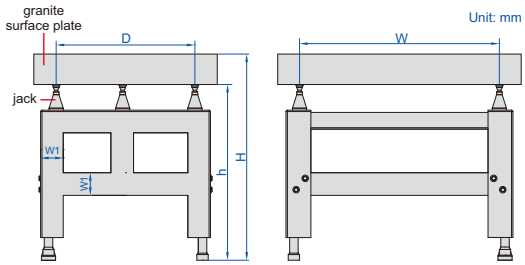
Code	Size (L×W×H)	Flatness	Net weight (kg)	Max. load (kg)
6900-032*	300×200×60mm	5.4μm	11	60
6900-042*	400×250×60mm	5.9μm	18	100
6900-044*	400×400×60mm	6.3μm	29	120
6900-053*	500×315×70mm	6.4μm	33	120
6900-064*	630×400×80mm	7.0μm	60	130
6900-066*	630×630×100mm	7.6μm	119	150
6900-085*	800×500×100mm	7.8μm	120	200
6900-0106*	1000×630×140mm	8.7μm	265	400
6900-0107*	1000×750×150mm	9.0μm	337	600
6900-0101*	1000×1000×150mm	9.7μm	450	800
6900-0128*	1200×800×160mm	9.8μm	461	1000
6900-0161*	1600×1000×180mm	11.5μm	864	1200

*Supplied with manufacturer inspection certificate

STANDS FOR GRANITE SURFACE PLATES

- For medium size granite surface plates
- 5 jacks are included
- Adjusting range of jacks: 25mm
- One foot on the bottomis adjustable

6902-64A



Low stands (mm)

Code	For granite surface plate	W	D	H (with granite surface plate)	h (without granite surface plate)	W1
6902-64A	630×400×80mm (code **6900-064** and **6900-164**)	352	224	775-800	695-720	80
6902-66A	630×630×100mm (code **6900-066** and **6900-166**)	352	352	775-800	675-700	80
6902-85A	800×500×100mm (code **6900-085** and **6900-185**)	448	280	775-800	675-700	80
6902-106A	1000×630×140mm (code **6900-0106** and **6900-1106**)	560	352	755-780	615-640	80
6902-107A	1000×750×150mm (code **6900-0107** and **6900-1107**)	560	420	755-780	605-630	80
6902-101A	1000×1000×150mm (code **6900-0101** and **6900-1101**)	560	560	755-780	605-630	80
6902-128A	1200×800×160mm (code **6900-0128** and **6900-1128**)	672	448	755-780	595-620	80
6902-161A	1600×1000×180mm (code **6900-0161** and **6900-1161**)	896	560	755-780	575-600	100

High stands (mm)

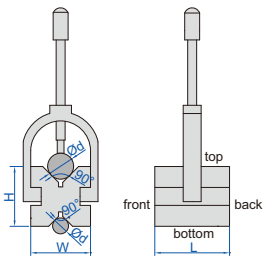
Code	For granite surface plate	W	D	H (with granite surface plate)	h (without granite surface plate)	W1
6902-64H	630×400×80mm (code **6900-064** and **6900-164**)	352	224	1000-1025	920-945	80
6902-66H	630×630×100mm (code **6900-066** and **6900-166**)	352	352	1000-1025	900-925	80
6902-85H	800×500×100mm (code **6900-085** and **6900-185**)	448	280	1000-1025	900-925	80
6902-106H	1000×630×140mm (code **6900-0106** and **6900-1106**)	560	352	1000-1025	860-885	80
6902-107H	1000×750×150mm (code **6900-0107** and **6900-1107**)	560	420	1000-1025	850-875	80
6902-101H	1000×1000×150mm (code **6900-0101** and **6900-1101**)	560	560	1000-1025	850-875	80
6902-128H	1200×800×160mm (code **6900-0128** and **6900-1128**)	672	448	1000-1025	840-865	80
6902-161H	1600×1000×180mm (code **6900-0161** and **6900-1161**)	896	560	1000-1025	820-845	100

V-BLOCK SETS

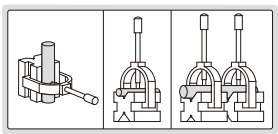
- Hold cylindrical workpieces for inspection and machining
- Two V-blocks per set
- Made of alloy steel
- Hardened to HRC60±2
- V groove on the top for large shafts
- V groove on the bottom for small shafts (except **6896-10**)

6896-10

6896-11

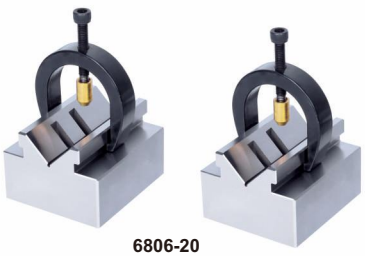


Code	Size (L×W×H)	Range of shafts (Ød)	Parallelism of both V grooves to top and bottom sides	Squareness of both V grooves to front and back sides	Height difference of a matched pair
6896-10	25×20×20mm	3-20mm	3μm	3μm	3μm
6896-11	50×40×40mm	5-30mm	5μm	5μm	5μm
6896-12	80×63×63mm	7-63mm	5μm	5μm	5μm
6896-13	100×80×80mm	7-80mm	5μm	5μm	5μm
6896-14	70×140×140mm	9-140mm	5μm	5μm	5μm

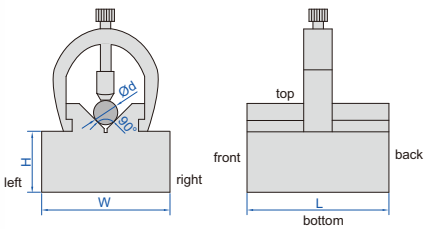


V-BLOCK SET

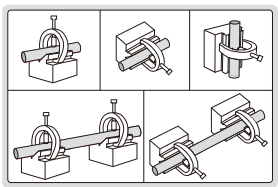
- Hold cylindrical workpieces for inspection and machining
- Two V-blocks per set
- Made of alloy steel
- Hardened to HRC60±2
- Applicable for cylinder with diameter (Ød): 3-20mm



6806-20



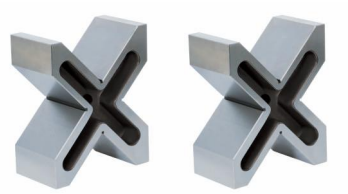
SIDE LIE-DOWN USE IS POSSIBLE



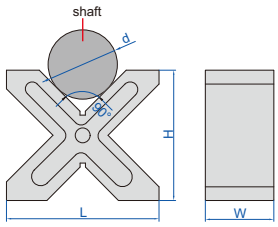
Code	Size (L×W×H)	Parallelism of V groove to bottom, left, right sides	Squareness of V groove to front and back sides	Height difference of a matched pair
6806-20	70×63×31mm	5μm	5μm	5μm

V-BLOCK SETS (ECONOMIC TYPE)

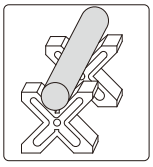
- For positioning cylindrical workpieces
- Two V-blocks per set
- Each V-block has four 90° V-grooves
- Cast iron, hardness HB170-240



6805-2

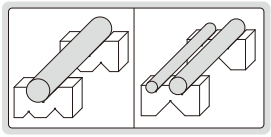


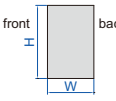
Code	Size (L×H×W)	Range of shafts (Ød)	Parallelism of four V grooves to all sides	Height difference of a matched pair
6805-1	150×130×75mm	8-120mm	25μm	30μm
6805-2	200×170×90mm	12-180mm	25μm	30μm

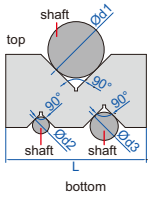


V-BLOCK SETS

6887-3







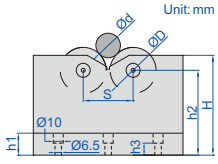
- Two V-blocks per set
- Made of hardened tool steel

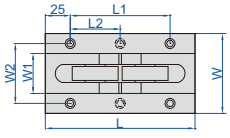
Code	Parallelism of three V grooves to top and bottom sides	Height difference of a matched pair
6887-1	5μm	5μm
6887-2	5μm	5μm
6887-3	5μm	5μm
6887-4	5μm	5μm

Code	Size (L×W×H)	Range of shafts (Ød1)	Range of shafts (Ød2)	Range of shafts (Ød3)
6887-1	50×19×24mm	3-32mm	3-16mm	3-22mm
6887-2	75×24×35mm	3-50mm	3-20mm	3-32mm
6887-3	100×33×52mm	3-68mm	3-26mm	3-40mm
6887-4	125×44×69mm	3-87mm	3-34mm	3-50mm

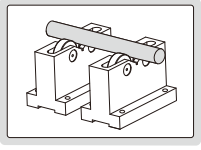
ROLLER BEARING V-BLOCK SETS

6888-1





- Runout accuracy: 5μm
- Parallelism of bearings to bottom: 12μm
- Two V-blocks per set
- Workpieces don't get damaged due to bearings
- Suitable for heavy workpieces



(mm)

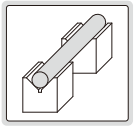
Code	W1	W2	h1	h2	h3	L1	L2	S
6888-1	22	44	20	85	12	100	–	60
6888-2	40	60	22	85	12	100	–	50
6888-3	60	80	30	124	20	180	90	120

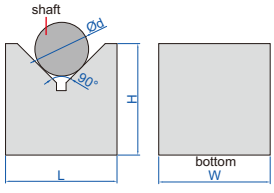
Code	Size (L×W×H)	Code of bearings	Diameter of bearings (ØD)	Range of shafts (Ød)	Load capacity
6888-1	150×60×100mm	16004 ZZ	42mm	25-70mm	500kg
6888-2	150×80×100mm	6303 ZZ	47mm	5-55mm	1000kg
6888-3	230×100×150mm	6306 ZZ	72mm	70-200mm	1000kg

GRANITE V-BLOCK SET

- Two V-blocks per set

6897-1



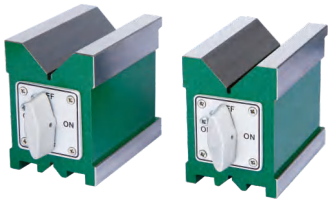


Code	Size (L×W×H)	Range of shafts (Ød)	Parallelism of V groove to bottom	Height difference of a matchet pair
6897-1	70×50×70mm	6-70mm	4μm	5μm

MAGNETIC V-BLOCKS (ADVANCED TYPE)

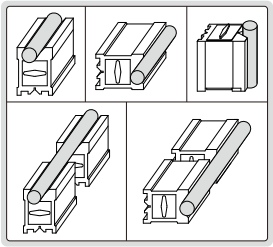
HARDENED SURFACES | HIGH PRECISION | STRONG MAGNETIC FORCE

6889-11



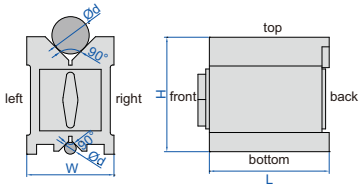
6889-1

- Hardened, high accuracy, strong magnetic force, for grinding, light milling, drilling and inspection of round and square workpieces
- All working surfaces are hardened to HRC60±2
- Magnetic force on top, bottom and two V grooves
- V groove on the top for large shafts
- V groove on the bottom for small shafts
- Suitable for cast iron surface plates and granite surface plates



Individual

Code	Size (L×W×H)	Range of shafts (Ød)	Magnetic force	Parallelism of V grooves to top, bottom, left, right sides	Squareness of V grooves to back side
6889-11	75×56×75mm	5-40mm	85kgf	5μm	5μm
6889-22	100×70×95mm	5-65mm	150kgf	5μm	5μm
6889-33	150×75×100mm	5-70mm	190kgf	6μm	6μm
6889-55	160×125×130mm	5-140mm	220kgf	12μm	12μm
6889-44	200×125×150mm	10-140mm	400kgf	12μm	12μm



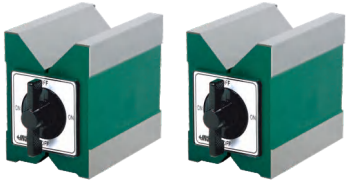
Matched pair

Code	Size (L×W×H)	Range of shafts (Ød)	Magnetic force	Parallelism of V grooves to top, bottom, left, right sides	Squareness of V grooves to back side	Height difference of a matched pair
6889-1	75×56×75mm	5-40mm	85kgf	5μm	5μm	5μm
6889-2	100×70×95mm	5-65mm	150kgf	5μm	5μm	5μm
6889-3	150×75×100mm	5-70mm	190kgf	6μm	6μm	6μm
6889-5	160×125×130mm	5-140mm	220kgf	12μm	12μm	12μm
6889-4	200×125×150mm	10-140mm	400kgf	12μm	12μm	12μm

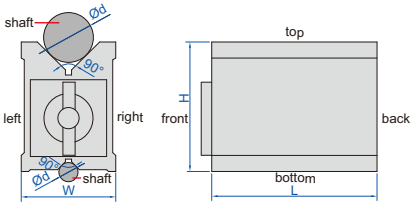
MAGNETIC V-BLOCKS

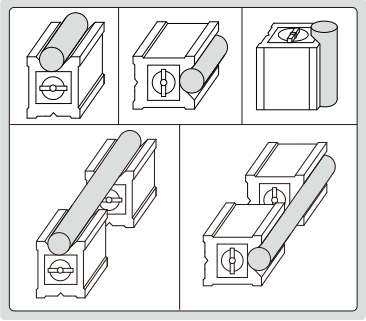
ATTENTION: NOT SUITABLE FOR STEEL OR IRON SURFACES, OTHERWISE THE MAGNETIC FORCE WILL BE REDUCED

6801-1202



6801-2A





- Hold cylindrical workpieces for inspection and machining
- V groove on the top for large shafts
- V groove on the bottom for small shafts
- Not suitable for steel or iron surfaces, otherwise the magnetic force will be reduced

Individual

Code	Size (L×W×H)	Range of shafts (Ød)	Magnetic force	Parallelism of V grooves to top, bottom, left, right side	Squareness of V grooves to back side	Remark
6801-1201	80×70×95mm	6-67mm	64kgf	10μm	10μm	not hardened
6801-1202	100×70×95mm	6-67mm	80kgf	10μm	10μm	
6801-1203	120×70×95mm	6-67mm	96kgf	10μm	10μm	
6801-1201A	80×70×95mm	6-67mm	64kgf	10μm	10μm	hardened surfaces
6801-1202A	100×70×95mm	6-67mm	80kgf	10μm	10μm	
6801-1203A	120×70×95mm	6-67mm	96kgf	10μm	10μm	

Matched pair

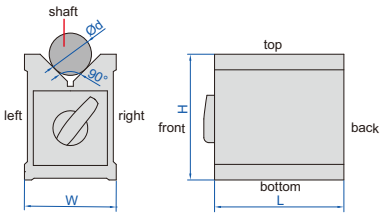
Code	Size (L×W×H)	Range of shafts (Ød)	Magnetic force	Parallelism of V grooves to top, bottom, left, right side	Squareness of V grooves to back side	Height difference of a matched pair	Remark
6801-1	80×70×95mm	6-67mm	64kgf	10μm	10μm	10μm	not hardened
6801-2	100×70×95mm	6-67mm	80kgf	10μm	10μm	10μm	
6801-3	120×70×95mm	6-67mm	96kgf	10μm	10μm	10μm	
6801-1A	80×70×95mm	6-67mm	64kgf	10μm	10μm	10μm	hardened surfaces
6801-2A	100×70×95mm	6-67mm	80kgf	10μm	10μm	10μm	
6801-3A	120×70×95mm	6-67mm	96kgf	10μm	10μm	10μm	

MAGNETIC V-BLOCKS

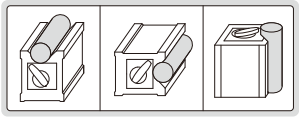
ATTENTION: NOT SUITABLE FOR STEEL OR IRON SURFACES, OTHERWISE THE MAGNETIC FORCE WILL BE REDUCED

- Parallelism of V groove to top, bottom, left and right sides: 10μm
- Hold cylindrical workpieces for inspection and machining
- Supplied in single piece
- Not suitable for steel or iron surfaces, otherwise the magnetic force will be reduced

6890-702



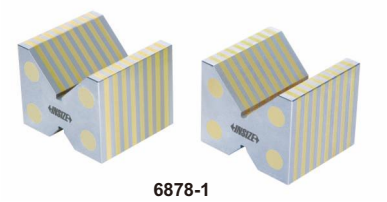
Code	Size (L×W×H)	Range of shafts (Ød)	Magnetic force	Squareness of V groove to back side	Remark
6890-702	70×60×73mm	6-44mm	56kgf	10μm	not hardend
6890-702A	70×60×73mm	6-44mm	56kgf	10μm	hardend surface



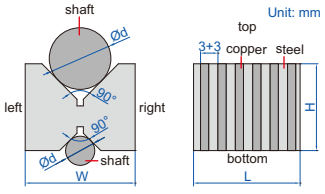
MAGNETIC INDUCTION V-BLOCK SET

ATTENTION: NOT HARDENED, DO NOT ROTATE WORKPIECES ON V-BLOCKS

- Parallelism of both V grooves to top and bottom sides: 10μm
- Height difference of a matched pair: 10μm
- Hold cylindrical workpieces for inspection and machining
- To be used on magnetic chucks
- Two V-blocks per set
- V groove on the top for large shafts
- V groove on the bottom for small shafts
- Hardness HRB70
- Non-magnetic copper strips



6878-1



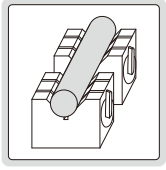
Code	Size (L×W×H)	Range of shafts (Ød)	Pole pitch
6878-1	52×58×46mm	6-56mm	3+3mm

MAGNETIC V-BLOCK SETS

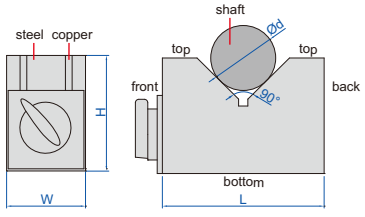
ATTENTION: NOT HARDENED, DO NOT ROTATE WORKPIECES ON V-BLOCKS

ATTENTION: LOW MAGNETIC FORCE

- Hold cylindrical workpieces for inspection, not suitable for machining due to low magnetic force
- Two V-blocks per set
- Hardness HRB70



6891-1

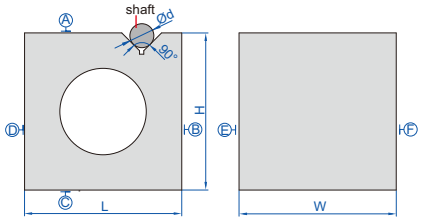


Code	Size (L×W×H)	Range of shafts (Ød)	Magnetic force	Parallelism of V groove to bottom and back sides	Height difference of a matched pair
6891-1	70×40×50mm	6-46mm	15kgf	10μm	10μm
6891-3	150×50×100mm	6-125mm	21kgf	10μm	10μm

GRANITE SQUARE WITH V GROOVE

- Parallelism and squareness of A, B, C, D, E and F: 6μm
- Parallelism and squareness of V groove to A, B, C, D, E and F: 6μm

4142-200

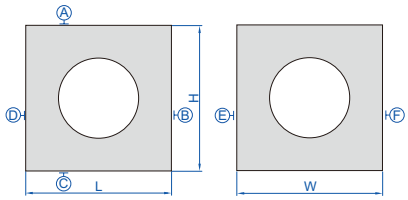


Code	Size (L×W×H)	Range of shaft (Ød)
4142-200	200×200×200mm	9-70mm

GRANITE SQUARE

- Made of Indian granite, high hardness, free from deterioration or dimensional change overtime, minimal changes in dimension due to temperature changes

4145-200



Code	Size (L×W×H)	Squareness of A, B, C, D, E and F	Parallelism and squareness of A, B, C, D, E and F
4145-200	200×200×200mm	1.5μm	2μm

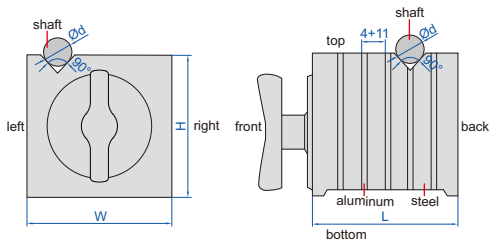
MAGNETIC SQUARE WITH V GROOVE

ATTENTION: NOT HARDENED, DO NOT ROTATE WORKPIECES ON V-BLOCKS

- Hold flat and cylindrical workpieces for inspection and machining
- Magnetic force on top, left, right and V grooves
- Parallelism and squareness of top, bottom, left, right and back: 20μm
- Parallelism and squareness of V grooves to top, bottom, left, right and back: 20μm

6539-100

Unit: mm



Code	Size (L×W×H)	Magnetic force of V grooves		Magnetic force of top, left and right sides		Range of shafts (Ød)
		on granite surface plate	on cast iron plate	on granite surface plate	on cast iron plate	
6539-100	100×100×100mm	30kgf	25kgf	50kgf	30kgf	5-30mm

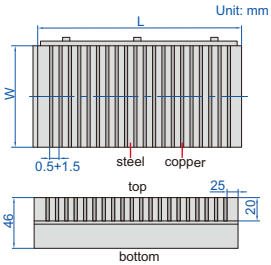
PERMANENT MAGNETIC CHUCKS

ATTENTION: NOT HARDENED

- The magnetic pole arrangement is dense and can hold thin and small workpieces

6537-400

Unit: mm



Code	Table size (L×W)	Magnetic force	Pole pitch	Parallelism of top to bottom
6537-175	175×100mm	8kgf/cm²	0.5+1.5mm	0.02mm/300mm
6537-250	250×125mm	8kgf/cm²	0.5+1.5mm	0.02mm/300mm
6537-150	150×150mm	8kgf/cm²	0.5+1.5mm	0.02mm/300mm
6537-300	300×150mm	8kgf/cm²	0.5+1.5mm	0.02mm/300mm
6537-350	350×150mm	8kgf/cm²	0.5+1.5mm	0.02mm/300mm
6537-401	400×150mm	8kgf/cm²	0.5+1.5mm	0.02mm/300mm
6537-451	450×150mm	8kgf/cm²	0.5+1.5mm	0.02mm/300mm
6537-400	400×200mm	8kgf/cm²	0.5+1.5mm	0.02mm/300mm
6537-450	450×200mm	8kgf/cm²	0.5+1.5mm	0.02mm/300mm
6537-500	500×200mm	8kgf/cm²	0.5+1.5mm	0.02mm/300mm

DEMAGNETIZER
CODE 0509-DG15

- Copper wire coils, can eliminate residual magnetism in molds and components
- Built-in thermal protector, automatic power-off to prevent overheating and automatic reset after cooling down

SPECIFICATION

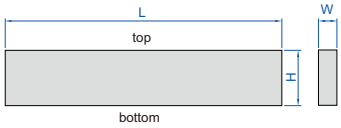
Working time	30 minutes continuously
Action temperature	100°C
Reset temperature	60°C~70°C
Power	200W
Power supply	220V 50Hz
Dimensions (L×W×H)	140×100×70mm
Net weight	2.4kg

MAGNETIC PARALLEL SETS

- One side with magnets, can reduce clamping time
- Parallelism between top and bottom: 5μm
- Height difference of a matched pair: 5μm
- Made of alloy tool steel
- Hardened to HRC55-60

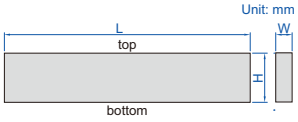
Code	Parallels per set	Length (L)	Thickness (W)	Height (H)
6509-90	5 pairs	90mm	2.5mm	15, 22, 25, 30, 32mm
6509-125	5 pairs	125mm	2.5mm	15, 30, 35, 37,39mm
6509-150	5 pairs	150mm	2.5mm	25, 35, 40, 45, 47mm
6509-160	5 pairs	160mm	2.5mm	22, 30, 37, 42, 47mm
6509-200	5 pairs	200mm	2.5mm	25, 40, 47, 52, 57mm

6509-125



PARALLEL SETS

- Parallelism between top and bottom: 5μm
- Height difference of a matched pair: 5μm
- Hardened to HRC55-60
- Made of alloy tool steel



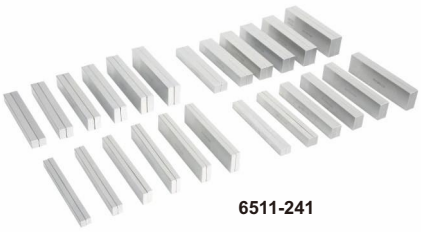
6533-144

packaging

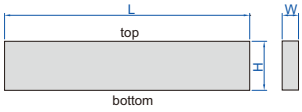
Code	Parallels per set	Length (L)	Thickness (W)	Height (H)
6533-6	6 pairs	200mm	9.5mm	35, 40, 45, 50, 55, 58mm
6533-8	8 pairs	160mm	8mm	12, 17, 22, 25, 28, 32, 36, 38mm
6533-81	8 pairs	200mm	8mm	17, 22, 26, 28, 32, 36, 38, 42mm
6533-9	9 pairs	160mm	4mm	10, 14, 18, 22, 26, 30, 34, 38, 42mm
6533-10	10 pairs	150mm	3mm	13, 16, 19, 22, 25, 28, 31, 35, 38, 41mm
6533-144	14 pairs	150mm	10mm	14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 35, 40, 45, 50mm

PARALLEL SETS

- Parallelism between top and bottom: 5μm
- Height difference of a matched pair: 5μm
- Made of alloy tool steel
- Hardened to HRC55-60



6511-241

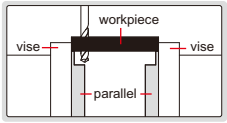


packaging

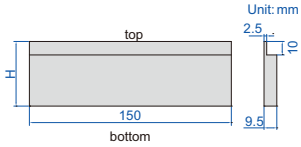
Code	Parallels per set	Length (L)	Height (H)×Thickness (W)
6511-20	20 pairs	100mm	5×2, 10×2, 15×2, 20×2, 6×3, 11×3, 16×3, 21×3, 7×4, 12×4, 17×4, 22×4, 8×5, 13×5, 18×5, 23×5, 9×6, 14×6, 19×6, 24×6mm
6511-24	24 pairs	125mm	11×8, 16×8, 21×8, 26×8, 31×8, 36×8, 13×10, 18×10, 23×10, 28×10, 33×10, 38×10, 15×12, 20×12, 25×12, 30×12, 35×12, 40×12, 17×14, 22×14, 27×14, 32×14, 37×14, 42×14mm
6511-241	24 pairs	150mm	11×8, 16×8, 21×8, 26×8, 31×8, 36×8, 13×10, 18×10, 23×10, 28×10, 33×10, 38×10, 15×12, 20×12, 25×12, 30×12, 35×12, 40×12, 17×14, 22×14, 27×14, 32×14, 37×14, 42×14mm

PARALLEL SET

- Height difference of a matched pair: 5μm
- Hardened to HRC55-60
- Made of alloy tool steel



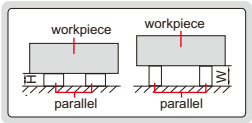
6534-6

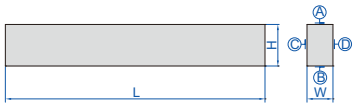


Code	Parallels per set	Parallelism between top and bottom	Height (H)
6534-6	6 pairs	5μm	25, 30, 35, 40, 45, 48mm

GRANITE PARALLEL SET

- Made of granite, hard and no rusty, no dimensional change over time or temperature change
- Two parallels per set





4143-250

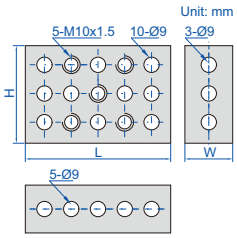
Code	Size (L×W×H)	Parallelism between A and B	Parallelism between C and D	Height difference of a matched pair
4143-250	250x25x40mm	3μm	3μm	3μm

PARALLEL/SQUARE SETS

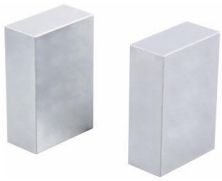
screws and wrench are included for code **6531-25**

- Pairs of matched blocks for positioning and set-up
- Hardness HRC60±2

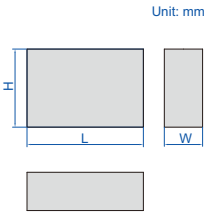
6531-25



6531-25



6531-251



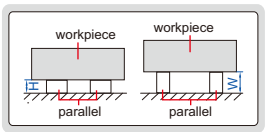
6531-251

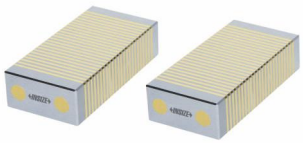
Code	Size (L×H×W)	Size accuracy	Squareness	Parallelism	Height difference of a matched pair	Hole numbers
6531-25	75×50×25mm	5μm	5μm/25mm	3μm	5μm	23 holes
6531-251	75×50×25mm	5μm	5μm/25mm	3μm	5μm	no holes

MAGNETIC INDUCTION PARALLEL SET

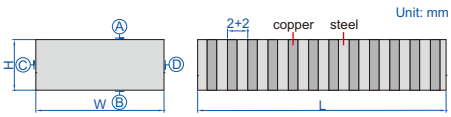
ATTENTION: NOT HARDENED

- To be used on magnetic chucks
- Two parallels per set
- Hardness HRB70
- Non-magnetic copper strips





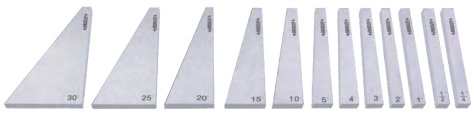
6879-1



Code	Size (LxWxH)	Pole pitch	Parallelism between A and B	Parallelism between C and D	Height difference of a matched pair
6879-1	100x50x25mm	2+2mm	10μm	10μm	10μm

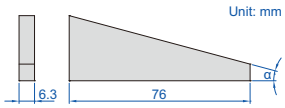
ANGLE PLATE SETS

- Accuracy: ±20 seconds
- For angle set-up in tooling, production and inspection
- Hardness HRC52



4006-12

Code	Angle plates included	Angle α
4006-10	10 pcs	1°, 2°, 3°, 4°, 5°, 10°, 15°, 20°, 25°, 30°
4006-12	12 pcs	1/4°, 1/2°, 1°, 2°, 3°, 4°, 5°, 10°, 15°, 20°, 25°, 30°

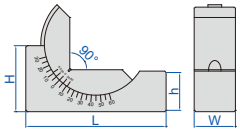


ADJUSTABLE ANGLE BLOCK

- Graduation of angle: 10 minutes
- Made of hardened tool steel
- With locking screw

Code	Size (LxWxH)	h	Adjustable angle	Accuracy of angle
6535-30	102x30x49mm	30mm	15°~0°~60°	10 minutes

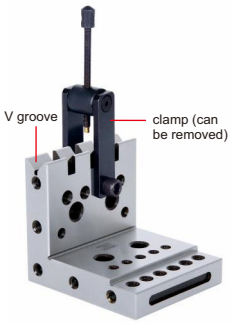
6535-30



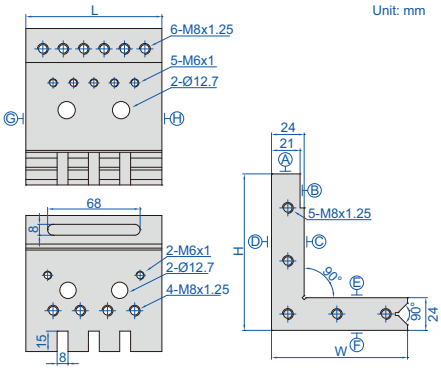
RIGHT ANGLE PLATE

- Made of alloy steel
- Hardened to HRC60±2
- V groove for cylinders
- Parallelism and squareness between A, B, C, D, E, F, G and H: 10μm
- Parallelism and squareness of V groove to A, B, C, D, E, F, G and H: 10μm

Code	Size (L×W×H)
6547-1	100×100×115mm



6547-1

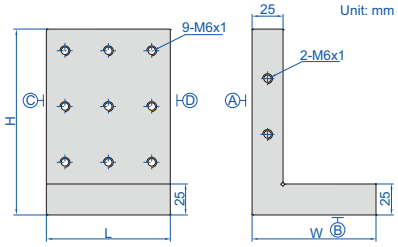


RIGHT ANGLE PLATE

- Made of tool steel
- Hardened to HRC60±2
- Squareness or parallelism between A, B, C and D: 5μm

Code	Size (L×W×H)
6548-1	100×100×150mm

6548-1

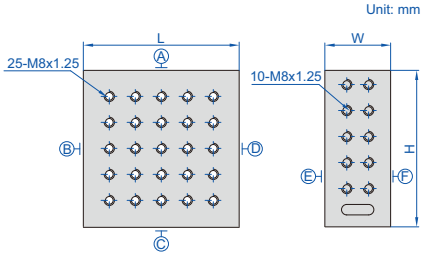


RIGHT ANGLE PLATE

- Made of tool steel
- Hardened to HRC56-58
- Parallelism between A, B, C, D, E and F: 3μm
- Squareness between A, B, C, D, E and F: 5μm

Code	Size (L×W×H)
6549-1	150×63×150mm

6549-1

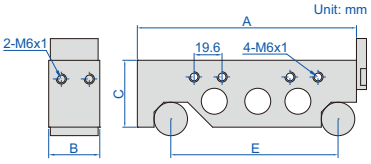


SINE BARS

CAN BE CUSTOMIZED

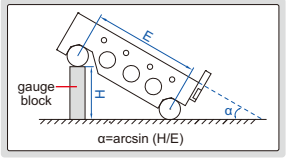
- Made of alloy tool steel

4155-100

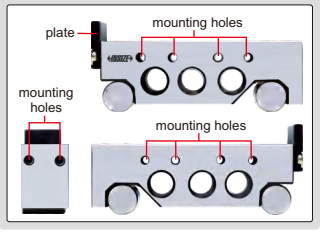


(mm)

Code	Roller distance (E)	Table size (AxB)	C	Accuracy of α at 30°
4155-100	100mm	130x30mm	40	±5 seconds
4155-200	200mm	230x30mm	40	±5 seconds
4155-300	300mm	345x40mm	50	±8 seconds



the front and back ends and two sides have mounting holes to install plate

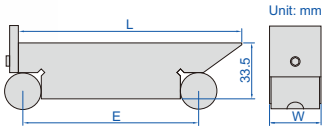


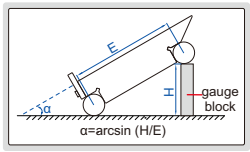
SINE BAR

- Made of alloy tool steel

Code	Roller distance (E)	Table size (L×W)	Accuracy of α at 30°
4158-100	100mm	130×30mm	±5 seconds

4158-100



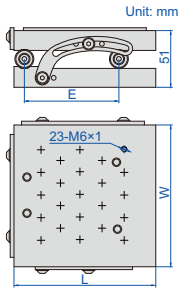


SINE TABLE

- Accuracy of angle: ±15 seconds
- Made of alloy tool steel
- Hardness HRC55-60

Code	Roller distance (E)	Table size (L×W)	Adjustable angle
6527-100	100mm	150×150mm	0-60°

6527-100



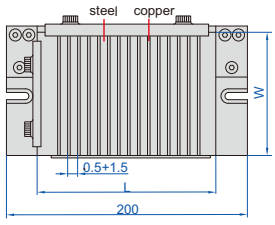
MAGNETIC SINE TABLE

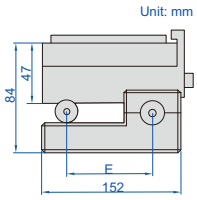
ATTENTION: NOT HARDENED

- Accuracy of angle: ±15 seconds
- Adjustable angle: 0-60°

Code	Table size (L×W)	Roller distance (E)
6538-100	150×150mm	100mm

6538-100





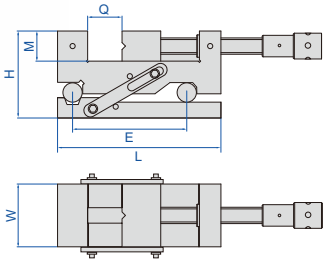
PRECISION SINE VISES

- Parallelism: 5μm/100mm
- Squareness: 5μm/100mm
- Adjustable angle: 0-55°
- Accuracy of angle: ±20 seconds
- Made of alloy steel
- Hardness HRC58-60

(mm)

Code	Jaw opening (Q)	Jaw width (W)	Roller distance (E)	L	H	M
6513-65	0-65	50	100	150	80	25
6513-85	0-85	63	100	185	91.5	32
6513-100	0-100	73	150	205	105	35
6513-1001	0-100	80	150	215	108	40
6513-125	0-125	88	150	245	108	40
6513-1251	0-125	100	200	255	116	45
6513-160	0-160	125	200	295	125	50
6513-175	0-175	150	200	315	125	50

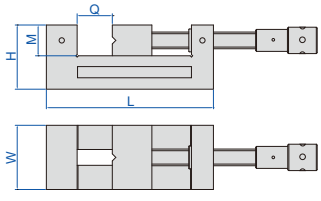
6513-85



PRECISION VISES

Code	Jaw opening (Q)	Jaw width (W)	L	H	M
6520-36	0-36mm	38mm	115mm	48mm	25mm
6520-67	0-67mm	50mm	150mm	50mm	25mm
6520-87	0-87mm	63mm	185mm	63mm	32mm
6520-102	0-102mm	73mm	205mm	70mm	35mm
6520-1021	0-102mm	80mm	215mm	80mm	40mm
6520-127	0-127mm	88mm	245mm	80mm	40mm
6520-1271	0-127mm	100mm	255mm	90mm	45mm
6520-162	0-162mm	125mm	295mm	100mm	50mm
6520-175	0-175mm	150mm	315mm	100mm	50mm
6520-200	0-200mm	200mm	350mm	110mm	55mm

6520-87



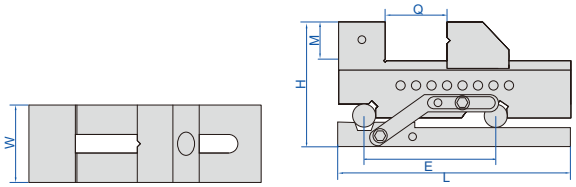
- Parallelism: 5μm/100mm
- Squareness: 5μm/100mm
- Made of alloy steel
- Hardness HRC58-60

PRECISION QUICK MOVING SINE VISES

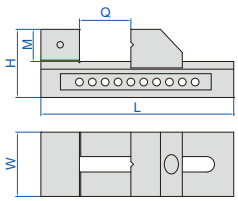
- Parallelism: 5μm/100mm
- Squareness: 5μm/100mm
- Adjustable angle: 0-60°
- Accuracy of angle: ±20 seconds
- Made of alloy steel
- Hardness HRC58-60
- Optional accessory: gauge blocks (code **4101**, **4201**)

6514-85

Code	Jaw opening (Q)	Jaw width (W)	Roller distance (E)	L	H	M
6514-85	0-85	63	100	170	93	32
6514-100	0-100	73	100	185	101	35
6514-125	0-125	88	150	230	108	40
6514-160	0-160	125	200	280	123	50
6514-170	0-170	150	200	300	128	50



QUICK MOVING PRECISION VISES



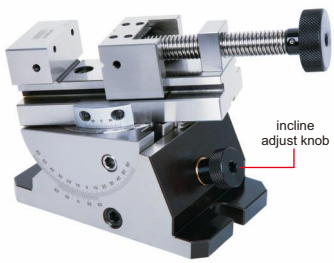
6526-85

Code	Jaw opening (Q)	Jaw width (W)	L	H	M
6526-20	0-20mm	25mm	65mm	29mm	9.3mm
6526-40	0-40mm	38mm	100mm	48mm	23mm
6526-65	0-65mm	50mm	135mm	50mm	25mm
6526-85	0-85mm	63mm	170mm	63mm	32mm
6526-100	0-100mm	73mm	185mm	70mm	35mm
6526-1001	0-100mm	80mm	195mm	80mm	40mm
6526-125	0-125mm	88mm	230mm	80mm	40mm
6526-1251	0-125mm	100mm	240mm	90mm	45mm
6526-160	0-160mm	125mm	280mm	100mm	50mm
6526-175	0-175mm	150mm	300mm	100mm	50mm
6526-208	0-208mm	200mm	350mm	110mm	55mm

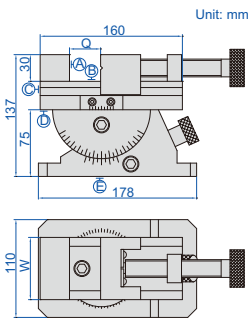
- Parallelism: 5μm/100mm
- Squareness: 5μm/100mm
- Made of alloy steel
- Hardness HRC58-60

PRECISION UNIVERSAL VISE

- Horizontal rotary: range 360°, graduation 0.05°
- Vertical incline: range 45°, graduation 0.05°
- With incline adjust knob
- Parallelism and squareness between A, B, C and D: 5μm/100mm, parallelism between D and E at 0°: 10μm/100mm
- Made of tool steel
- Hardness HRC56-58



6521-80

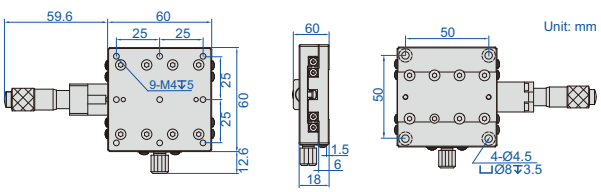


Code	Jaw opening (Q)	Jaw width (W)
6521-80	0-80mm	70mm

X-AXIS STAGE

- Cross roller guides, achieve high precision and smooth movement
- Stages made of aluminum alloy

6582-602



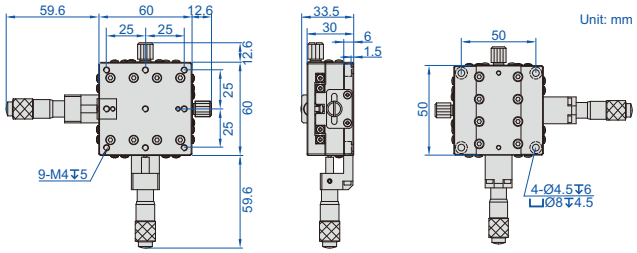
SPECIFICATION (micrometer in the middle)

Code	X-axis displacement	Parallelism of top to bottom surface	Micrometer graduation	Micrometer accuracy	Maximum load	Micrometer location	Stage size	Net weight
6582-602	±6.5mm	0.03mm	0.01mm	0.01mm	49N (5kgf)	middle	60x60mm	0.24kg

XY-AXIS STAGE

- Cross roller guides, achieve high precision and smooth movement
- Stages made of aluminum alloy

6584-602



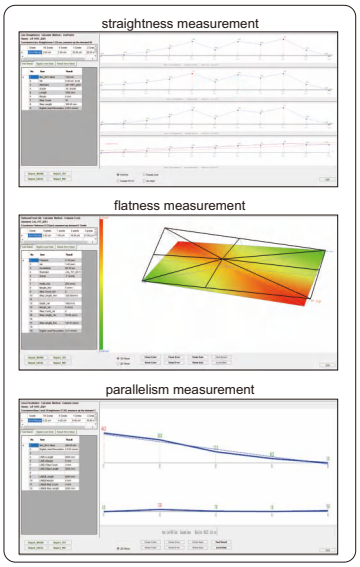
SPECIFICATION (micrometer in the middle)

Code	XY-axis displacement	Parallelism of top to bottom surface	Micrometer graduation	Micrometer accuracy	Maximum load	Micrometer location	Stage size	Net weight
6584-602	±6.5mm	0.06mm	0.01mm	0.01mm	49N (5kgf)	middle	60x60mm	0.48kg

BUILT-IN BLUETOOTH DIGITAL LEVELS

VIDEO

measuring and analysis software (included)



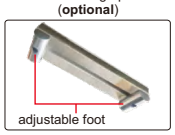
4952-150

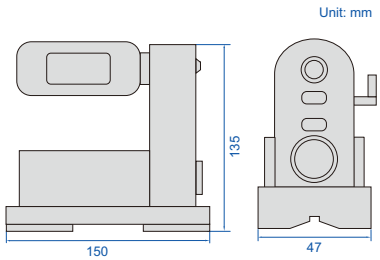
remote control (included)

4×21700 batteries and charger (included)

receiver (included)

300mm bridge plate (**optional**)





- Measures straightness, parallelism and flatness
- Built-in bluetooth, transmission distance is 30 meters (under the condition of no obstruction and no electromagnetic interference)
- The LCD display can be rotated for easy observation in different directions
- Designed with handle for easy access
- Supplied with measuring and analysis software

SPECIFICATION

Code	4952-150		4952-150L	
Resolution (adjustable)	0.01mm/m (2")	0.001mm/m (0.2")	0.01mm/m (2")	0.005mm/m (1")
Range	±5mm/m	±0.5mm/m	±5mm/m	±2.5mm/m
Accuracy	±(0.01+2%A)*	±(0.001+2%A)*	±(0.01+2%A)*	±(0.005+2%A)*
Repeatability	0.01mm/m	0.001mm/m	0.01mm/m	0.005mm/m
Response time	<3s	<10s	<3s	<5s
Power supply	1×21700 Li-ion battery, for 50h continuous working			
Net weight	1.8kg			

*A is the absolute measured value, for example A=0.1mm/m, the resolution is 0.001mm/m, the accuracy is ±0.003mm/m

STANDARD DELIVERY

Main unit	1 pc
Remote controller	1 pc
Receiver	1 pc
Measurement software	1 set
Charger	1 pc
21700 Li-ion battery	4 pcs

OPTIONAL ACCESSORY

300mm bridge plate	4952-01
200mm bridge plate	4952-02
500mm bridge plate	4952-03

DIGITAL LEVEL
CODE ISE-2DT

VIDEO

DATA OUTPUT

lie-down use

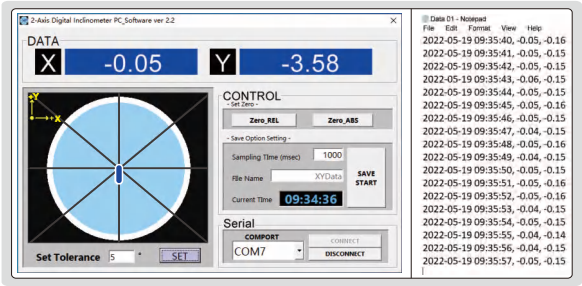
- Color LCD, touch panel
- X-Y axis measurement
- Set the tolerance and the display is shown in different colors

within the tolerance (green)

out of the tolerance (red)

- To show the incline with line or bubble

PC software (**optional**), send data to txt



SPECIFICATION

Measuring range	±30°
Resolution	0.1°, 0.01°, 0.1mm/m
Accuracy	±0.03° (range 0~3°) ±0.05° (range >3°)
Power supply	rechargeable battery
Dimension	115×66×25mm
Net weight	224g

STANDARD DELIVERY

Main unit	1 pc
USB cable	1 pc

OPTIONAL ACCESSORY

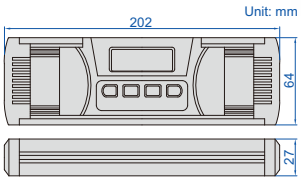
Software	ISE-2DT-SOFTWARE

DIGITAL LEVEL AND SLOPE METER

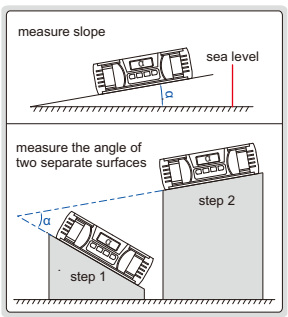
BACKLIGHT | BUZZER ALARM AT 0° AND 90° | WORKING TEMPERATURE -5°C~50°C | ABSOLUTE LEVEL | IP67 WATERPROOF

VIDEO

2175-360



- IP67 dust/waterproof
- Used as level and slope meter
- Aluminum frame, shock absorbing rubber end caps
- Magnetic bottom with V-groove for shafts
- The sea level is permanently set inside the chip, zero setting is not needed when batteries are replaced
- Buttons: ON/OFF, backlight/buzzer alarm, absolute and incremental measurement, unit (mm/m, %, °), HOLD (keep the reading)
- Three AAA batteries, automatic power off

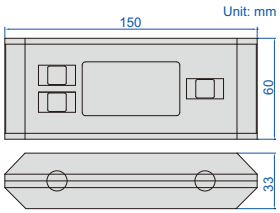


Code	Range	Resolution	Accuracy
2175-360	0-360° (90°×4)	0.05°; 1mm/m	at 0°: ±0.05°; at others: ±0.1°

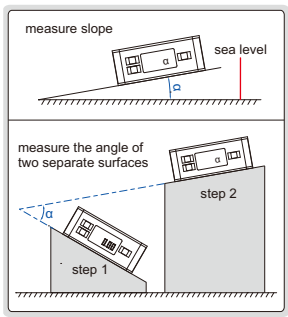
DIGITAL LEVEL AND SLOPE METER

BACKLIGHT | BUZZER ALARM AT 0° AND 90° | WORKING TEMPERATURE -5°C ~ 50°C | IP54 WATERPROOF | ABSOLUTE LEVEL

2179-360



- Resolution: 0.05°; 1mm/m; 0.125in/ft
- IP54 dust/waterproof
- Used as level and slope meter
- Aluminum frame
- Magnetic bottom with V-groove for shafts
- The sea level is permanently set inside the chip, zero setting is not needed when battery is replaced
- Buttons: ON/OFF, absolute and incremental measurement, keep the reading, buzzer alarm, unit (mm/m, %, in/ft), conversion, backlight
- Two AAA batteries, automatic power off

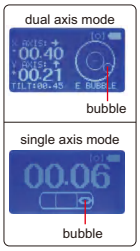


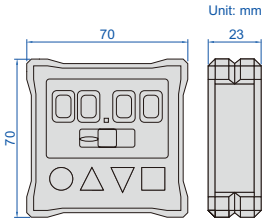
Code	Range	Accuracy
2179-360	0-360°(90°x4)	at 0° and 90°: ±0.1°, at others: ±0.2°

DUAI AXIS DIGITAL LEVEL AND GYRO ANGLE METER

VIDEO

AUDIBLE ALARM WHEN OUT OF LIMIT | DISPLAY FLIPS OVER WHEN THE BOTTOM FACES UP | ATTENTION: HARD PLASTIC CASE | DATA OUTPUT | BACKLIGHT

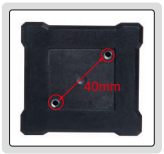




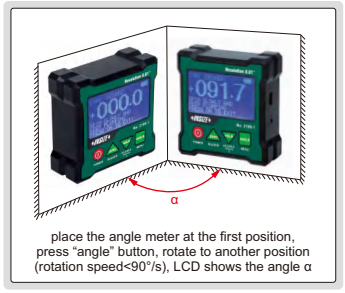
2199-1

- Single axis/double axis level and slope meter, gyro technique can measure the angle between two planes in any direction
- Hard plastic case, with V-shaped grooves, four magnetic sides
- Display flips over when the bottom faces up
- Audible alarm when out of limit
- Buttons: POWER, ZERO, HOLD, display unit (°, mm/m, %), MENU
- Rechargeable Li-ion battery 3.7V, operation time is 40 hours
- Automatic power off in 30 minutes
- Data output
- Android and iPhone APP are included
- Optional accessory: wired data transmission (code **2199-A01**), bluetooth (code **2199-A02**), transmission distance is 10 meters (under the condition of no obstruction and no electromagnetic iterference)

M4 threaded holes on the back for fixing



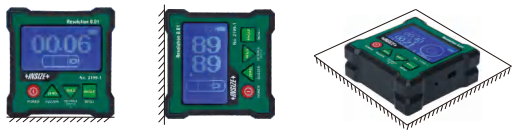
measurement of angle between two planes in any direction (gyro technique)



place the angle meter at the first position, press "angle" button, rotate to another position (rotation speed<90°/s), LCD shows the angle α

Code	Range	Resolution	Accuracy
2199-1	single axis level: 4x90° dual axis level: ±40°	0.01°	at 0° and 20°: ±0.08° at 20° and 70°: ±0.15° at 70° and 90°: ±0.08°
	gyro angle meter: 360°	0.1°	±0.5°

VIDEO



horizontal use | vertical use | lie-down use

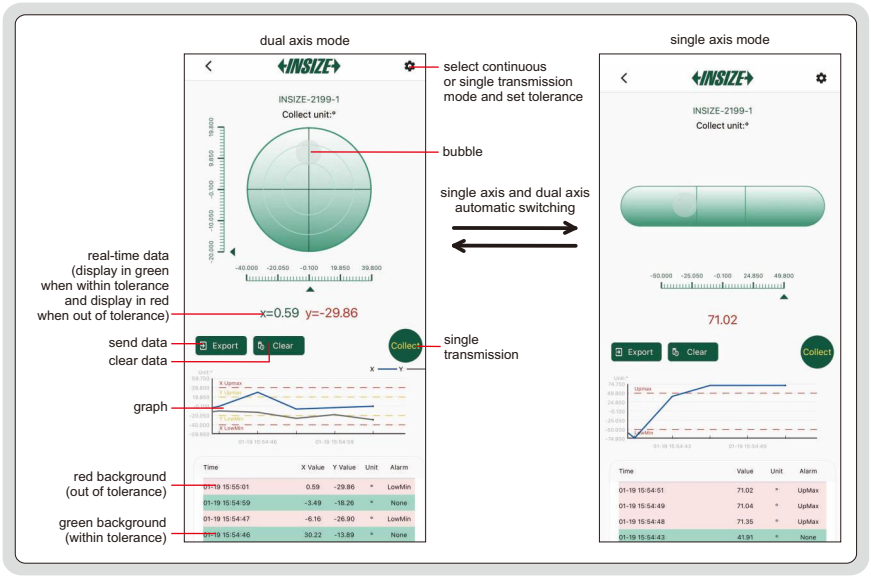
connect to mobile phone via bluetooth

bluetooth (code **2199-A02**, **optional**)

wired data transmission (code **2199-A01**, **optional**)

connect to computer via wired data transmission

Android and iPhone APP (included), can choose real-time display (continuous transmission) or single transmission



DIGITAL LEVEL AND SLOPE METER

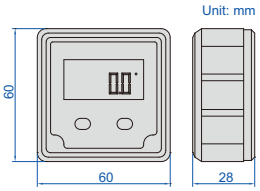
DISPLAY FLIPS OVER WHEN THE BOTTOM FACES UP | MAGNETIC BOTTOM | ABSOLUTE LEVEL | WORKING TEMPERATURE -5°C~50°C | BACKLIGHT

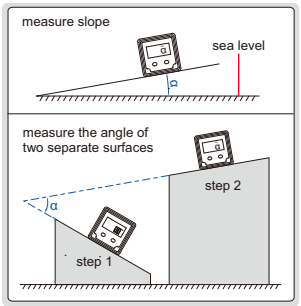
- Used as level and slope meter
- Aluminum frame, magnetic bottom
- The display flips over when the bottom faces up
- The backlight is on automatically when in use, and automatically off in 15 seconds after use
- The sea level is permanently set inside the chip, zero setting is not needed when battery is replaced
- Buttons: ON/OFF, ZERO, absolute and incremental measurement
- One AAA battery, automatic power off in 5 minutes

VIDEO

POPULAR MODEL

2170-1



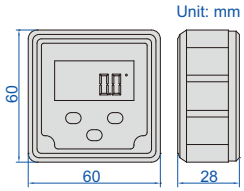


Code	Range	Resolution	Accuracy
2170-1	4×90°	0.1° (=1.745mm/m)	at 0° and 90°: ±0.1°, at others: ±0.2°

BUILT-IN BLUETOOTH DIGITAL LEVEL AND SLOPE METER

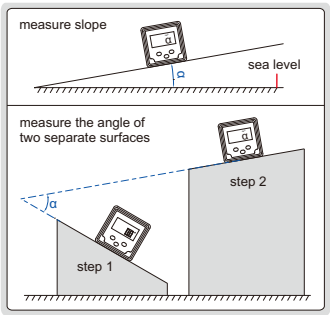
VIDEO

WORKING TEMPERATURE -5°C~50°C | MAGNETIC BOTTOM | DISPLAY FLIPS OVER WHEN THE BOTTOM FACES UP | BACKLIGHT | ABSOLUTE LEVEL

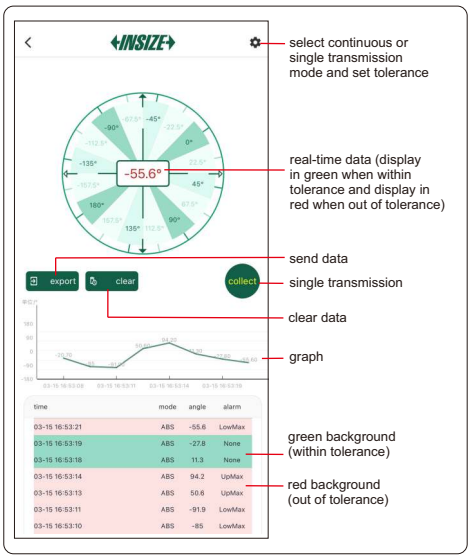


2198-2

- Used as level and slope meter
- Aluminum frame
- Magnetic bottom
- The display flips over when the bottom faces up
- The backlight is on automatically when in use, and automatically off in 15 seconds after use
- The sea level is permanently set inside the chip, zero setting is not needed when battery is replaced
- Buttons: ON/OFF, ZERO, HOLD, absolute and incremental measurement
- Built-in bluetooth, transmission distance is 15 meters (under the condition of no obstruction and no electromagnetic interference). Android and iPhone APP are included
- One AAA battery, automatic power off in 5 minutes



Android and iPhone APP (included), can choose real-time display (continuous transmission) or single transmission



Code	Range	Resolution	Accuracy
2198-2	4x90°	0.1° (=1.745mm/m)	at 0° and 90°: ±0.1°; at others: ±0.2°

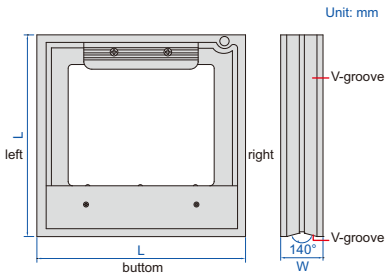
FRAME LEVELS

VIDEO

- V-groove on bottom and left for shafts (shafts dia. 15~68mm)
- With transverse vial

Code	Sensitivity	Size (LxL)	W
4902-150	0.02mm/m (=0.001°)	150×150mm	40mm
4902-200	0.02mm/m (=0.001°)	200×200mm	40mm
4902-300	0.02mm/m (=0.001°)	300×300mm	45mm
4902-C150	0.05mm/m (=0.0029°)	150×150mm	40mm
4902-C200	0.05mm/m (=0.0029°)	200×200mm	40mm
4902-C300	0.05mm/m (=0.0029°)	300×300mm	45mm

4902-200



BLOCK LEVELS

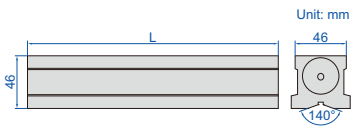
POPULAR MODEL

VIDEO

- V-groove on bottom for shafts (shafts dia. 15~68mm)
- With transverse vial

Code	Sensitivity	Length (L)
4903-150A	0.02mm/m (=0.001°)	150mm
4903-200A	0.02mm/m (=0.001°)	200mm
4903-300A	0.02mm/m (=0.001°)	300mm
4903-C150	0.05mm/m (=0.0029°)	150mm
4903-C200	0.05mm/m (=0.0029°)	200mm
4903-C300	0.05mm/m (=0.0029°)	300mm

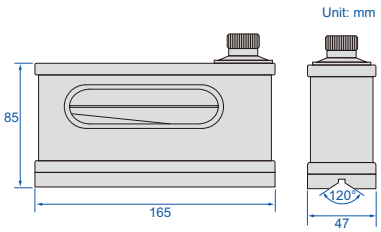
4903-200A



IMAGING LEVEL

- V-groove on bottom for shafts (shafts dia. 10~34mm)

4956-10



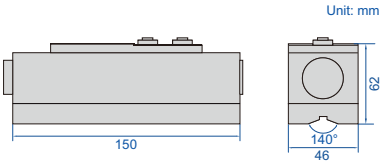
Code	Range	Graduation	Length
4956-10	0-10mm/m	0.01mm/m	165mm

ELECTRONIC BLOCK LEVEL

VIDEO

COLOR DISPLAY WITH BACKLIGHT

4950-1



- Button function: power switch, zero, data save, absolute/reference measurement
- Can save and display 8 sets of data
- V-groove on bottom for shafts (shafts diameter Ø14~75mm)
- With transverse vial
- Power: a 21700 rechargeable Li-ion battery, for 60h continuous working

2x21700 batteries and charger are included

Code	Range	Resolution	Accuracy	Repeatability	Response time
4950-1	±10mm/m (±0.573°)	0.01mm/m (0.001°)	±(0.01+2%A)*	0.01mm/m	<3s

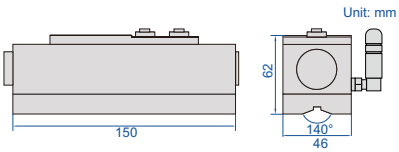
*A is the absolute measured value, for example A=1mm/m, the accuracy is 0.03mm/m

BUILT-IN BLUETOOTH BLOCK LEVEL

BUILT-IN BLUETOOTH

COLOR DISPLAY WITH BACKLIGHT

VIDEO



4951-1

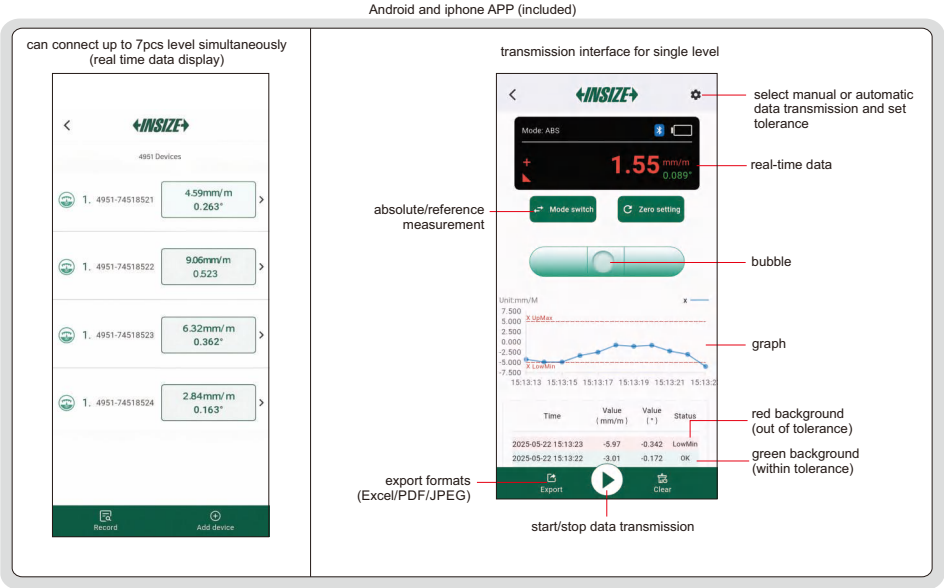
- Button function: power switch, zero, data save, absolute/reference measurement
- Can save and display 8 sets of data
- V-groove on bottom for shafts (shafts diameter Ø14-75mm)
- With transverse vial
- Built-in Bluetooth, transmission distance is 50 meters (under the condition of no obstruction and no electromagnetic interference)
- Android and iPhone APP are included
- Power: a 21700 rechargeable Li-ion battery, for 40h continuous working

2x21700 batteries and charger are included

Code	Range	Resolution	Accuracy	Repeatability	Response time
4951-1	±10mm/m (±0.573°)	0.01mm/m (0.001°)	±(0.01+2%A) *	0.01mm/m	< 3s

* A is the absolute measured value, for example A=1mm/m, the accuracy is 0.03mm/m

Android and iphone APP (included)



BUILT-IN BLUETOOTH BLOCK LEVEL

BUILT-IN BLUETOOTH

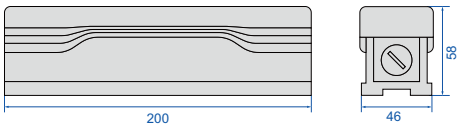
COLOR DISPLAY LARGE CHARACTERS WITH BACKLIGHT

- Button function: on/off, data hold, reading flips over, unit conversion (°, mm/m)
- Analog bubbles can show tilt trends in X-axis and Y-axis
- Built-in Bluetooth, transmission distance is 10 meters (under the condition of no obstruction and no electromagnetic interference)
- Android and iPhone APP are included
- Powered by 3×AAA batteries
- Automatic power off

4953-200

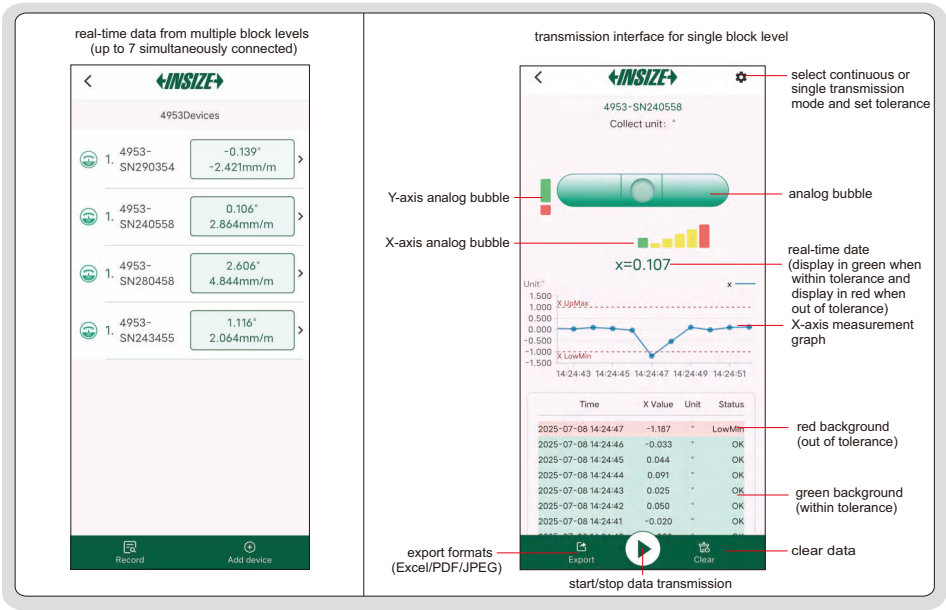
VIDEO

Unit: mm



Code	Range	Resolution	Accuracy	Repeatability	Response time	Net weight
4953-200	±0.5mm/m (±0.028°)	0.01mm/m (0.001°)	±0.02mm/m	0.01mm/m	<3s	1450g

Android and iphone APP (included)



DIGITAL LEVELS AND SLOPE METERS

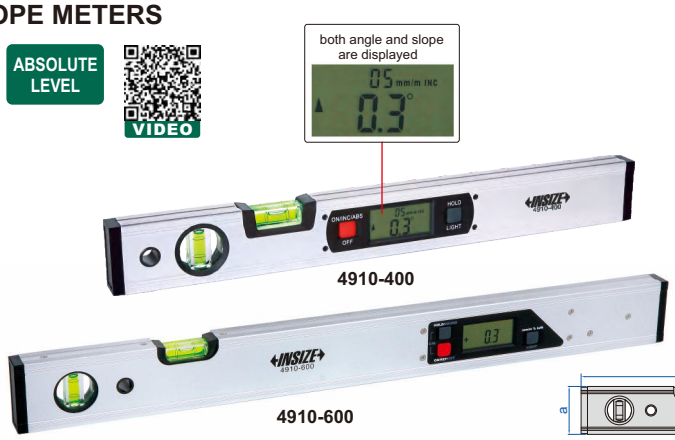
WORKING TEMPERATURE 0°C ~ 50°C

BACKLIGHT

ABSOLUTE LEVEL

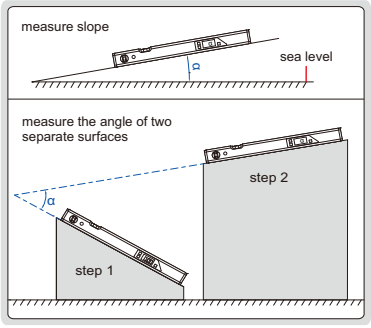
VIDEO

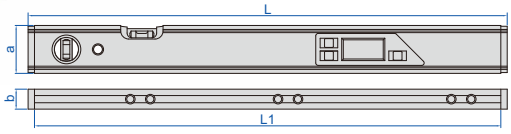
- With transverse and longitudinal vials
- Used as level and slope meter
- Aluminum frame, magnetic bottom
- The sea level is permanently set inside the chip, zero setting is not needed when batteries are replaced
- Buttons: ON/OFF, absolute and incremental measurement, keep the reading, buzzer alarm (not for **4910-400**), unit (mm/m, %, in/ft), conversion (not for **4910-400**), backlight
- The display flips over when the bottom faces up
- Two AAA batteries, automatic power off



4910-400

4910-600





Code	Range	Resolution	Accuracy	Remark*	L	L1	a	b
4910-400	0~360° (90°×4)	angle: 0.1°	±0.2°	both angle and slope are displayed (slope is calculated by angle)	416mm	400mm	50mm	21mm
4910-600	0~360° (90°×4)	at 0° and 90°: 0.05°; at others: 0.1°	at 0° and 90°: ±0.1°; at others : ±0.2°	at 0° and 90° buzzer alarm	600mm	585mm	60mm	25mm

*mm/m=tan(°)×1000, for example: 0.3°=tan(0.3)×1000=5mm/m

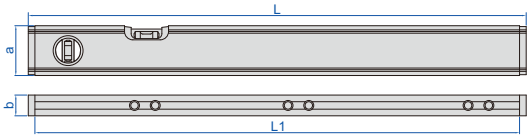
BUILT-IN BLUETOOTH DIGITAL LEVELS AND SLOPE METERS

WORKING TEMPERATURE 0°C~50°C | ABSOLUTE LEVEL | BACKLIGHT | BUILT-IN BLUETOOTH

VIDEO

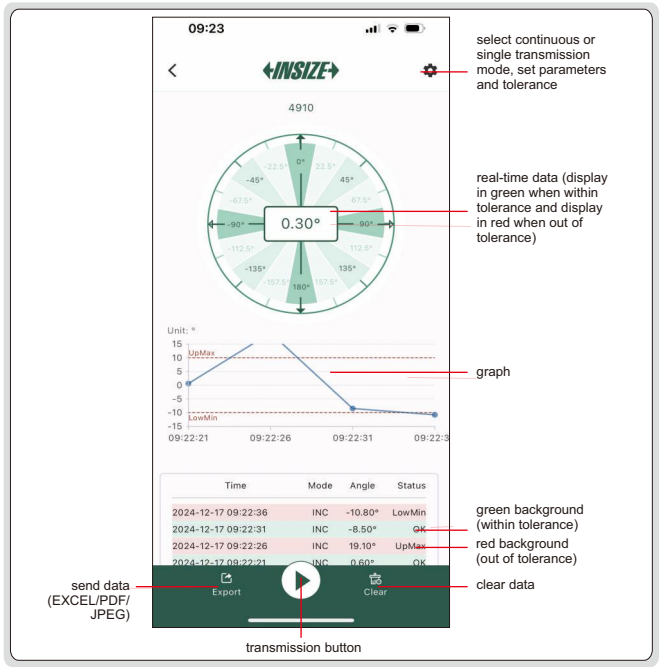
4910-400WL

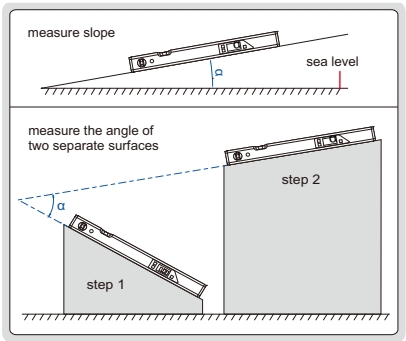
4910-600WL



- With transverse and longitudinal vials
- Used as level and slope meter
- Aluminum frame, magnetic bottom
- The sea level is permanently set inside the chip, zero setting is not needed when batteries are replaced
- Buttons: ON/OFF, absolute and incremental measurement, keep the reading, buzzer alarm (not for **4910-400WL**), unit (mm/m, %, in/ft), conversion (not for **4910-400WL**), backlight
- The display flips over when the bottom faces up
- Built-in Bluetooth, transmission distance is 10 meters (under the condition of no obstruction and no electromagnetic interference)
- Android and iPhone APP are included
- Two AAA batteries
- Automatic power off

Android and iPhone APP (included)
can choose real-time display (continuous transmission) or single transmission





(mm)

Code	Range	Resolution	Accuracy	Remark*	L	L1	a	b
4910-400WL	0~360° (90°×4)	angle: 0.1°	±0.2°	both angle and slope are displayed (slope is calculated by angle)	416	400	50	21
4910-600WL	0~360° (90°×4)	at 0° and 90°: 0.05°; at others: 0.1°	at 0° and 90°: ±0.1°; at others: ±0.2°	at 0° and 90° buzzer alarm	600	585	60	25
4910-1000WL	0~360° (90°×4)	at 0° and 90°: 0.05°; at others: 0.1°	at 0° and 90°: ±0.1°; at others: ±0.2°	at 0° and 90° buzzer alarm	1000	984	60	25

*mm/m=tan(°)×1000, for example: 0.3°=tan(0.3)×1000=5mm/m

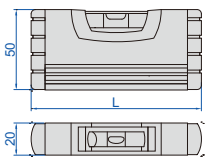
HANDY LEVEL

MAGNETIC BASE | LIFETIME WARRANTY VIALS

- Shockproof vials
- Magnetic base
- Shock absorbing rubber end caps
- Working temperature: -15˚C~55˚C

4912-100

Unit: mm



magnetic base surface

packaging

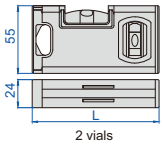
Code	Size (L)	Accuracy
4912-100	100mm	0.5mm/m

HANDY LEVELS

MAGNETIC BASE | LIFETIME WARRANTY VIALS

- Shockproof horizontal and vertical vials
- Magnetic base
- Shock absorbing rubber end caps
- Working temperature: -15°C~55°C

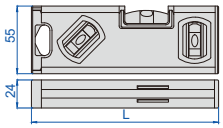
4922-100



2 vials

4922-150

Unit: mm



3 vials

Code	Size (L)	Accuracy	Number of vials
4922-100	100mm	0.5mm/m	2
4922-150	150mm	0.5mm/m	3
4922-200	200mm	0.5mm/m	3

CASTING ALUMINUM LEVEL

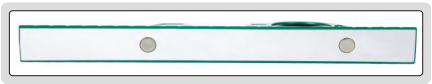
LIFETIME WARRANTY VIALS | MAGNETIC BASE

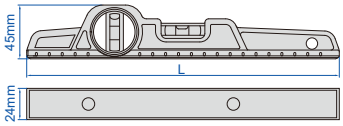
- Shockproof horizontal and vertical vials
- Magnetic base
- Working temperature: -15˚C~55˚C
- Cast aluminum body

4913-250

packaging

magnetic bottom surface (milled)





Code	Size (L)	Accuracy
4913-250	250mm	0.5mm/m

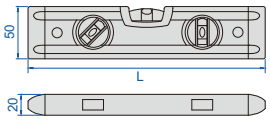
ALUMINUM LEVEL

MAGNETIC BASE | LIFETIME WARRANTY VIALS

- Shockproof horizontal and vertical vials
- Magnetic base
- Shock absorbing rubber end caps
- Working temperature: -15°C~55°C

4921-230

Unit: mm

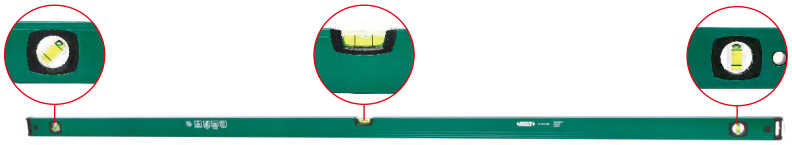


Code	Size (L)	Accuracy
4921-230	230mm	0.5mm/m

ALUMINUM LEVELS

LIFETIME WARRANTY VIALS | MAGNETIC BASE

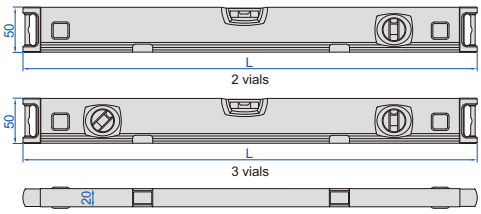
4914-600



4914-2000

- Accuracy: 0.5mm/m
- Shockproof horizontal and vertical vials
- Magnetic base
- Shock absorbing rubber end caps
- Working temperature: -15˚C~55˚C

Unit: mm

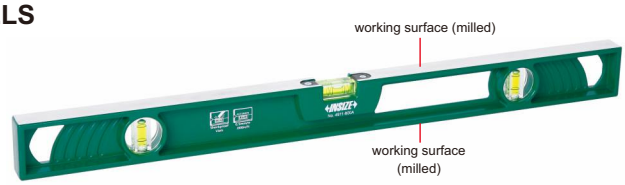


magnetic bottom surface (milled)

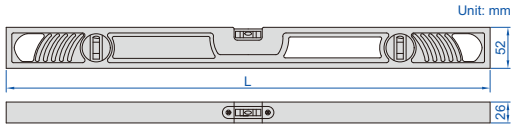
Code	Size (L)	Number of vials
4914-300	300mm	2
4914-600	600mm	2
4914-800	800mm	2
4914-1000	1000mm	2
4914-1200	1200mm	2
4914-2000	2000mm	3

ALUMINUM LEVELS

LIFETIME WARRANTY VIALS



4911-600



Code	Length (L)	Accuracy
4911-600	600mm	0.5mm/m
4911-800	800mm	0.5mm/m

- Top and bottom working surfaces
- Shock-proof and UV-proof vials
- Die casting aluminum alloy frame
- Zero position of horizontal vial can be set
- One graduation of horizontal vial is 2% slope
- Working temperature: -15°C~55°C

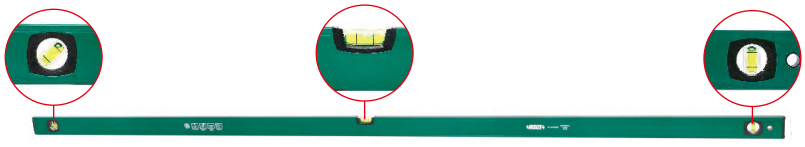
bottom surface (non-magnetic, milled)

ALUMINUM LEVELS (BASIC TYPE)

LIFETIME WARRANTY VIALS

MAGNETIC BASE

4918-300

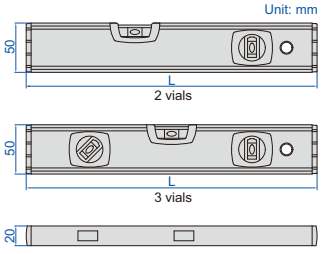


4918-2000

Code	Size (L)	Number of vials
4918-300	300mm	2
4918-600	600mm	2
4918-800	800mm	2
4918-1000	1000mm	2
4918-1200	1200mm	2
4918-2000	2000mm	3

- Accuracy: 1mm/m
- Shock-proof and UV-proof vials
- Magnetic base
- Shock absorbing rubber end caps
- Working temperature: -15°C~55°C

magnetic bottom surface

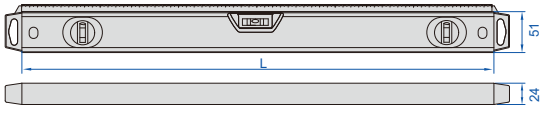


ALUMINUM LEVEL WITH RULER

LIFETIME WARRANTY VIALS

- Shockproof horizontal and vertical vials
- Non-magnetic milled base
- Shock absorbing rubber end caps
- Range of ruler: 0-60cm, graduation: 1mm
- Working temperature: -15°C~55°C

4923-600



Code	Size (L)	Accuracy
4923-600	600mm	0.5mm/m

LEVEL BUBBLES

NO NEED TO SET ZERO BEFORE USE

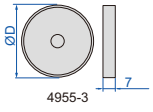
4955-3

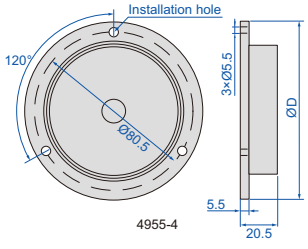
4955-4

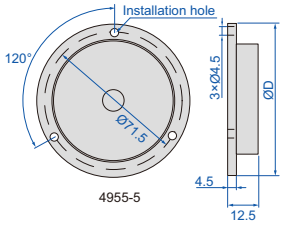
4955-5

- No need to set zero before use

Unit: mm







Code	Range	Graduation	Accuracy	Working temperature	Base diameter (D)	Base type
4955-3	0-3°	1°	±0.2°	-20°C~50°C	Ø30mm	stainless steel, without mouting hole
4955-4	0-4°	1°	±0.2°	-20°C~40°C	Ø90mm	aluminum alloy, with mouting holes
4955-5	0-5°	2°	±0.4°	-20°C~50°C	Ø80mm	aluminum alloy, with mouting holes

CROSS-LINE LASER LEVEL
CODE 4917-30

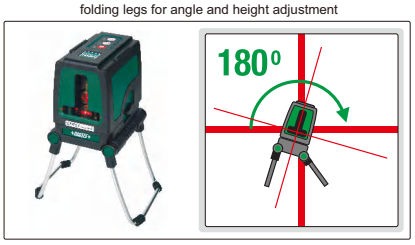
- Red horizontal and vertical cross laser lines
- Self-leveling within ±3°, self-leveling time within 4s, audible and visual warning when out of ±3°
- Folding legs for angle and height adjustment
- Outdoor use with the detector (code: **4917-DETECTOR**)

VIDEO

IP54 WATERPROOF

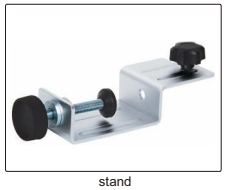
AUDIBLE AND VISUAL ALARM WHEN OUT OF ±3°

folding legs for angle and height adjustment



application examples

outdoor detector (**optional**)



stand
(included with outdoor detector)

SPECIFICATION

Laser line width	2±0.5mm (within 5m)
Laser type	630~660nm, class II, <1mW
Beam angle	120±0.5°
Self-leveling range	±3°
Working distance	indoor: 30m, outdoor: 50m with detector (**optional**)
Accuracy	0.2mm/m
Operation temperature	-10~40°C
Power supply	3×AA batteries, for 3 hours working
Dimension	100×82×104mm
Net weight	620g

STANDARD DELIVERY

Main unit	1 pc
1/4" to 5/8" tripod adaptor	1 pc
Battery (AA)	3 pcs

OPTIONAL ACCESSORY

Outdoor detector	4917-DETECTOR

OUTDOOR DETECTOR (OPTIONAL)

Detecting distance	horizontal 1~50m, vertical 1~30m
Detecting accuracy*	high accuracy ±1.5mm, low accuracy ±2.5mm
Power supply	9V battery
Dimension	168×58×30mm
Net weight	140g (battery included)

*Use high accuracy detection mode within 15m, use low accuracy detection mode over 15m

SELF-LEVELING ROTARY LASER
CODE GRL-L340

INDICATOR FLASHING WHEN OUT OF ±5°

IP65 WATERPROOF

VIDEO

application examples

horizontal leveling | vertical leveling | working with detector

detector (included)

remote controller (included)

beam finder glasses (included)

bracket for C battery (included)

tripod (included)

- Applicable fields: construction, decoration, pipeline and equipment installation
- Green laser beam rotates 360° horizontally or vertically
- Self-leveling range ±5° on both X and Y planes
- Alarm when inclination is out of ±5°
- ±5° leveling range for manual mode on both X and Y planes
- 5 variable speeds 0-600rpm
- 6 scan modes
- Plumb up and plumb down dots
- Remote control for long distance
- Power supply: AC or DC

SPECIFICATION

Working range		indoor 50m, outdoor 300m (with detector)
Self leveling range		±5°
Horizontal/vertical beam accuracy		±0.1mm/m
Main laser type		520~540nm, class 2, <1mW
Auxiliary laser type		645~655nm, class 2, <1mW
Rotating speed		0/60/120/300/600rpm
Scanning range		0/10/45/90/180/360°
Setting slope		X axis: ±5°, Y axis: ±5°
Operation temperature		-20~50°C
Maximum remote control distance		20m
Power supply	remote controller	2×1.5V AAA batteries
	main unit	NI-MH batteries or 4×1.5V C batteries
	detector	1×9V battery
Dimension		210×210×213mm
Net weight		2.5kg

STANDARD DELIVERY

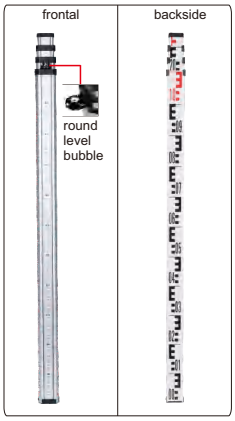
Main unit (including NI-MH batteries)	1 pc
C battery and bracket	1 set
Detector	1 pc
Remote controller	1 pc
Beam finder glasses	1 pc
Laser target	1 pc
Power adapter	1 pc
AAA battery	2 pcs
9V battery	1 pc
Tripod	1 pc

AUTO LEVEL
CODE TSB-A30

VIDEO

- Widely used in surveying and mapping engineering, construction engineering and many other precise measurement fields
- Formed hanging wires and magnetic dampers are adopted
- High anti-interference ability, adaptable to complex environments

tripod (included)



TSB-A30-4M tower ruler (**optional**)

SPECIFICATION

Standard deviation of round trip leveling measurement per kilometer	using indium steel ruler	1.5mm
	using a tower ruler	2.5mm
Telescope magnification		30X
Field of view		1° 30′
Shortest visible distance		0.6m
Stadia multiplication constant		100
Stadia addition constant		0
The working range of the compensator		±10′
Setting accuracy		±0.5″
Round level bubble accuracy		8′/2mm
Angle disk graduation value		1°/1gon
Dimension (L×W×H)		216×128×138mm
Net weight		1.55kg

TOWER RULER (OPTIONAL)

Code	TSB-A30-4M	TSB-A30-5M
Measuring range	4m	5m
Resolution	1mm	
Full scale accuracy	±3mm	
Precision per decimeter	±1mm	
Precision per centimeter	±1mm	

STANDARD DELIVERY

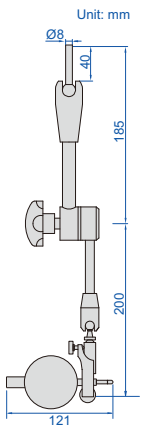
Main unit	1 pc
Tripod	1 pc

BUILT-IN BLUETOOTH DIGITAL CENTERING INDICATOR

VIDEO

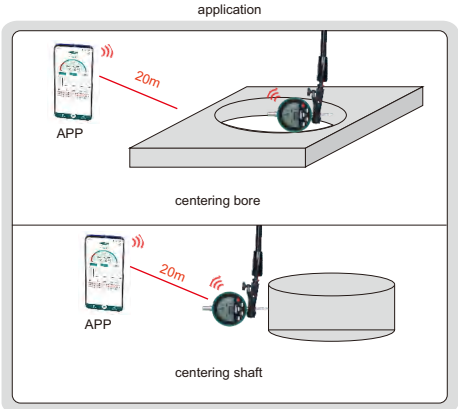
BUILT-IN BLUETOOTH

- Centering bores and shafts when installed on machine tools
- The APP features real-time data display and zero setting for digital indicator
- Android and iPhone APP are included
- Built-in bluetooth, transmission distance is 20 meters (under the condition of no obstruction and no electromagnetic interference)
- Button function: on/off, zero, data preset, tolerance Go and No-Go display, inch/metric conversion, measuring direction change, max./min./TIR measurment, absolute/incremental measurement, bluetooth on/off
- Power: rechargeable Li-battery

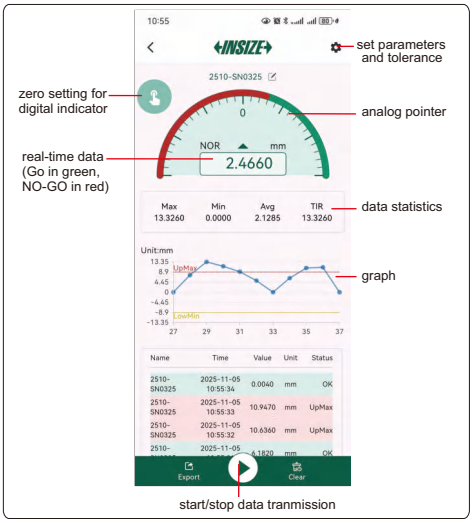


Code	Digital indicator stroke	Digital indicator resolution	Accuracy
2851-10	12.7mm/0.5"	0.001mm/0.00005"	3μm

application



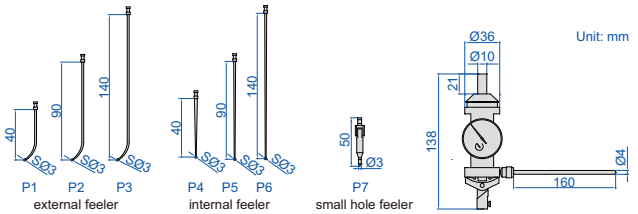
Android and iPhone APP (included)



CENTERING INDICATOR

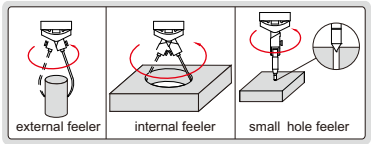
POPULAR MODEL

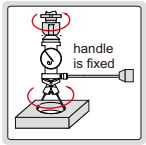
2385-3



VIDEO

- Provides quick and accurate centering in boring and milling set-up
- Maximum speed is recommended not to exceed 800rpm





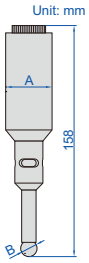
Code
2385-3

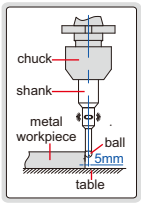
Feeler	Measuring diameter	Accuracy
P1	Ø0-60mm	0.015mm
P2	Ø0-160mm	0.02mm
P3	Ø0-250mm	0.03mm
P4	Ø3.2-80mm	0.015mm
P5	Ø3.2-180mm	0.02mm
P6	Ø3.2-280mm	0.03mm
P7	Ø0-2.8mm	0.015mm

LARGE SHANK ELECTRONIC EDGE FINDERS

6572-1

6572-2

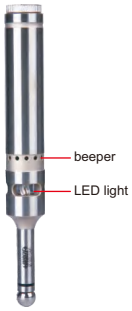




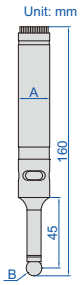
- The shank is electrically conducted to the metal workpiece through the chuck and table. The LED lights up and the beeper sounds (only for **6572-2**), when the ball touches the workpiece
- Not suitable for rotary use
- Hardened shank and contact ball

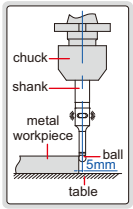
Code	Shank (A)	Contact ball (B)	Accuracy	Beeper	Battery
6572-1	Ø32mm	SØ10mm	5μm	without	23A, 12V×1 pc
6572-2	Ø32mm	SØ10mm	5μm	with	23A, 12V×1 pc

ELECTRONIC EDGE FINDER



6566-3





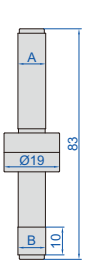
- The shank is electrically conducted to the metal workpiece through the chuck and table. The LED lights up and the beeper sounds, when the ball touches the workpiece
- Not suitable for rotary use
- Hardened shank and contact ball

Code	Shank (A)	Contact ball (B)	Accuracy	Beeper	Battery
6566-3	Ø20mm	SØ10mm	5μm	with	23A, 12Vx1 pc

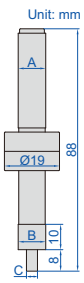
NON-MAGNETIC EDGE FINDERS

6573-1

6573-2

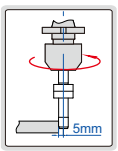


6573-1

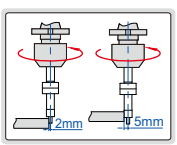


6573-2

- TiAlN coating, non-magnetic, hardness HV2500, extremely wear resistance
- Suitable for machine speed 400~600rpm



6573-1



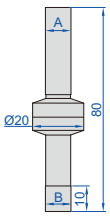
6573-2

Code	Shank (A)	Contact point (B)	Contact point (C)	Accuracy
6573-1	Ø10mm	Ø10mm	—	5μm
6573-2	Ø10mm	Ø10mm	Ø4mm	5μm

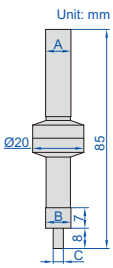
EDGE FINDERS

6562-3

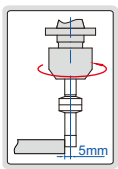
6562-4



6562-3

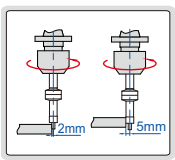


6562-4



6562-3

- Hardened shank and contact point
- Suitable for machine speed 400-600rpm



6562-4

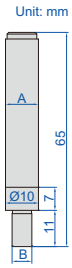
Code	Shank(A)	Contact point (B)	Contact point (C)	Accuracy
6562-3	Ø10mm	Ø10mm	—	5μm
6562-4	Ø10mm	Ø10mm	Ø4mm	5μm

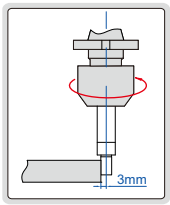
EDGE FINDER

- Hardened shank and contact point
- Suitable for machine speed 400-600rpm

Code	Shank (A)	Contact point (B)	Accuracy
6567-1	Ø10mm	Ø6mm	8μm

6567-1



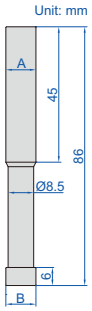


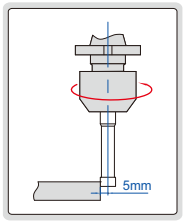
CERAMIC EDGE FINDER

- Ceramic contact point, non magnetic
- Suitable for machine speed 400-600rpm

Code	Shank (A)	Contact point (B)	Accuracy
6568-1	Ø10mm	Ø10mm	8μm

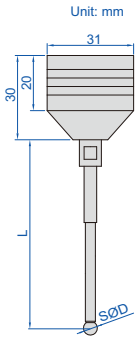
6568-1





EDGE FINDERS FOR EDM

- To locate workpieces
- Buzzer in EDM sounds when the ball touches the workpiece
- Tungsten steel ball, diameter accuracy: ±0.003mm
- Non magnetic stainless steel spindle
- Magnetic base

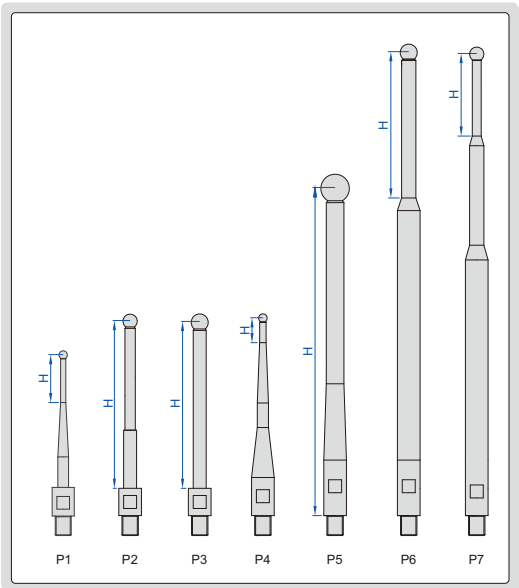


6558-52

CAN BE CUSTOM-MADE

VIDEO

spindle type



(mm)

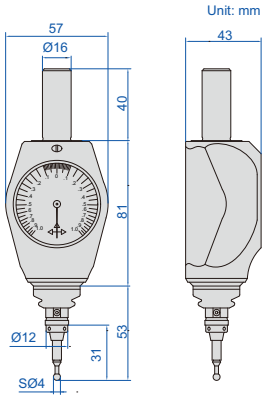
Code	Ball dia. (SØD)	Spindle length (L)	Measuring depth (H)	Spindle type
6558-11	SØ1	69	5	P4
6558-21	SØ2	49	6	P1
6558-22	SØ2	69	6	P4
6558-23	SØ2	119	8	P4
6558-31	SØ3	48	6	P1
6558-32	SØ3	68	7	P4
6558-33	SØ3	118	10	P4
6558-41	SØ4	48	37	P3
6558-42	SØ4	68	57	P2
6558-43	SØ4	118	16	P4
6558-44	SØ4	168	28	P7
6558-51	SØ5	47	36	P3
6558-52	SØ5	67	56	P2
6558-53	SØ5	117	106	P2
6558-54	SØ5	167	46	P6
6558-61	SØ6	47	35	P3
6558-62	SØ6	67	56	P3
6558-63	SØ6	87	76	P3
6558-64	SØ6	117	107	P2
6558-65	SØ6	167	51	P6
6558-81	SØ8	46	46	P5
6558-82	SØ8	66	54	P3
6558-83	SØ8	116	105	P3
6558-84	SØ8	166	51	P6
6558-101	SØ10	45	34	P3
6558-102	SØ10	65	53	P3
6558-103	SØ10	115	114	P5
6558-104	SØ10	165	53	P6

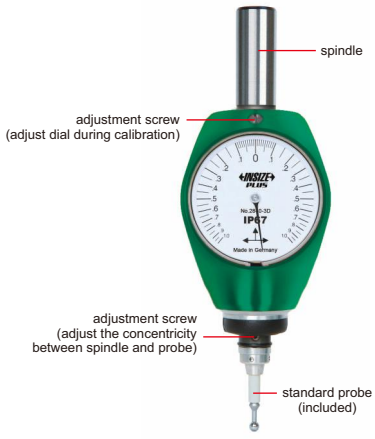
3D TESTER
INSIZE PLUS

ATTENTION: WHEN USING STANDARD PROBE, READING SHOWS MOVEMENT VALUE OF PROBE. WHEN USING EXTENDED PROBE, READING DOES NOT SHOW MOVEMENT VALUE OF PROBE

IP67 WATERPROOF | **SHOCK PROOF**

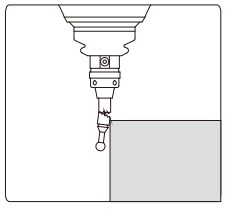
VIDEO





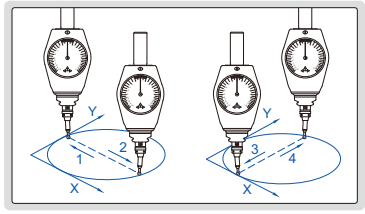
2840-3D

if the probe is pressed too much,
the probe breaks at the breaking point,
in order to prevent damage of the main body



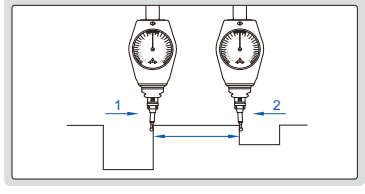
- Shockproof, IP67 dust/waterproof
- Mainly used for milling machines and CNC machine tools
  1. determine coordinate point on workpieces
  2. find center of holes
  3. adjust and position workpieces
- Can be used to measure length and depth
- When using standard probe, reading shows movement value of probe, for example, if probe moves 0.05mm, reading changes 0.05mm (5 graduations).
  When using extended probe, reading does not show movement value of probe
- Large working range on three axes (X, Y, Z), which avoids damage of probes due to collision by mistake

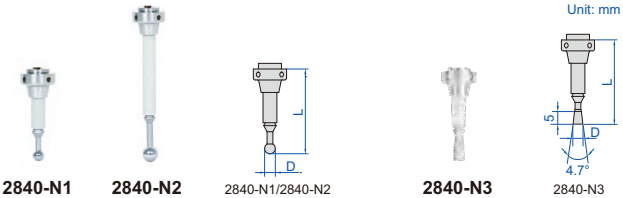
find center of holes



Code	Range	Graduation	Repeatability at zero (one direction)	X, Y, Z range
2840-3D	±1.0mm	0.01mm	±0.01mm	6mm

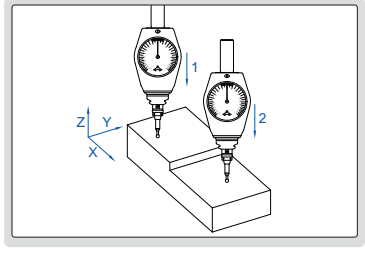
length measurement





2840-N1 **2840-N2** 2840-N1/2840-N2 **2840-N3** 2840-N3

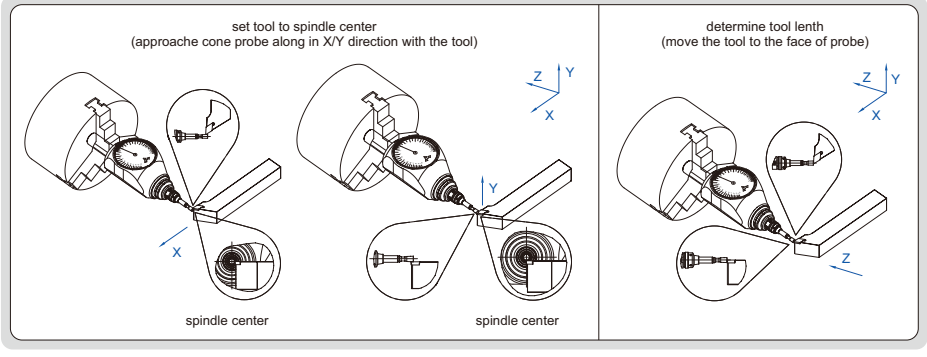
depth measurement



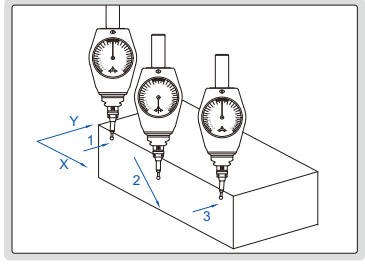
PROBE (optional) **(mm)**

Code	Description	L	D	Remark
2840-N1	standard probe	31	SØ4	reading shows movement value of probe
2840-N2	extended probe	56.6	SØ6	reading does not show movement value of probe
2840-N3	cone probe	31	SØ4.2	position turning tools in the lathe

position turning tools **(cone probe is optional)**



position workpieces

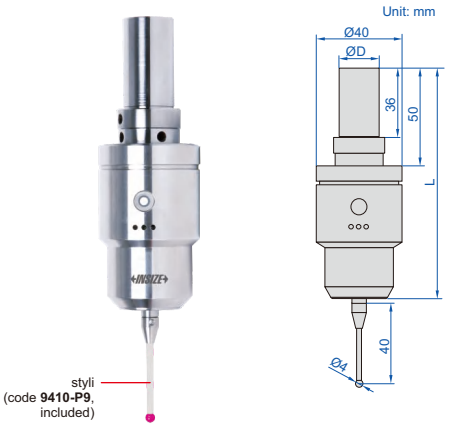


TRIGGER-TYPE 3D PROBE (AUDIBLE AND VISUAL ALARM)
CODE 9410

VIDEO

IP67 WATERPROOF

- Suitable for all kinds of machining centers, CNC boring machines, milling machines, drilling and tapping centers
- Suitable for workpiece detection of various solid materials
- Manually set the workpiece coordinates and machining reference points before CNC machining process
- In the process of CNC machining, manually detect and control key dimensions and position coordinates and their accuracy
- Detect the accuracy of the key size, shape and position of the workpiece after completion of CNC machining
- Standard Ø20mm shank diameter, held by CNC
- LED indicator and buzzer indicate the trigger state of the probe
- Using lithium battery charging technology, no need to replace the battery
- The battery (5% utilization rate per shift) can be used continuously for 90 days
- Type-C interface
- Optional accessory: styli and extension bar



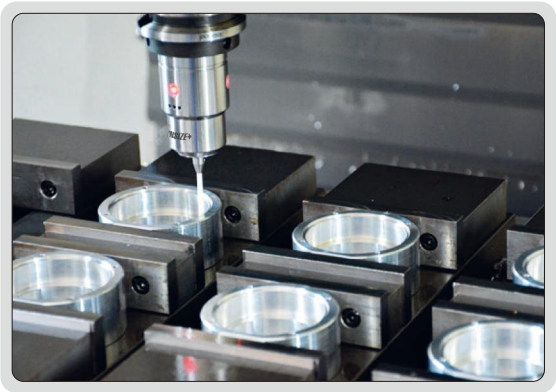
signal extension cord (included)

type-C charging cable (included)

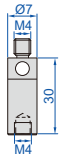
SPECIFICATION

Probe length (L)	115.5mm
Shank diameter (ØD)	20mm
Trigger direction	±X, ±Y, +Z
Directional trigger protection stroke	X-Y: ±12°, Z: +5mm
Arbitrary one-way repeated trigger accuracy	≤1μm
Trigger force in X-Y direction (with standard styli)	0.3-0.6N
Trigger force in Z direction	4N
Dust/waterproof	IP67
Type-C charging cable	1.5m
Signal extension cord (provide signals to CNC)	1m

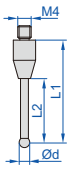
application



Unit: mm



Unit: mm



EXTENSION ROD (OPTIONAL)

Code	Material
9410-R1	ceramic

STYLI (OPTIONAL)

(mm)

Code	L1	L2	Ød	Material of rod*	Material of ball
9410-P1	18	13	4	stainless steel	ruby
9410-P2	18	13.5	5	stainless steel	ruby
9410-P3	18.5	13	3	stainless steel	ruby
9410-P4	19	8	2	carbide	ruby
9410-P5	19.5	4	1	carbide	ruby
9410-P6	50	40	2	carbide	ruby
9410-P7	50	34	5	ceramic	ruby
9410-P8	100	86	6	ceramic	ruby
9410-P9	40	30	4	ceramic	ruby
9410-P10	50	36	6	ceramic	ruby

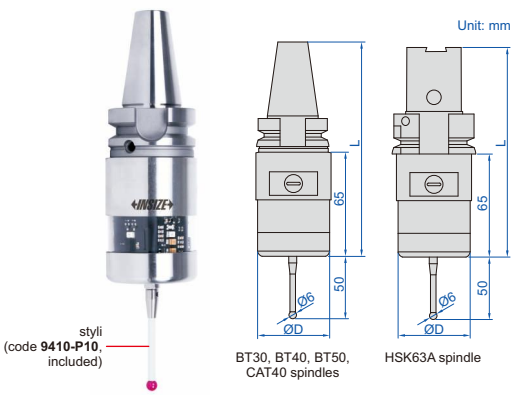
* For stainless steel or carbide rods, it is recommended to use extension rods to protect spindles in case of break

INFRARED TRANSMISSION PROBES FOR CNC MACHINE TOOLS

IP68 WATERPROOF

VIDEO

- On-machine measurement of all kinds of small and medium-sized machining centers, CNC boring, milling machines and five-axis CNC machine tools
- Automatically set the workpiece coordinate and machining reference point before CNC machining process
- Automatically measure dimension and position coordinate during CNC machining
- Measure dimension, shape and position after CNC machining is completed
- Four kinds of SSR signals such as probe status, error, low voltage and pulse are transmitted to CNC machine tools
- M code is used to control on or off of probes
- Infrared transmission, strong anti-interference
- Infrared transmission/reception range: 5m
- Supplied with automatic measurement software
- Optional accessory: styli



9413-1

9413-A

PROBE SPECIFICATION

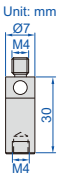
Code	9413-1	9413-2	9413-3	9413-4	9413-5
Probe length (L)	140mm	166mm	216mm	168mm	136mm
Probe diameter (ØD)	48mm	48mm	48mm	48mm	48mm
Applicable spindle *	BT30	BT40	BT50	CAT40	HSK63A
Trigger accuracy of styli in any direction	1μm				
Protection stroke triggered by styli in all directions	X and Y axis stroke: ±12.5°, Z axis stroke: 5mm				
Trigger force of styli in all directions	X and Y axis: 1-1.6N, Z axis: 5-10N				
Dust/waterproof	IP68				
Power supply	2×LS14250 lithium battery				

* SK and ISO spindle probes also can be customized

RECEIVER SPECIFICATION

Code	9413-A
Protection function	low battery voltage or probe transmitting signal all the time **
Applicable probe	code **9413-1**, **9413-2**, **9413-3**, **9413-4**, **9413-5**
Cable length	8m
Dust/waterproof	IP68
Power supply	input voltage: 24V±10% (DC), load current: 50mA

** When battery voltage is low or probe is in wrong state, receiver sends a signal to CNC machine to stop working

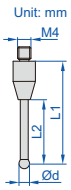


EXTENSION ROD (OPTIONAL)

Code	Material
9410-R1	ceramic

STYLI (OPTIONAL)

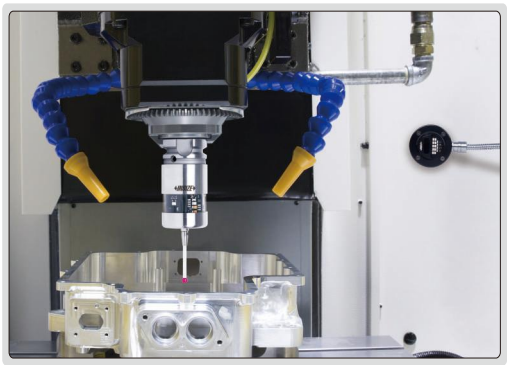
(mm)



Code	L1	L2	Ød	Material of rod ***	Material of ball
9410-P1	18	13	4	stainless steel	ruby
9410-P2	18	13.5	5	stainless steel	ruby
9410-P3	18.5	13	3	stainless steel	ruby
9410-P4	19	8	2	carbide	ruby
9410-P5	19.5	4	1	carbide	ruby
9410-P6	50	40	2	carbide	ruby
9410-P7	50	34	5	ceramic	ruby
9410-P8	100	86	6	ceramic	ruby
9410-P9	40	30	4	ceramic	ruby
9410-P10	50	36	6	ceramic	ruby

*** For stainless steel or carbide rods, it is recommended to use extension rods to protect spindles in case of break

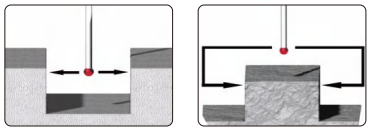
application



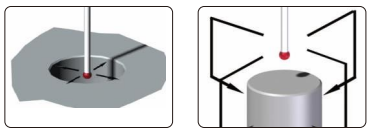
AUTOMATIC MEASUREMENT SOFTWARE (INCLUDED)

1. Stylus automatic calibration
2. Protection of stylus during probe movement (avoid collision)

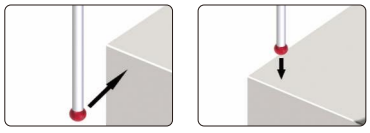
3. Groove and boss measurement



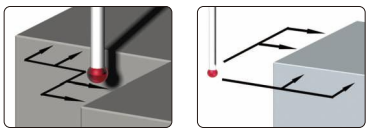
4. Bore and axis measurement



5. X or Y single-surface measurement

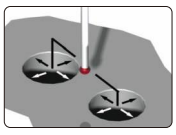


6. Internal and external corner measurement



7. 4th axis measurement
8. Angle on X and Y plane measurement
9. Three points measurement of arc

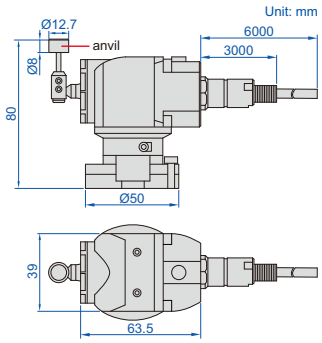
10. Measure the distance between two holes

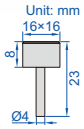


ZERO SETTER WITH CABLE (FIVE-SIDE)
CODE 9412

IP68 WATERPROOF

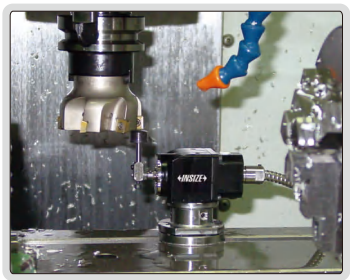
- Suitable for various machining centers, CNC boring and milling machines, etc.
- Automatically set the tool length parameters before CNC machining process
- Automatic detection of tool wear or damage during CNC machining
- Automatic detection of tool wear or damage after CNC machining is completed
- The working surface adopts ceramic material and chamfering process, which can greatly improve the service life
- The plug, cable part and output signal of the host are protected, so that the zero setter can work in the splash environment for a long time
- Signal transmission through the cable, the reverse connection of the power line can change the state of the signal output
- The working status is displayed by the indicator light
- Supplied with automatic zero setter software package
- Optional accessory: square feeler block (code **9412-B1**)





VIDEO

application



SPECIFICATION

Height (factory setting)	80±0.5mm
Diameter of zero setter	Ø12.7mm
Trigger direction	±X, ±Y, +Z
Trigger protection stroke	X-Y: ±5mm, Z: 8mm
Axial reset force	3.4N-3.6N
Repeated trigger accuracy	≤1μm
Hardness of the zero setter	HM8.5
Class of protection	IP68
Cable length*	6m (stainless steel sheath 3m)
Input voltage	24V±10% (DC)
Load current	max: 50mA
Signal type and logic**	SSR (NC/NO)

*The length of the cable can be customized

**Before purchasing, it is necessary to confirm whether the working logic of the tool setter output signal matches CNC control system

SQUARE ANVIL (OPTIONAL)

Code	Shape	Dimension	Material
9412-B1	square	16×16mm	ceramic

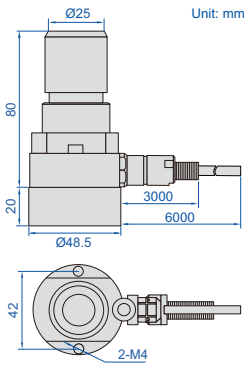
Automatic zero setter software (included)

1. Automatic calibration of the center position of the anvil
2. Standard knife length setting
3. Semi-automatic and fully automatic tool setting for tool length
4. Semi-automatic and fully automatic tool diameter settings
5. Automatic detection of tool wear and breakage

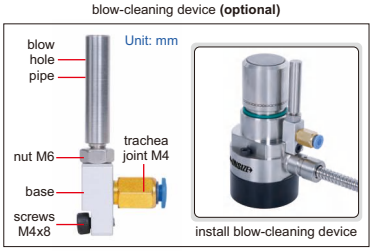
ZERO SETTER (WITH CABLE)
CODE 9411

IP68 WATERPROOF

- Suitable for various machining centers, CNC boring and milling machines, etc.
- Automatically set the tool length parameters before CNC machining process
- Automatic detection of tool wear or damage during CNC machining
- Automatic detection of tool wear or damage after CNC machining is completed
- The working surface is made of hard alloy material, which can greatly improve the scratch resistance
- Signal transmission through the cable, the reverse connection of the power line can change the state of the signal output
- The working status is displayed by the indicator light
- Supplied with 20mm mounting base
- Supplied with automatic zero setter software package
- Optional accessory: blow-cleaning device (code **9411-C1**)



blow-cleaning device **(optional)**



application

SPECIFICATION

Height	80mm (the height is 100mm after adding the mounting base)
Diameter of zero setter	Ø25mm
Downward travel	5mm
Axial reset force	6N±0.3N
Repeated trigger accuracy	≤1μm
Hardness of the zero setter	HRA90-93
Class of protection	IP68
Cable length*	6m (stainless steel sheath 3m)
Input voltage	24V±10% (DC)
Load current	max: 50mA
Signal type and logic**	SSR (NC/NO)

*The length of the cable can be customized

** Before purchasing, it is necessary to confirm whether the working logic of the tool setter output signal matches CNC control system

BLOW-CLEANING DEVICE (OPTIONAL)

Code	Material
9411-C1	stainless steel

Before purchasing a blow-cleaning device, it is necessary to confirm whether CNC machine has the M-code to control the cleaning

Automatic zero setter software package (included)

1. Automatic calibration of the center position of the cutter block
2. Standard knife length setting
3. Semi-automatic and fully automatic tool setting for tool length
4. Automatic detection of tool wear and breakage

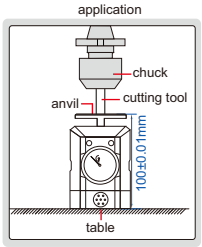
VIDEO

ELECTRONIC TOOL SETTER

8MM RANGE

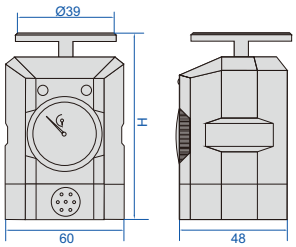
AUDIBLE AND VISUAL ALARM

- 8mm range(travel of anvil: 94~102mm)
- Audible and visual alarm:
  -When approaching 100.5 mm, the green LED light on, the beeper sounds a "beep"
  -When appriaching 99.5 mm, the red and green LED lights blink in succession, the beeper sounds "beep beep beep"
- Magnetic base
- 2xLR44 Battery



6559-100

Unit: mm



Code	Graduation	Accuracy	Height (H)	Test force
6559-100	0.01mm	±0.01mm	100mm	5N (at 100mm)

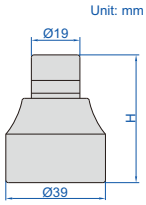
ELECTRONIC ZERO SETTER

INSIZE PLUS

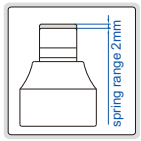
LOW TEST FORCE

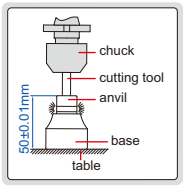
- The base is electrically conducted to the cutting tools through the table and chuck, the LED lights up when the cutting tool touches the anvil
- Magnetic base
- Two batteries LR44

Unit: mm



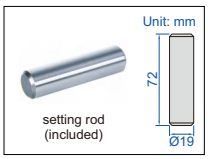
6553-50

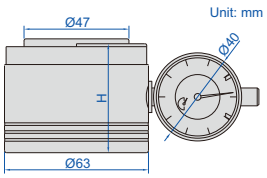




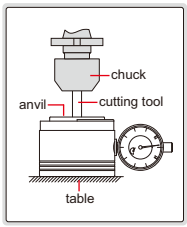
Code	Height (H)	Accuracy	Test force
6553-50	50mm	±10μm	7N (at 49mm)

ZERO SETTER





6556-50

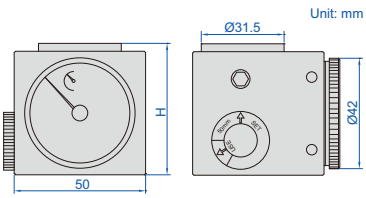


Code	Height (H)	Graduation	Accuracy	Test force
6556-50	50mm	0.01mm	±0.01mm	10N (at 50mm)

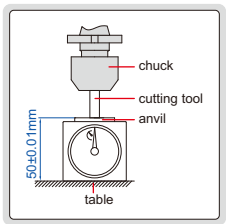
ZERO SETTER

- Magnetic base

Unit: mm



2397-502A

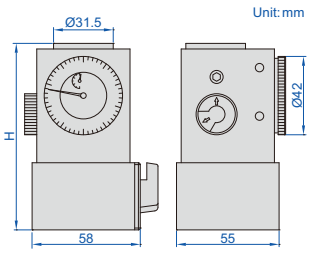


Code	Height (H)	Graduation	Accuracy	Test force
2397-502A	50mm	0.01mm	±0.01mm	9N (at 50mm)

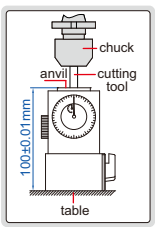
ZERO SETTER

- Magnetic base with on-off switch
- Test force: 9N (at 100mm)

Unit: mm



2394-100A



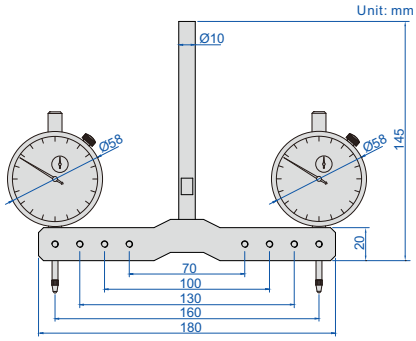
Code	Height (H)	Graduation	Accuracy
2394-100A	100mm	0.01mm	±0.01mm

VERTICAL MILLING MACHINE PERPENDICULARITY MEASURING GAUGE

VIDEO

- Used to detect and adjust the perpendicularity between the spindle and worktable of a vertical milling machine

2257-10



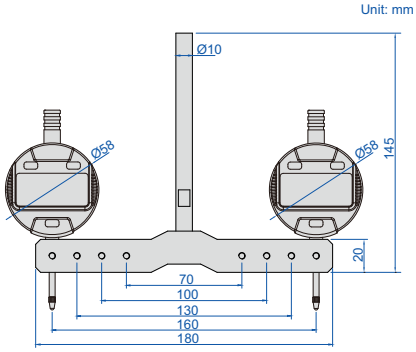
Code	Indicator	Accuracy
2257-10	dial indicator, code **2301-10F**, range: 10mm, graduation: 0.01mm	5μm

VERTICAL MILLING MACHINE PERPENDICULARITY MEASURING GAUGE

VIDEO

- Used to detect and adjust the perpendicularity between the spindle and worktable of a vertical milling machine

2258-101



Code	Indicator	Accuracy
2258-101	digital indicator, code **2112-101F**, range: 12.7mm/0.5", resolution: 0.001mm/0.00005"	3μm

INDUCTANCE TYPE PROBE CODE 9420-AP02

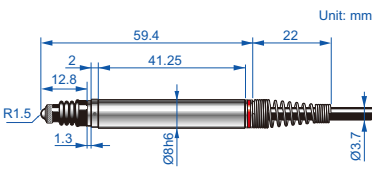
IP65 WATERPROOF

VIDEO

- Ultra-short length, built-in precision linear ball bearings
- For highly accurate and repeatable displacement measurements of displacement, deformation, dimension, vibration, thickness, expansion, etc. in quality control and metrology applications

SPECIFICATION

Range		±0.9mm
Accuracy *		±(0.3+3×|L|³)μm, L is measuring length in mm
Repeatability		0.15μm
Thermal drift		0.25μm/°C
Mechanical stroke		2.2mm
Sensor type		LVDT (full bridge)
Measuring force **		0.75N
Protective cover		fluorinated elastomer
Contact type		carbide
Insert thread		M2.5
Operation environment	work	-10~60ºC, ≤80% (non-condensing)
	storage	-20~100ºC, ≤80% (non-condensing)
Cable length		2m (customized from 2~5m)
Output interface		5-wire aviation interface
Net weight		16g

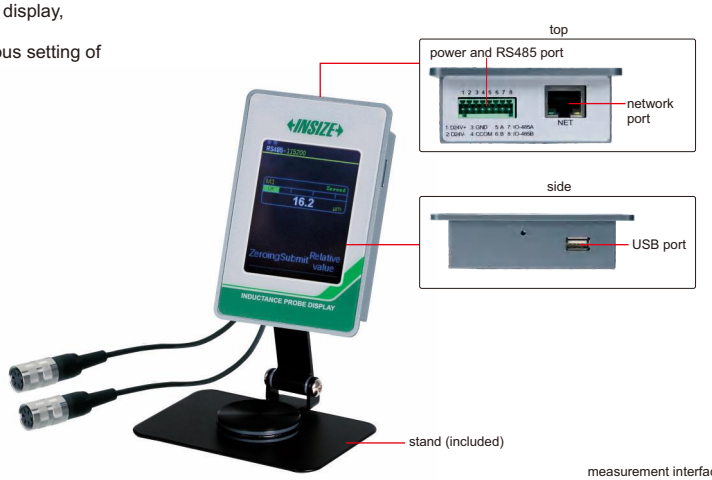


* Work with optional **9427-S** series or **9428-B** series displays, accuracy ≤1μm (need to be set in the factory)

** Measuring rod vertical down at 0±25% potential

INDUCTANCE PROBE DISPLAYS (STANDARD TYPE)

- Built-in high-performance AD chip, supporting multi-channel sensor display, computing, data storage, feedback output
- Up to 10 measurement programmes can be stored, with simultaneous setting of several workpiece parameters, configurable tolerances, linearity, measurement modes, etc.
- Measured values can be freely edited, stored automatically or man transferred to external devices for PLC control or access to SPC a



9427-S02B

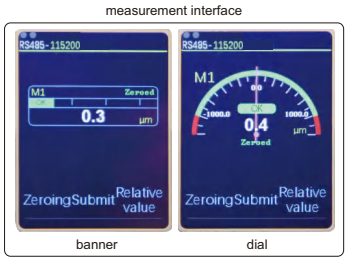
SPECIFICATION

Code	9427-S02A	9427-S02B
Channel number	2	2
Sensor type *	full bridge	half bridge
Display	3.5" touchable LCD screen	
Display mode	banner display, dial display	
Unit	μm, mm	
Range (mm)	±1, ±2, ±5, ±10 (adjustable)	
Resolution (μm)	0.1, 1	
Communication port **	RS485 (Modbus RTU)	
Sampling time (ms)	2, 4, 8, 16, 32 (adjustable)	
Operation environment	0~40°C, <80% (non-condensing)	
Storage environment	-20~50°C, <80% (non-condensing)	
Power supply	DC 24V	
Dimension (L×W×H)	113×73×30mm	
Net weight	252g	

*Applicable inductance probes: INSIZE **9420** series, Mahr, Marposs, Solartron, TESA, DONG-DO, ACCRETECH, etc.
**Optional RS232 (Modbus RTU), network port (Modbus TCP and EtherNet/IP), WIFI (Modbus TCP and EtherNet/IP) or I/O

STANDARD DELIVERY

Main unit	1 pc
Power and RS485 cable	1 pc
Stand	1 pc



MULTICHANNEL INDUCTANCE PROBE DISPLAYS CODE 9428-B□□□□

- Built-in high-performance chip, supporting multichannel sensor display and feedback output function
- Measured values can be cached and transferred to external devices for PLC control or access to SPC analysis system
- Up to 16 displays can be connected for 256 simultaneous measurements
- Optional: inductance type probe **9420-AP02**

9428-B2T1P3

SPECIFICATION

Channel number *	1~16 (selectable)
Display mode	banner display
Unit	μm, mm
Range (mm)	±0.5, ±1, ±2, ±5, ±10 (adjustable)
Resolution	0.1μm
Sampling time	2ms
Operation environment	0~60°C, 20~85% (non-condensing)
Storage environment	-20~70°C, 20~85% (non-condensing)
Power supply	DC 24V
Dimension (L×W×H)	161×101×45mm
Net weight	502g

*Applicable inductance probes: INSIZE **9420** series, Mahr, Marposs, Solartron, TESA, DONG-DO, ACCRETECH, etc.

Code explanation:

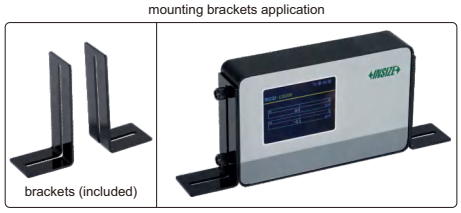
9428-B□T□P□

number of probe interfaces — sensor type — communication interface

Code example:

9428-B2T1P3	B2-number of probe interfaces: 2 (1~16 selectable)
	T1-sensor type: full bridg
	P3-communication interface: RS485

mounting brackets application



SENSOR TYPE

T1	full bridge
T2	half bridge

COMMUNICATION PORT

P1	network port (Modbus TCP and EtherNet/IP)
P2	RS232 (Modbus RTU)
P3	RS485 (Modbus RTU)

STANDARD DELIVERY

Main unit	1 pc
Power and RS485 cable	1 pc
Brackets	2 pcs

DIGITAL LINEAR GAUGES

VIDEO

INSPECTION CERTIFICATE

IP43 WATERPROOF

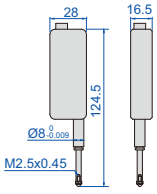
ABSOLUTE ENCODER, THE ORIGINAL DATA REMAINS AFTER POWER OFF

- Scale type: optical grating
- Absolute encoder, the original data remains after power off
- Digital signal output, amplifier is not required
- Repeatability: 0.5μm
- Measuring force: ≤1.5N
- Dust/waterproof: IP43
- Baud rate: 9600 (can be customized)
- Cable length: 3m (can be customized)

7130-10

7130-10L

Unit: mm



Code	Range	Resolution	Accuracy	Outgoing cable direction	Output signal	Output interface
7130-10*	0-12.5mm	0.1μm	1μm	horizontal	RS232, TTL level	
7130-10L*	0-12.5mm	0.1μm	1μm	vertical	RS232, TTL level	

*optional data output cable **7302-7130** or wireless transmitter **7315-7130**

OPTIONAL ACCESSORY

Data output cable (keyboard format)	**7302-7130**
Wireless transmitter (receiver is needed)**	**7315-7130**
Software of linear gauge	**7130-SOFTWARE**

** receiver code **7315-2/3/6/7/8/9**

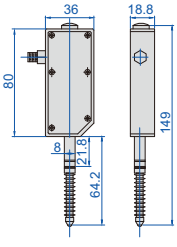
CAPACITANCE LINEAR GAUGES

IP65 WATERPROOF

- Capacitance type linear encoder
- Shock-proof, water proof, dust proof, suitable for high speed movement, long working life
- Optional: display unit **7106-1A**, multichannel interface box **7107-1** or **7107-2**

7107-12

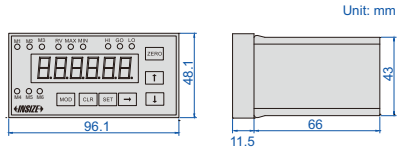
Unit: mm

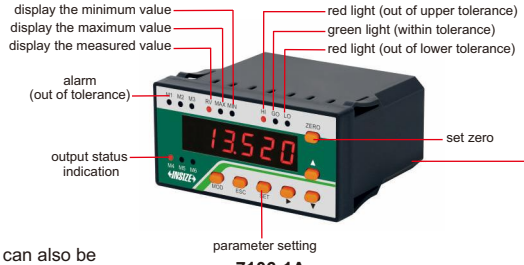


SPECIFICATION

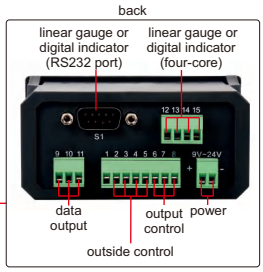
Code	7107-11	7107-12
Measuring range	12mm/0.47"	12mm/0.47"
Resolution	0.01mm/0.0004"	0.001mm/0.00004"
Accuracy	20μm	5μm
Hysteresis	10μm	2μm
Driving type	spring	
Measuring force	1.5N	
Measuring principle	capacitance type linear encoder	
Voltage	5V	
Sampling frequency	100 times/sec	
Working life	ten million times	
Dust/waterproof	IP65	
Cable length	2m	
Data output	RS232	

DISPLAY UNIT FOR CAPACITANCE LINEAR GAUGES
CODE 7106-1A





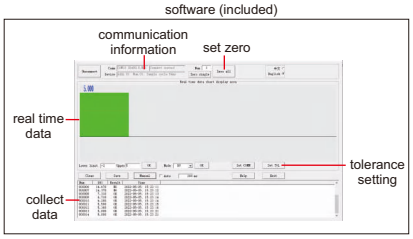
7106-1A



- Can be connected with **7107-11** or **7107-12** linear gauge, can also be connected with digital indicator (data cable **7309-C01M** is needed)
- Set tolerance and make judgment (out of upper tolerance, within tolerance, out of lower tolerance), output the judgment to control outside devices, control from outside (set zero, hold reading and collect data)
- Software of display unit (included): in the software, it is possible to set tolerance and show judgment (red when out of tolerance, green when within tolerance), set zero, collect data manually or automatically (time is adjustable), output data to Excel, print report

connected with
7107-11 or **7107-12** linear gauge

software (included)

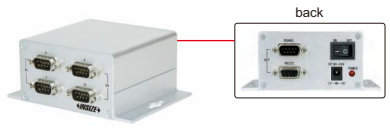


connected with digital indicator
(data cable **7309-C01M** is needed)

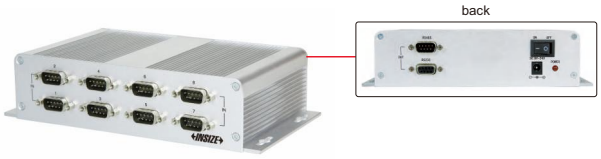
SPECIFICATION

Display	6 digits
Quantity of linear gauge or digital indicator to be connected	1 pc
Tolerance	set tolerance and make judgment with alarm and lights (out of upper tolerance, within tolerance, out of lower tolerance)
Output control	output the tolerance judgment (out of upper tolerance, within tolerance, out of lower tolerance) to control outside devices
Outside control	control the display units from outside (set zero, hold reading and collect data)
Data output	connect to computer software and serial communication
Power supply	DC 9~24V

MULTICHANNEL INTERFACE BOXES FOR CAPACITANCE LINEAR GAUGES

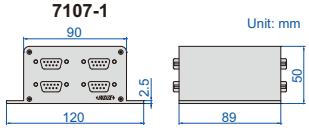


7107-1

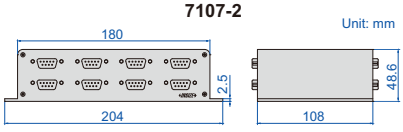


7107-2

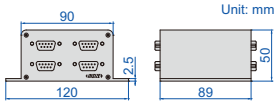
7107-3



7107-1



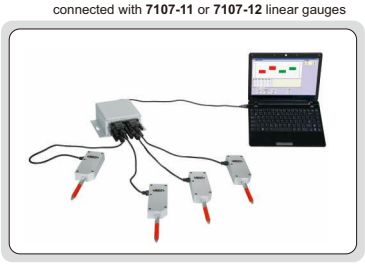
7107-2



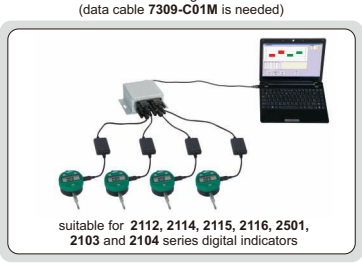
7107-3

- Can be connected with **7107-11** or **7107-12** linear gauges, can also be connected with digital indicators (data cable **7309-C01M** is needed)
- Connection box (code **7107-3**) is needed to connect interface boxes, when two or more interface boxes are used. Maximum 4 interface boxes can be connected.
- Software of interface boxes (included): in the software, it is possible to set tolerance of each channel and show judgment (red when out of tolerance, green when within tolerance), set zero, collect data manually or automatically (time is adjustable), output data to Excel, print report.

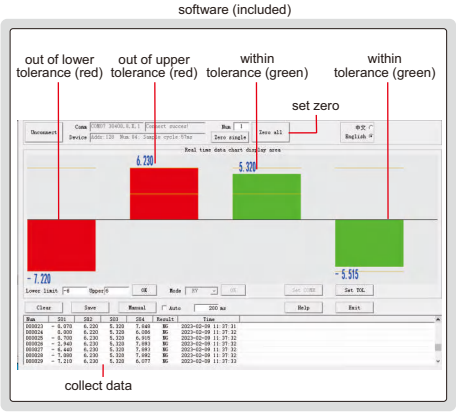
connected with **7107-11** or **7107-12** linear gauges



connected with digital indicators
(data cable **7309-C01M** is needed)



software (included)



INTERFACE BOX SPECIFICATION

Code	7107-1	7107-2
Quantity of linear gauges or digital indicators to be connected	4 pcs	8 pcs
Data output	RS232 and RS485	
Power supply	DC 9~24V	

CONNECTION BOX (OPTIONAL) SPECIFICATION

Code	7107-3
Quantity of interface boxes to be connected	4 pcs (maximum 4 interface boxes can be connected)
Data output	RS232 and RS485
Power supply	DC 9~24V

LINEAR SCALES (TTL SIGNAL)

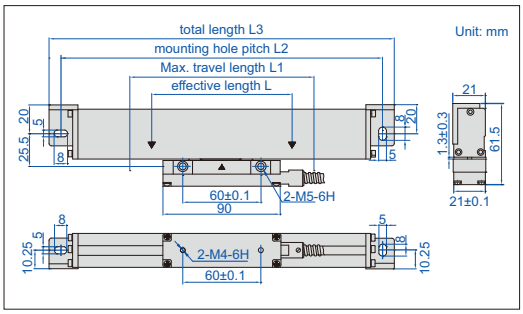
IP54
WATERPROOF

ISL-A1-300

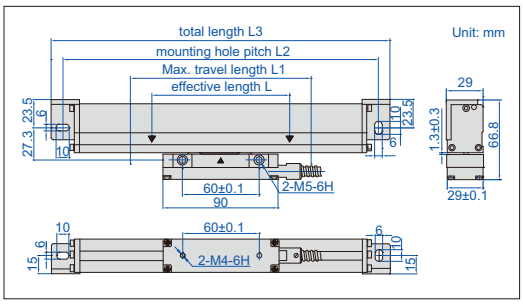
- Optical TTL (Through-The-Lens) detection.
  These optical TTL linear scales use an transistor logic to transmit and record high-resolution distance measurements. They are the most accurate type of encoder and are paired with **ISL-DR2/DR3** and **ISL-LCD7** (digital readout)

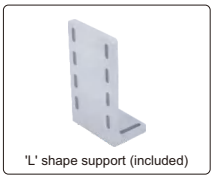
Effective length (L)	Code		
	thin type		thick type
	series ISL-A1	series ISL-A5	series ISL-B5
50mm	ISL-A1-50	ISL-A5-50	ISL-B5-50
100mm	ISL-A1-100	ISL-A5-100	ISL-B5-100
150mm	ISL-A1-150	ISL-A5-150	ISL-B5-150
200mm	ISL-A1-200	ISL-A5-200	ISL-B5-200
250mm	ISL-A1-250	ISL-A5-250	ISL-B5-250
300mm	ISL-A1-300	ISL-A5-300	ISL-B5-300
350mm	ISL-A1-350	ISL-A5-350	ISL-B5-350
400mm	ISL-A1-400	ISL-A5-400	ISL-B5-400
450mm	ISL-A1-450	ISL-A5-450	ISL-B5-450
500mm	ISL-A1-500	ISL-A5-500	ISL-B5-500
550mm	ISL-A1-550	ISL-A5-550	ISL-B5-550
600mm	ISL-A1-600	ISL-A5-600	ISL-B5-600
650mm	ISL-A1-650	ISL-A5-650	ISL-B5-650
700mm	ISL-A1-700	ISL-A5-700	ISL-B5-700
750mm	ISL-A1-750	ISL-A5-750	ISL-B5-750
800mm	ISL-A1-800	ISL-A5-800	ISL-B5-800
850mm	ISL-A1-850	ISL-A5-850	ISL-B5-850
900mm	ISL-A1-900	ISL-A5-900	ISL-B5-900
950mm	ISL-A1-950	ISL-A5-950	ISL-B5-950
1000mm	ISL-A1-1000	ISL-A5-1000	ISL-B5-1000
1100mm			ISL-B5-1100
1200mm			ISL-B5-1200
1300mm			ISL-B5-1300
1400mm			ISL-B5-1400
1500mm			ISL-B5-1500
1600mm			ISL-B5-1600
1700mm			ISL-B5-1700
1800mm			ISL-B5-1800
1900mm			ISL-B5-1900
2000mm			ISL-B5-2000

Series ISL-A1 and ISL-A5

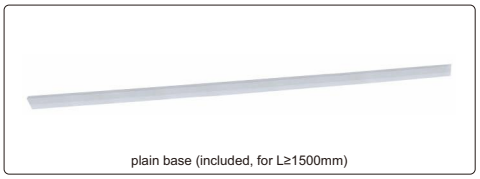


Series ISL-B5

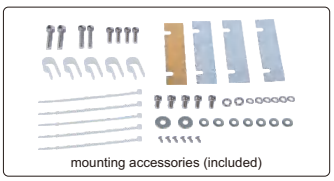




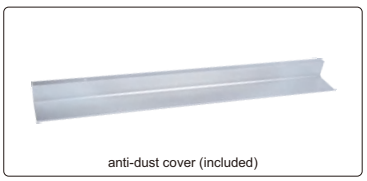
'L' shape support (included)



plain base (included, for L≥1500mm)



mounting accessories (included)



anti-dust cover (included)

STANDARD DELIVERY

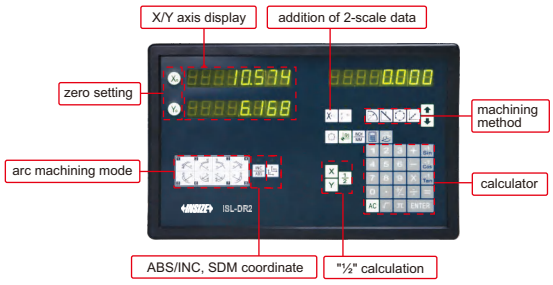
Main Unit	1 pc
'L' shape support	1 pc
Anti-dust cover	1 pc
Plain base	1 pc (for L≥1500mm)
Mounting accessories	1 package

SPECIFICATION

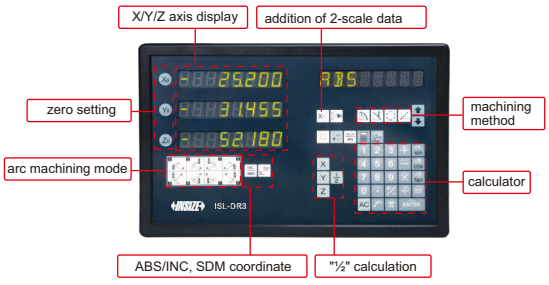
Code	Series ISL-A1		Series ISL-A5		Series ISL-B5	
L1 (mm)	L+30 (L≤900)	L+50 (L>900)	L+30 (L≤900)	L+50 (L>900)	L+30 (L≤900)	L+50 (L>900)
L2 (mm)	L+132 (L≤900)	L+152 (L>900)	L+132 (L≤900)	L+152 (L>900)	L+136 (L≤900)	L+156 (L>900)
L3 (mm)	L+148 (L≤900)	L+168 (L>900)	L+148 (L≤900)	L+168 (L>900)	L+154 (L≤900)	L+174 (L>900)
Resolution	1μm		5μm		5μm	
Max. response speed	50m/min		90m/min		60m/min	
Scale grating pitch	20μm					
Scale reference point pitch	50mm					
Accuracy	±(5+5L/1000)μm L is the effective length in mm					
Cable length	3.5m (L: 50-950mm), 5m (L: 1000-1500mm), 10m (L: 1600-3200mm)					
Output signal	TTL					
Socket	9PD					
Power supply	5±0.5V					

DIGITAL READOUTS

VIDEO



ISL-DR2



ISL-DR3

- For **ISL-A1**, **ISL-A5**, **ISL-B5** series linear scales

software flash disk (included)

mounting bracket (included)

SPECIFICATION

Code	ISL-DR2	ISL-DR3
Application	two-axis	three-axis
Scale input ports	2	3
Resolution	0.05μm, 0.1μm, 0.2μm, 0.5μm, 1μm, 2μm, 5μm, 10μm, 20μm, 50μm	
Functions	addition of 2-scale data, linearity error compensation, smoothing, RS232C interface unit, BCD code out, zero setting, preset, resolution setting, counting direction setting, inch/mm conversion, ABS/INC conversion, expansion/contraction coefficient setting, "½" calculation, detecting RI, bolt-hole circle machining, ramp circle machining	
Power supply	110/220V, 50/60Hz	
Dimension	295x185x45mm	
Net weight	1.45kg	

STANDARD DELIVERY

Main unit	1 pc
Mounting bracket	1 pc
Ground cable	1 pc
RS232C cable	1 pc
Software flash disk for RS232C	1 pc

DIGITAL READOUT CODE ISL-LCD7

VIDEO

- 7.57 inch LCD display
- Language: English, Simplified Chinese, Traditional Chinese
- Can be connected with **ISL-A1, ISL-A5, ISL-B5** series linear scales

mounting bracket for readout (included)

READOUT SPECIFICATION

Application	three-axis: X/Y/Z
Scale input ports	3
Resolution	0.05μm, 0.1μm, 0.2μm, 0.5μm, 1μm, 2μm, 5μm, 10μm, 20μm, 50μm
Functions	X/Y/Z addition of 3-scale data, linearity error compensation, smoothing, RS232C interface unit, BCD code out, zero setting, preset, resolution setting, counting direction setting, inch/mm conversion, ABS/INC conversion, expansion/sontraction coefficient setting, "½" calculation, detecting RI, bolt-hole circle machining, ramp circle machining, circular arc machining, oblique surface machining, automatic edge finding, discharge machining
Dimension	200×88×260mm
Net weight	1.26kg

STANDARD DELIVERY

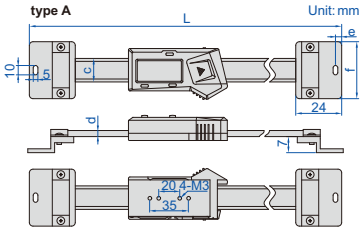
Main unit	1 pc
Mounting bracket	1 pc
Ground cable	1 pc
RS232C cable	1 pc
Software flash disk for RS232C	1 pc

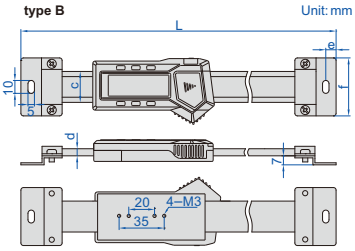
DIGITAL HORIZONTAL SCALES

DATA OUTPUT

7101-300A

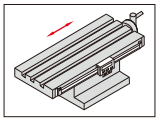
7101-400A

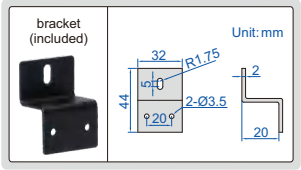




- Non waterproof
- Resolution: 0.01mm/0.0005"
- Buttons type A: on/off, zero, mm/inch,
  type B: on/off, zero, mm/inch, ABS, data preset
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Supplied with bracket to be mounted on the back

example of application





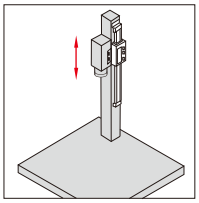
Code	Range	Type	Accuracy	L	c	d	e	f	Wireless transmitter (optional)
7101-100A	100mm	A	±0.02mm	215mm	16mm	4mm	6mm	36mm	**7315-25** (receiver is needed)
7101-150A	150mm	A	±0.03mm	265mm	16mm	4mm	6mm	36mm	
7101-200A	200mm	A	±0.03mm	315mm	16mm	4mm	6mm	36mm	
7101-300A	300mm	A	±0.04mm	445mm	16mm	4mm	6mm	36mm	
7101-400A	400mm	B	±0.05mm	590mm	24mm	5.5mm	8mm	45mm	**7315-22** (receiver is needed)
7101-500A	500mm	B	±0.05mm	690mm	24mm	5.5mm	8mm	45mm	
7101-600A	600mm	B	±0.08mm	790mm	24mm	5.5mm	8mm	45mm	
7101-800A	800mm	B	±0.10mm	990mm	24mm	5.5mm	8mm	45mm	
7101-1000A	1000mm	B	±0.10mm	1240mm	31mm	10.5mm	10mm	60mm	

DIGITAL VERTICAL SCALES

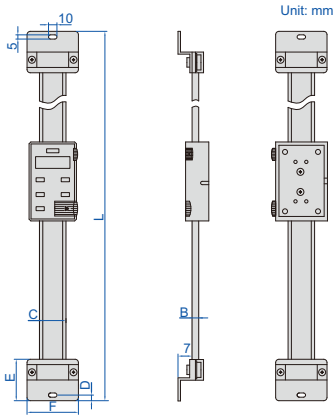
DATA OUTPUT

- Non waterproof
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch,
  ABS/INC, data hold, TOL, set
- Battery LR44, data output
- Made of stainless steel
- Supplied with bracket to be mounted on the back
- Optional accessory:
  wireless transmitter code **7315-1150** (receiver is needed)

example of application

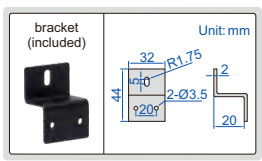


7102-300



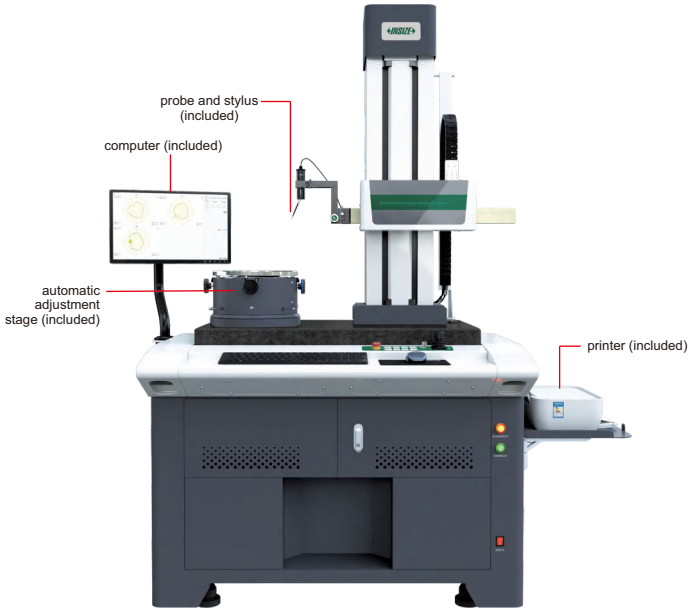
(mm)

Code	Range	Accuracy	B	C	D	E	F	L
7102-100	100mm/4"	±0.02mm	4	20	6	24	40	245
7102-150	150mm/6"	±0.03mm	4	20	6	24	40	296
7102-200	200mm/8"	±0.03mm	4	20	6	24	40	345
7102-300	300mm/12"	±0.04mm	4	20	6	24	40	445
7102-400	400mm/16"	±0.05mm	4	20	6	24	40	545
7102-500	500mm/20"	±0.05mm	5.5	24	8	32	45	685
7102-600	600mm/24"	±0.08mm	5.5	24	8	32	45	785
7102-800	800mm/32"	±0.10mm	5.5	24	8	32	45	985
7102-1000	1000mm/40"	±0.10mm	10.5	31	9.5	40	60	1245



ROUNDNESS/CYLINDRICITY TESTER
CODE RCT-300

VIDEO



- Automatic centering and leveling
- Evaluation items
  -Cylindricity module: cylindricity, radial full run, coaxiality, taper, radius
  -Roundness module: roundness, concentricity, radial single jump, wall thickness difference
  -Straightness module: straightness, parallelism, squareness
  -Single section flatness module: single section flatness, axial single hop, perpendicularity, parallelism
  -Multi-section flatness module: multi-section flatness, parallelism, axial full runout, perpendicularity
  -Commutator module: monolithic bounce, immediate bounce, interval difference
- Analytical ability
  -Cylindricity function: 2-10 sections, 3 evaluation methods
  -Reference benchmarks for cylindricity evaluation: LSCY, MZCY, MICY, MCCY, OSCY
  -Reference circle for roundness evaluation: LSC, MZC, MIC, MCC
  -Measurement band: 1-15upr, 1-50upr, 1-150upr, 1-250upr, 1-500upr, 15-100upr, 15-500upr, 2-15upr, 1-1500upr, custom
  -Notched measurement

SPECIFICATION

Probe	measuring range	±500μm
	resolution	1:262144
	linear accuracy	0.1%
Ruby stylus	size	Ø2×10mm
	direction	two directions
	adjustable angle	±45°
X axis	travel	165mm
	excess range	25mm
	drive mode	motor
	moving speed	(0.1~50)mm/s
Z axis	measuring range	480mm
	straightness	0.3μm/100mm
	movement speed	(0.1~10)mm/s
	movement mode	motor
Detector	acquisition device	circular grating
	circumferential sampling points	14400
Granite stage		900×500mm
Rotary stage	rotation accuracy	(0.025+6H/10000)μm for H≤20mm, H is the measuring height in mm
	rotation speed	6rpm
	max. measuring diameter	300mm
	max. workpiece diameter (rotation diameter)	450mm
Automatic adjustment stage	workbench diameter	280mm
	adjustment range of center	±3mm
	adjustment range of level	±1°
	weight capacity	30kg
Precision chuck	external grip diameter	Ø1~Ø81mm
	internal grip diameter	Ø31~Ø70mm
Air filter	pressure range	0~0.8MPa
	oil mist removal accuracy	0.01μm
	export oil mist concentration	0.5mg/m³
Dimension (L×W×H)		1680×862×1685mm
Power supply		220±10%V, 50Hz
Power		500W
Net weight		350kg

To be continued

Continued from previous page

air filter (included)

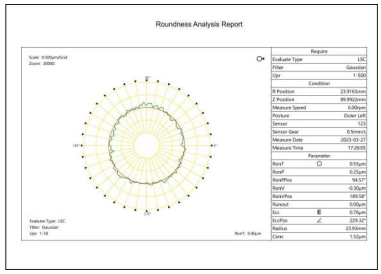
standard block (included)

column adjusting rod (included)

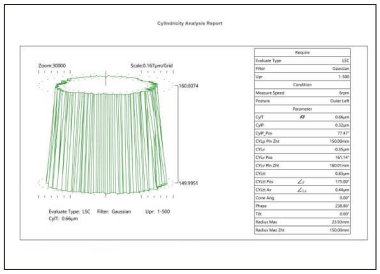
precision chuck (included)

STANDARD DELIVERY

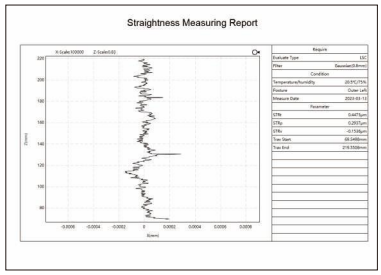
Main unit	1 pc
Probe (with ruby stylus)	1 pc of each
Standard block	1 pc
Column adjusting rod	1 set
Precision chuck	1 pc
Automatic adjustment stage	1 pc
Roundness cylindricity acquisition and analysis system	1 set
Air filter	1 set
Computer	1 pc
Printer	1 pc
Installation tools	1 set



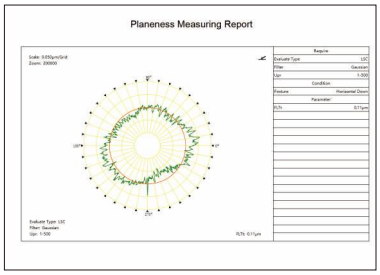
roundness analysis



cylindricity analysis



straightness analysis

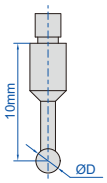


planeness analysis

OPTIONAL ACCESSORY

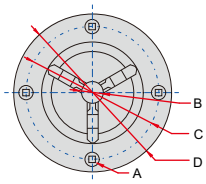
Probes	see below details
Precision chucks	see below details
Dryer	CMM-DRY

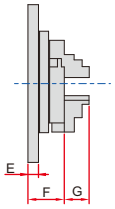
SPECIFICATION OF PROBES



Code	Diameter (ØD)	Remark
RCT-RA260-T1	2mm	included
RCT-RA260-T2	0.5mm	optional
RCT-RA260-T3	1mm	optional
RCT-RA260-T4	4mm	optional
RCT-RA260-T5	8mm	optional

SPECIFICATION OF PRECISION CHUCKS

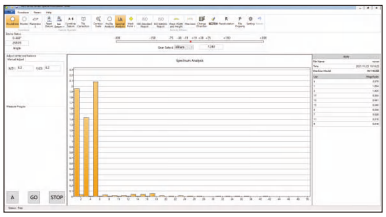




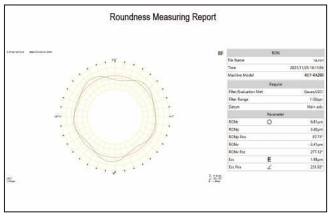
(mm)

Code	A	B	C	D	E	F	G	Clamping range		Remark
								external grip dia.	internal grip dia.	
RCT-RA260-C1	M5×0.8	16	100	118	8	28	13	Ø0.8~63	Ø23~58	optional
RCT-RA260-C2	M6×1.0	20	116	143	10.5	37	15	Ø1~81	Ø31~70	included
RCT-RA260-C3	M6×1.0	26	140	168	10	39	19	Ø1~100	Ø36~90	optional

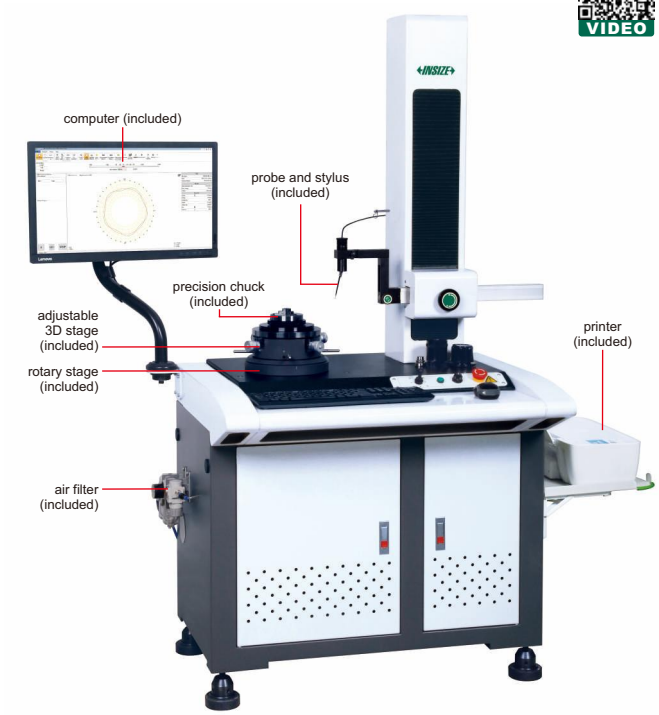
ROUNDNESS MEASURING MACHINE
CODE RCT-RA260



spectrum analysis



measurement



SPECIFICATION

Probe	measuring range	±300μm
	resolution	0.001μm
	linear accuracy	0.25%
Ruby stylus	size	Ø2×10mm
	direction	two directions
	adjustable angle	±45°
X axis	travel	165mm
	excess range	25mm
	drive mode	by hand
Z axis	drive mode	motor
	travel	420mm
	movement speed	0.5~10mm/s
Rotary stage	rotation accuracy	(0.025+6H/10000)μm for H≤20mm, H is the measuring height in mm
	rotation speed	6rpm
	max. measuring diameter	260mm
	max. workpiece diameter (rotation diameter)	400mm
Adjustable 3D stage	diameter	180mm
	adjustment range of center	±3mm
	adjustment range of level	±2°
	weight capacity	30kg
Granite stage		700×500mm
Precision chuck	external grip diameter	Ø1~Ø81mm
	internal grip diameter	Ø31~Ø70mm
Air filter	pressure range	0~0.8MPa
	oil mist removalaccuracy	0.01μm
	export oil mist concentration	0.5mg/m³
Dimension (LxWxH)		1300×795×1715mm
Power supply		220±10%V, 50Hz
Power		500W
Net weight		320kg

- Air-floating spindle
- Can measure roundness, concentricity, flatness, radial runout
- Spectrum analysis, automatic gap/burr removal, waveform analysis
  4 roundness evaluation methods: smallest area method, least square method, smallest circumscribed circle method, largest inscribed circle method
- Measuring filer: 1-15upr, 1-50upr, 1-150upr, 1-250upr, 1-500upr, 15-100upr, 15-500upr, 2-15upr
- Filter form: Gauss (ISO standard)
- Software is included, for measurement, analysis, data output, etc.

STANDARD DELIVERY

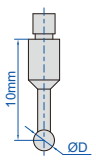
Main unit	1 pc
Probe (with ruby stylus)	1 pc of each
Standard block	1 pc
Precision chuck	1 pc
Adjustable 3D stage	1 pc
Rotary stage	1 pc
Computer	1 pc
Software	1 set
Printer	1 pc
Air filter	1 set
Installation tools	1 set

standard block (included)

OPTIONAL ACCESSORY

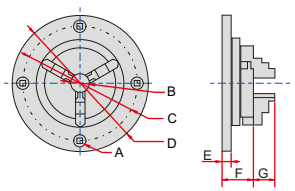
Probes	refer to details
Precision chucks	refer to details
Dryer	CMM-DRY

SPECIFICATION OF PROBES



Code	Diameter (ØD)	Remark
RCT-RA260-T1	2mm	included
RCT-RA260-T2	0.5mm	optional
RCT-RA260-T3	1mm	optional
RCT-RA260-T4	4mm	optional
RCT-RA260-T5	8mm	optional

SPECIFICATION OF PRECISION CHUCKS



(mm)

Code	A	B	C	D	E	F	G	Clamping range		Remark
								external grip dia.	internal grip dia.	
RCT-RA260-C1	M5x0.8	16	100	118	8	28	13	Ø0.8~63	Ø23~58	optional
RCT-RA260-C2	M6x1.0	20	116	143	10.5	37	15	Ø1~81	Ø31~70	included
RCT-RA260-C3	M6x1.0	26	140	168	10	39	19	Ø1~100	Ø36~90	optional

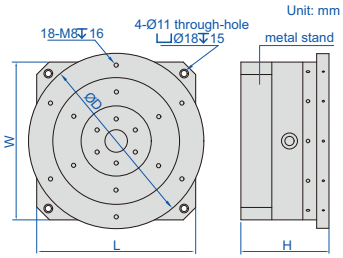
PRECISION AIR FLOATING ROTARY TABLES

- Manual drive
- Floating by air pressure, the rotary table can rotate smoothly and be free from wear
- Air filter is included

VIDEO

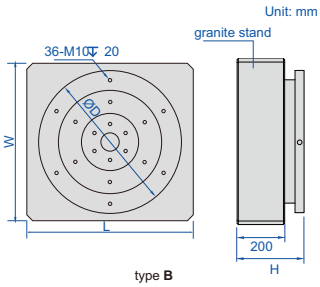
CUSTOM-MADE SUPPLY SPECIAL SIZES ACCORDING TO CUSTOMER'S REQUEST

6875-320



type **A**

6875-600



type **B**

(mm)

Code	Stage size ØD	Type	Max. load	Air supply pressure	Max. RPM	Rotation accuracy in radial/axial	L×W×H
6875-320	320mm	A	100kg	0.4-0.6Mpa	500RPM	<0.3μm	272×272×161
6875-400	400mm	A	100kg	0.4-0.6Mpa	500RPM	<0.3μm	272×272×161
6875-500	500mm	A	100kg	0.4-0.6Mpa	500RPM	<0.3μm	272×272×191
6875-600	600mm	B	500kg	0.4-0.6Mpa	500RPM	<0.3μm	700×700×262

Glass hemisphere for calibration (optional)

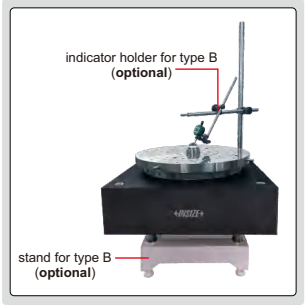
Code	Roundness
6875-BALL*	0.05μm

*To check the accuracy of rotary table

6875-BALL

Code	Remark
6875-STAND-□□□□	stand for type B, **optional** **
6875-HOLDER-□□□□	indicator holder for type B, **optional** **

**Custom-made according to requirements



Clamps for glass hemisphere (optional)

Code	Remark
6875-CLAMP	for type A
6875-CLAMP-B	for type B

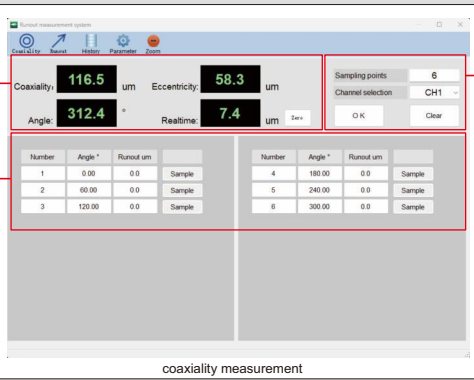
6875-CLAMP

Software for runout measuring (optional)

Code
6875-SOFTWARE

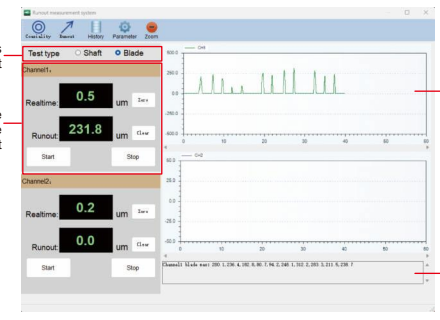
- Measuring the coaxiality and runout of shaft workpieces
- Measuring the runout at the blade tips
- Real-time measurement waveform diagram
- The measurement data is saved automatically, and can be checked at any time and exported to Excel

6875-SOFTWARE (digital indicator code **2133** and data output cable code **7305-G60** are needed)



coaxiality measurement

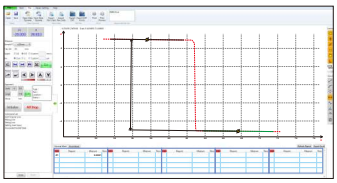
shaft runout measurement

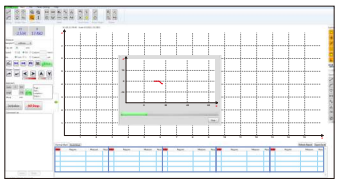


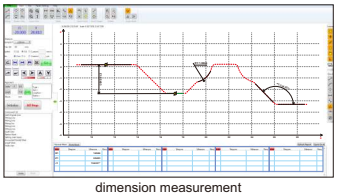
blade tips runout measurement

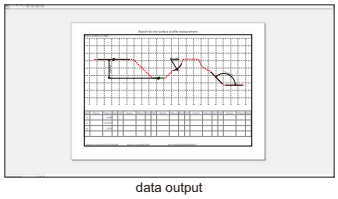
SURFACE PROFILE MEASURING MACHINE
CODE SPM-1000

- Software is included, for surface profile measurement and data output
- Probe compensation
- Output as format txt, csv, etc.
- Large range design, the leverage ratio is 1:2.2, maintain the original accuracy of the sensor
- The overall structure of the Z-axis sensor does not have any elastic components, ensuring the measuring force is constant regardless the position of probe

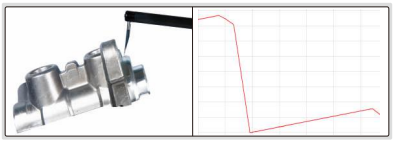

calibration


contour scanning


dimension measurement

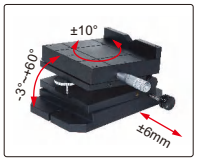

data output

standard shaft (included)



standard balls (included)

standard blocks (included)



stage (included)

vise (included)

SPECIFICATION

X axis measuring range	140mm
X axis resolution	0.1μm
X axis straightness	0.5μm/100mm
X axis moving speed	0.1~10mm/s
Z axis measuring range	±20mm
Z axis resolution	0.05μm
Z axis moving speed	0.5~10mm/s
Linear accuracy	±(1.5+|0.05H|)μm, H is measuring height in mm
Angular measuring accuracy	±2′
Arc measuring accuracy	±(2+R/8)μm, R is 2~10mm standard ball
Radius of probe tip	25μm
Moving direction	backward
Measuring force	6.9~9.8mN
Measuring unit	mm/inch
Traceable angle	72° (upward), 87° (downward)
Drive mode	motor
Travel of Z axis	430mm
Dimension (L×W×H)	1200×700×1780mm
Power supply	220±5%V, 50Hz
Net weight	320kg

STANDARD DELIVERY

Main unit	1 pc
Standard probe and arm	1 pc of each
Standard block	2 pcs
Standard ball	2 pcs
Standard shaft	1 pc
Stage	1 pc
Vise	1 pc
Computer	1 pc
Measurement software	1 pc
Printer	1 pc
Installation tools	1 set

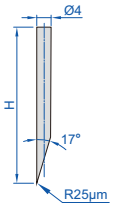
OPTIONAL ACCESSORY

Tilting frame	SPM-1000-TILTING
Probe	refer to details

SPECIFICATION OF PROFILE PROBES

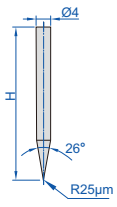
Unit: mm

chisel stylus



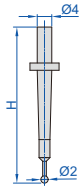
code **SPM-1000-T01** (H=32mm, included)
code **SPM-1000-T02** (H=48mm, **optional**)
code **SPM-1000-T03** (H=68mm, **optional**)

cone stylus



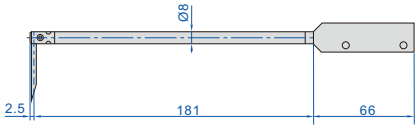
code **SPM-1000-Z01** (H=32mm, **optional**)
code **SPM-1000-Z02** (H=48mm, **optional**)
code **SPM-1000-Z03** (H=68mm, **optional**)

ball stylus

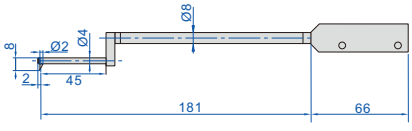


code **SPM-1000-R01** (H=32mm, **optional**)
code **SPM-1000-R02** (H=48mm, **optional**)
code **SPM-1000-R03** (H=68mm, **optional**)

standard arm, code **SPM-1000-SP** (included), stylus is not included

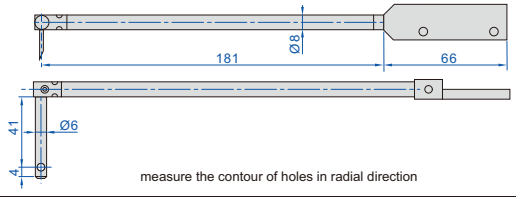


probe for small holes, code **SPM-1000-SBP** (**optional**), stylus is included



measure the contour of holes with diameter>Ø8mm

transverse probe, code **SPM-1000-LP** (**optional**), stylus is included

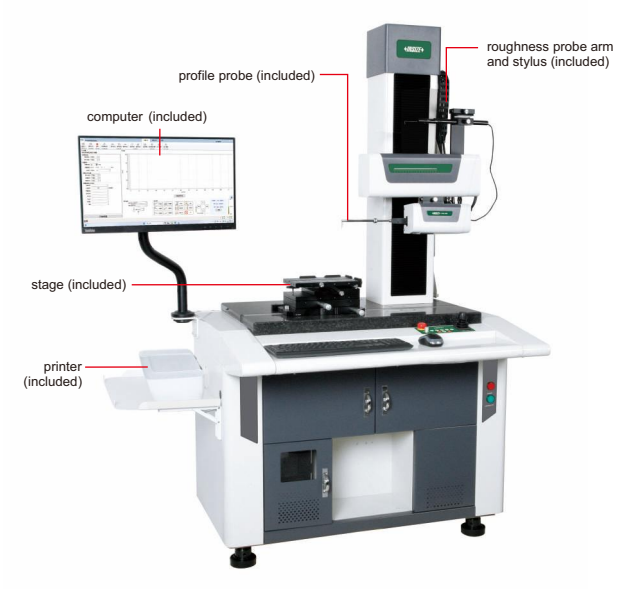


measure the contour of holes in radial direction

ROUGHNESS AND PROFILE MEASURING MACHINE (TWO PROBES TYPE)
CODE SPM-2000

VIDEO

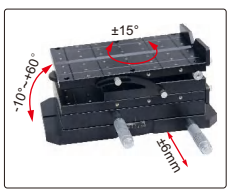
ATTENTION: PROFILE AND ROUGHNESS PROBES ARE USED SEPARATELY



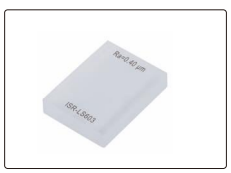
- High precision grating sensor, large measuring range, strong stability
- Three point magnetic suction positioning module, switch measuring rod only need one second
- Wide range roughness sensor without skid
- Intelligent measurement analysis system, automatic programming measurement
- CAD profile comparison

standard balls (included)

vise (included)



stage (included)



roughness standard block (included)

standard blocks (included)

PROFILE MEASUREMENT SPECIFICATION

X axis measuring range	150mm
X axis resolution	0.1μm
X axis traverse speed	(0.1~20)mm/s
Z axis measuring range	40mm
Z axis resolution	0.02μm
Z axis traverse speed	(0.5~30)mm/s
Straightness	0.5μm/100mm
Linear accuracy	±(0.6+|0.02H|)μm, H is measuring height in mm
Angular measuring accuracy	±1′
Arc measuring accuracy	±(1.5+R/12)μm, R is 2~10mm standard ball
Measuring unit	μm/μin
Measuring speed	(0.1~1)mm/s
Traceable angle	72° (upward), 88° (downward)
Travel of Z axis	420mm
Power supply	220±5%V, 50Hz
Dimension (L×W×H)	1329×930×1805mm
Net weight	350kg

ROUGHNESS MEASUREMENT SPECIFICATION

Roughness parameters	Ra, Ramax, Ramin, Rasd, Rp, Rpmax, Rpmin, Rpsd, Rv, Rvmax, Rvmin, Rvsd, Rz, Rzmax, Rzmin, Rzsd, R3z, Rmax, Rc, Rcmax, Rcmin, Rcsd, Rt, Rq, Rqmax, Rqmin, Rqsd, Rsk, Rskmax, Rskmin, Rsksd, Rku, Rkumax, Rkumin, Rkusd, Rsm, Rsmmax, Rsmmin, Rsmsd, RS, RΔa, RΔamax, RΔamin, RΔasd, RΔq, RΔqmax, RΔqmin, RΔqsd, Rk, Rpk, Rvk, Mr1, Mr2, Rλa, Rλamax, Rλamin, Rλasd, Rλq, Rλqmax, Rλqmin, Rλqsd, Rδc, Rpc, Rmr, CR, CF, CL
Waviness parameters	Wa, Wamax, Wamin, Wasd, Wsa, Wca, Wa08, Wc, Wcmax, Wcmin, Wcsd, Wt, Wz, Wzmax, Wzmin, Wzsd, Wp, Wpmax, Wpmin, Wpsd, Wv, Wvmax, Wvmin, Wvsd, Wq, Wqmax, Wqmin, Wqsd, Wsm, Wsmmax, Wsmmin, Wsmsd, Wsk, Wskmax, Wskmin, Wsksd, Wku, Wkumax, Wkumin, Wkusd, WΔq, WΔqmax, WΔqmin, WΔqsd, Wδc, Wmr
Original profile parameters	Pa, Pt, Pp, Pc, Pv, Pz, Pq, Psm, Psk, Pku, RzJ, Rpq, Rvq, Rmq, Pmr, PΔq, Avh, Hmax, Hmin, Area, Pδc, Tilta
Motif parameters	Ncrx, R, Rx, AR, Nr, Cpm, Sr, Sar, W, Wx, Aw, Wte, Nw, Sw, Saw
Measuring range	±420μm
Resolution	0.0001μm
Linear accuracy	≤±(8nm+3.5%)
Probe radius/angle	5μm/90°
Cut off	0.025/0.08/0.25/0.8/2.5/8mm
Measuring unit	μm
Measuring speed	(0.1~1)mm/s

To be continued

Continued from previous page

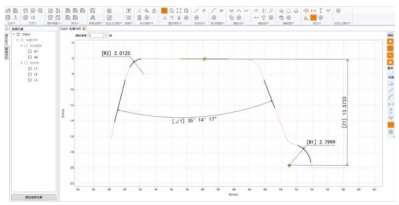
STANDARD DELIVERY

Main unit	1 pc
Calibration block	1 set
Roughness probe arm	1 pc
Roughness stylus	1 pc
Profile probe arm	1 pc
Profile chisel stylus	1 pc
Stage	1 set
Vise	1 set
Computer	1 pc
Software	1 set
Printer	1 pc
Installation tools	1 set

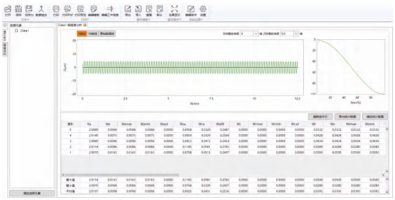
OPTIONAL ACCESSORY

Probe	refer to details

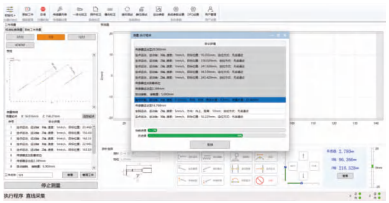
SOFTWARE (included)



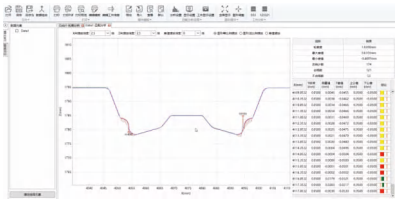
profile measurement



roughness measurement



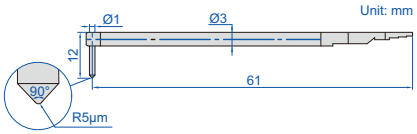
automatic measurement



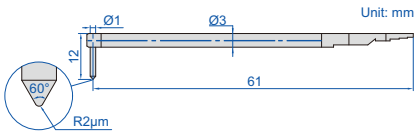
CAD profile comparison

SPECIFICATION OF ROUGHNESS PROBES

standard probe, code **SPM-2000-P** (included),
stylus is included



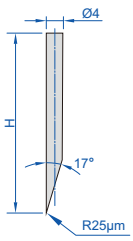
small roughness probe, code **SPM-2000-P1** (**optional**),
stylus is included



SPECIFICATION OF PROFILE PROBES

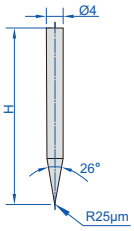
Unit: mm

chisel stylus



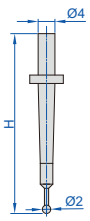
code **SPM-1000-T01** (H=32mm, included)
code **SPM-1000-T02** (H=48mm, **optional**)
code **SPM-1000-T03** (H=68mm, **optional**)

cone stylus



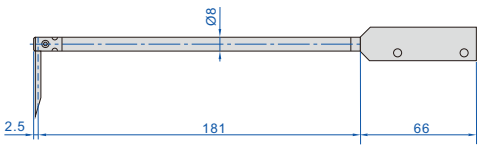
code **SPM-1000-Z01** (H=32mm, **optional**)
code **SPM-1000-Z02** (H=48mm, **optional**)
code **SPM-1000-Z03** (H=68mm, **optional**)

ball stylus

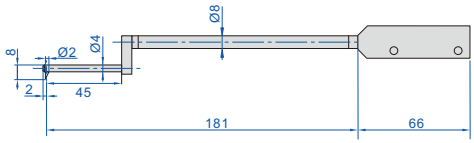


code **SPM-1000-R01** (H=32mm, **optional**)
code **SPM-1000-R02** (H=48mm, **optional**)
code **SPM-1000-R03** (H=68mm, **optional**)

standard arm, code **SPM-1000-SP** (included),
stylus is not included

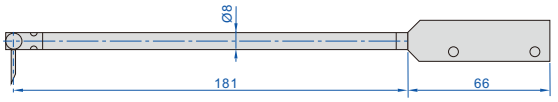


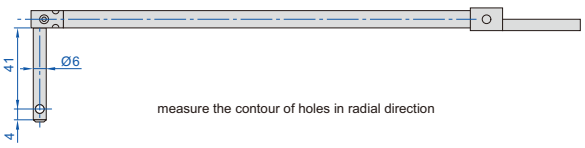
probe for small holes, code **SPM-1000-SBP** (**optional**),
stylus is included



measure the contour of holes with diameter >Ø8mm

transverse probe, code **SPM-1000-LP** (**optional**), stylus is included





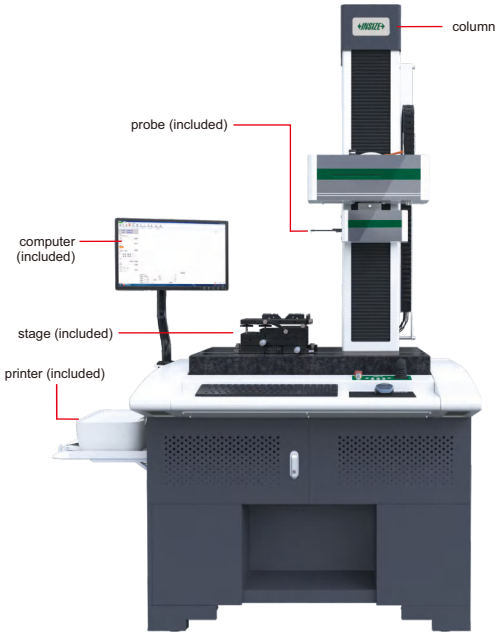
measure the contour of holes in radial direction

ROUGHNESS AND PROFILE MEASURING MACHINE (ONE PROBE TYPE)
CODE SPM-5000

PROFILE AND ROUGHNESS MEASUREMENT AT THE SAME TIME

VIDEO

- Roughness, waviness, and profile analysis can be achieved with just one measurement
- Can measure all roughness and waviness parameters
- Can be used for automatic measurement system
- Air flotation and shockproof system to reduce measurement deviation
- Free to edit measurement reports

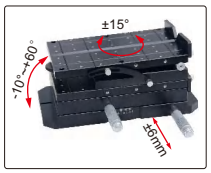


PROFILE MEASUREMENT SPECIFICATION

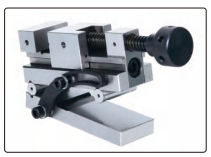
X axis measuring range	150mm
X axis resolution	0.0012μm
X axis traverse speed	(0.05~50)mm/s
X axis linear accuracy	±(0.8+|0.015L|)μm, L is measuring length in mm
Z axis measuring range	±10mm
Z axis resolution	0.0012μm
Z axis traverse speed	(0.2~40)mm/s
Z axis linear accuracy	±(0.5+|0.02H|)μm, H is measuring height in mm
Angular measuring accuracy	±1′
Arc measuring accuracy	±(1+R/12)μm, R is 2~10mm standard ball
Straightness	0.3μm/100mm
Measuring unit	mm/inch
Travel of Z axis	420mm
Power supply	220±10%V, 50Hz
Dimension (L×W×H)	1700×820×1900mm
Net weight	500kg

standard balls (included)

standard shaft (included)



stage (included)


vise (included)

standard blocks (included)

ROUGHNESS MEASUREMENT SPECIFICATION

Roughness parameters	Ra, Ramax, Ramin, Rasd, Rp, Rpmax, Rpmin, Rpsd, Rv, Rvmax, Rvmin, Rvsd, Rz, Rzmax, Rzmin, Rzsd, R3z, Rc, Rcmax, Rcmin, Rcsd, Rt, Rq, Rqmax, Rqmin, Rqsd, Rsk, Rskmax, Rskmin, Rsksd, Rku, Rkumax, Rkumin, Rkusd, Rsm, Rsmmax, Rsmmin, Rsmsd, Rs, RΔa, RΔamax, RΔamin, RΔasd, RΔq, RΔqmax, RΔqmin, RΔqsd, Rk, Rpk, Rvk, Mr1, Mr2, Rλa, Rλamax, Rλamin, Rλasd, Rλq, Rλqmax, Rλqmin, Rλqsd, Rδc, Rpc, Rmr
Waviness parameters	Wa, Wamax, Wamin, Wasd, Wsa, Wca, Wa08, Wc, Wcmax, Wcmin, Wcsd, Wt, Wz, Wzmax, Wzmin, Wzsd, Wp, Wpmax, Wpmin, Wpsd, Wv, Wvmax, Wvmin, Wvsd, Wq, Wqmax, Wqmin, Wqsd, Wsm, Wsmmax, Wsmmin, Wsmsd, Wsk, Wskmax, Wskmin, Wsksd, Wku, Wkumax, Wkumin, Wkusd, WΔq, WΔqmax, WΔqmin, WΔqsd, Wδc, Wmr
Original profile parameters	Pa, Pt, Pp, Pc, Pv, Pz, Pq, Psm, Psk, Pku, RzJ, Rpq, Rvq, Rmq, Pmr, PΔq, Avh, Hmax, Hmin, Area, Pδc, Tilta
Motif parameters	Ncrx, R, Rx, AR, Nr, Cpm, Sr, Sar, W, Wx, Aw, Wte, Nw, Sw, Saw
Measuring range	±10mm
Resolution	0.0012μm
Linear accuracy	≤±(6nm+2.5%)
Probe radius/angle	5μm/90°
Cut off	0.025/0.08/0.25/0.8/2.5/8mm
Number of cut-offs	2~7
Measuring unit	μm
Measuring speed	(0.1~2)mm/s

To be continued

Continued from previous page

STANDARD DELIVERY

Main unit (including workbench, controller, driver, sensor)	1 pc
Calibration block	1 set
Probe arm	1 pc
Stylus	1 pc
Air flotation and shockproof system	1 set
Stage	1 set
Vise	1 set
Computer	1 pc
Software	1 set
Printer	1 pc
Installation tools	1 set

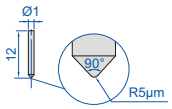
OPTIONAL ACCESSORY

Probe	refer to details

SPECIFICATION OF STANDARD PROBE

Unit: mm

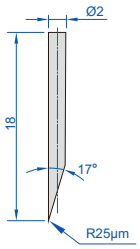
standard stylus , code **SPM-5000-R1** (included)



SPECIFICATION OF PROFILE PROBES

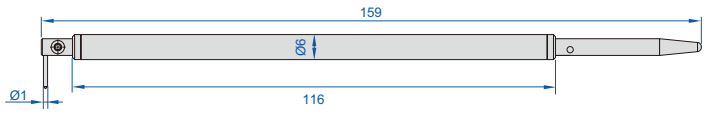
Unit: mm

chisel stylus

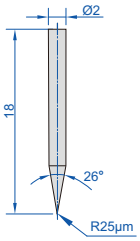


code **SPM-5000-T01** (**optional**)

standard arm, code **SPM-5000-P1** (included), stylus is not included

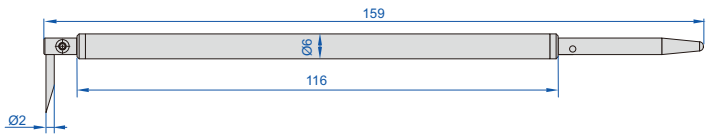


cone stylus

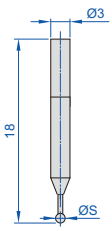


code **SPM-5000-Z01** (**optional**)

profile arm, code **SPM-5000-P2** (optional), stylus is not included

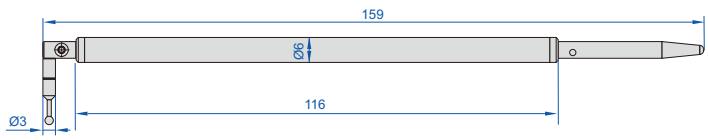


ball stylus



code **SPM-5000-S01** (ØS=1mm, **optional**)
code **SPM-5000-S02** (ØS=2mm, **optional**)

profile arm, code **SPM-5000-P3** (**optional**), stylus is not included



BIDIRECTIONAL ROUGHNESS AND PROFILE MEASURING MACHINE
CODE SPM-6000

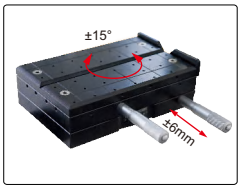
VIDEO

- Intelligent tracking control system, real-time scanning measurement
- Bidirectional probe measurement
- Constant measuring force
- Can be used to measure absolute diameters
- Real time variable speed measurement, high-speed measurement can also ensure accuracy
- The trajectory of the probe is vertical, with more realistic Z-axis coordinate point and large range
- The profile data point cloud spacing is consisten, enabling high accuracy measurement

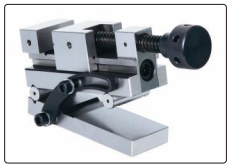
PROFILE MEASUREMENT SPECIFICATION

X axis measuring range	325mm
X axis resolution	0.01μm
X axis traverse speed	5~10mm/s
X axis straightness	0.45μm/100mm
X axis linear accuracy	±(0.8+L/100)μm, L is measuring length in mm
X axis measuring speed	0.2~0.7mm/s
Z axis measuring range	325mm
Z axis resolution	0.01μm
Z axis traverse speed	5~10mm/s
Z axis straightness	0.45μm/100mm
Z axis linear accuracy	±(0.8+H/100)μm, H is measuring height in mm
Z axis measuring speed	0.2~0.7mm/s
Angular measuring accuracy	±2'
Arc measuring accuracy	±(0.8+R/15)μm
Measuring unit	mm/inch
Traceable angle	72° (upward), 89° (downward)
Power supply	220±5%V, 50Hz
Dimension (L×W×H)	1700×820×1900mm
Net weight	500kg

calibration blocks (included)



stage (included)



vise (included)

standard shaft (included)

ROUGHNESS MEASUREMENT SPECIFICATION

Roughness parameters	Ra, Ramax, Ramin, Rasd, Rp, Rpmax, Rpmin, Rpsd, Rv, Rvmax, Rvmin, Rvsd, Rz, Rzmax, Rzmin, Rzsd, R3z, Rmax, Rc, Rcmax, Rcmin, Rcsd, Rt, Rq, Rqmax, Rqmin, Rqsd, Rsk, Rskmax, Rskmin, Rsksd, Rku, Rkumax, Rkumin, Rkusd, Rsm, Rsmmax, Rsmmin, Rsmsd, RS, RΔa, RΔamax, RΔamin, RΔasd, RΔq, RΔqmax, RΔqmin, RΔqsd, Rk, Rpk, Rvk, Mr1, Mr2, Rλa, Rλamax, Rλamin, Rλasd, Rλq, Rλqmax, Rλqmin, Rλqsd, Rδc, Rpc, Rmr, CR, CF, CL
Waviness parameters	Wa, Wamax, Wamin, Wasd, Wsa, Wca, Wa08, Wc, Wcmax, Wcmin, Wcsd, Wt, Wz, Wzmax, Wzmin, Wzsd, Wp, Wpmax, Wv, Wvmax, Wvmin, Wvsd, Wq, Wqmax, Wqmin, Wqsd, Wsm, Wsmmax, Wsmmin, Wsmsd, Wsk, Wskmax, Wskmin, Wsksd, Wku, Wkumax, Wkumin, Wkusd, WΔq, WΔqmax, WΔqmin, WΔqsd, Wδc, Wmr, Wpsd, Wpmin
Original profile parameters	Pa, Pt, Pp, Pc, Pv, Pz, Pq, Psm, Psk, Pku, RzJ, Rpq, Rvq, Rmq, Pmr, PΔq, Avh, Hmax, Hmin, Area, Pδc, Tilta
Motif parameters	Ncrx, R, Rx, AR, Nr, Cpm, Sr, Sar, W, Wx, Aw, Wte, Nw, Sw, Saw
Resolution	0.01μm
Linear accuracy	≤±(20nm+5%)
Probe radius/angle	5μm/90°
Cut off	0.025/0.08/0.25/0.8/2.5/8mm
Number of cut-offs	2~7
Measuring unit	μm
Measuring speed	0.1~2mm/s

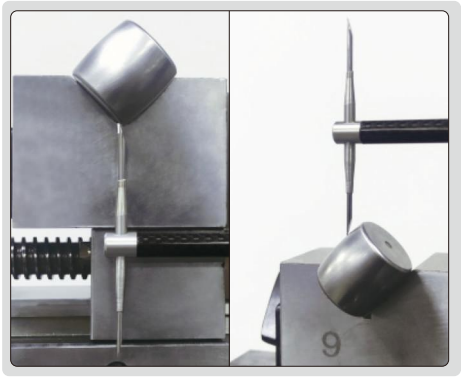
STANDARD DELIVERY

Main unit (including workbench, controller, driver, sensor)	1 set
Calibration block	1 set
Profile arm	1 pc
Bidirectional profile stylus	1 pc
Stage	1 pc
Vise	1 pc
Computer	1 pc
Software	1 set
Printer	1 pc
Installation tools	1 set

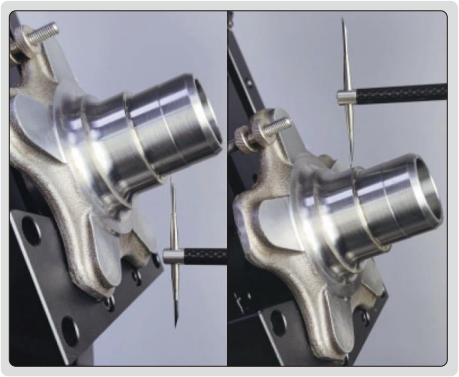
To be continued

Continued from previous page

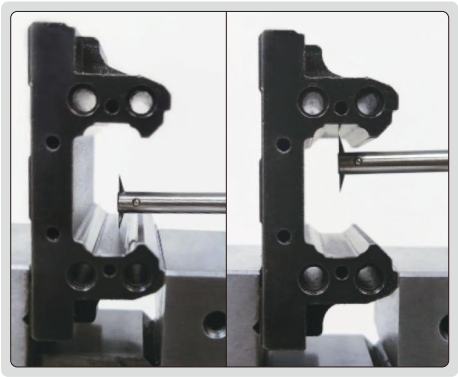
APPLICATION EXAMPLES



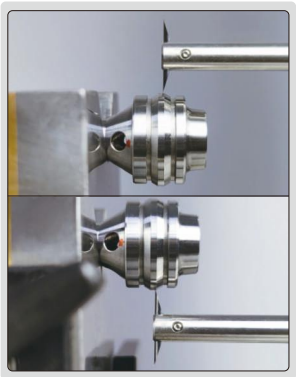
roller bearing



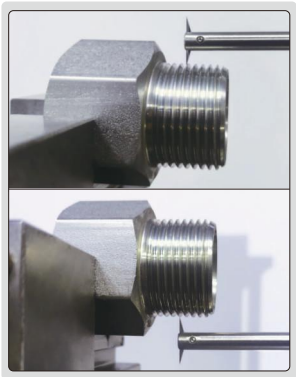
hub bearing



slider



valve spool

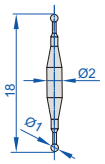


thread

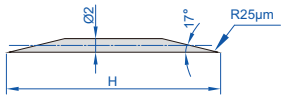
SPECIFICATION OF PROBES

Unit: mm

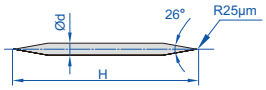
bidirectional spherical stylus
code **SPM-6000-R01 (optional)**



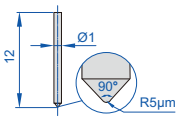
bidirectional chisel stylus
code **SPM-6000-T01** (H=16mm, included)
code **SPM-6000-T02** (H=24mm, **optional**)
code **SPM-6000-T03** (H=30mm, **optional**)



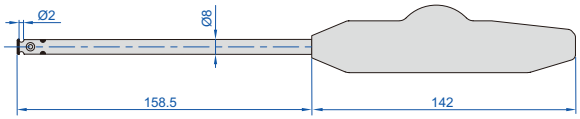
bidirectional cone stylus
code **SPM-6000-Z01** (H=12mm, Ød=2mm, **optional**)
code **SPM-6000-Z02** (H=24mm, Ød=2mm, **optional**)
code **SPM-6000-Z03** (H=10mm, Ød=1mm, **optional**)



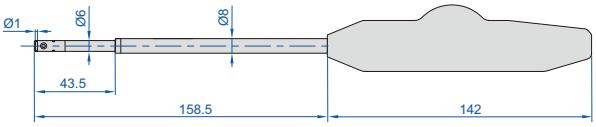
unidirectional roughness stylus
code **SPM-6000-S01** (**optional**)



profile arm,
code **SPM-6000-ARM1**
(included)



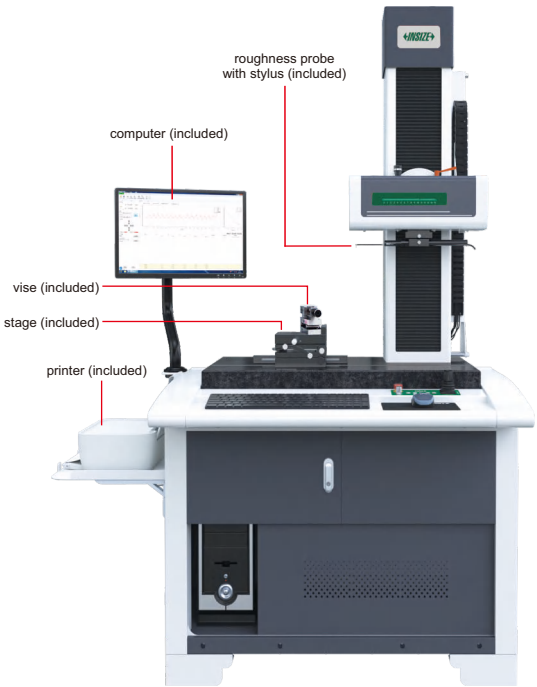
roughness arm,
code **SPM-6000-ARM2**
(**optional**)



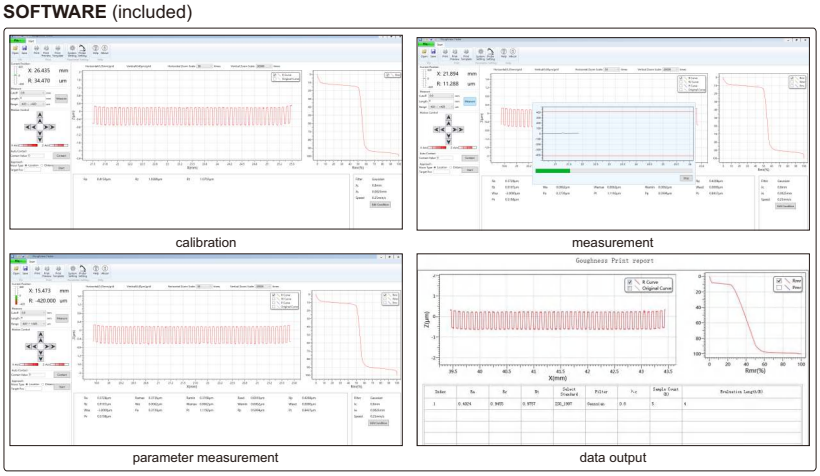
ROUGHNESS MEASURING MACHINE
CODE SPM-4000

VIDEO

- Skidless probe
- Hundreds of parameters can be evaluated, such as roughness profile, waviness profile, primary profile, etc.
- Software is included, for measurement and data output



SOFTWARE (included)


calibration
measurement
parameter measurement
data output

SPECIFICATION

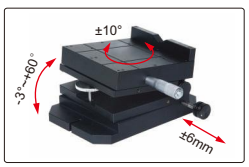
Roughness parameters	Ra, Ramax, Ramin, Rasd, Rp, Rpmax, Rpmin, Rpsd, Rv, Rvmax, Rvmin, Rvsd, Rz, Rzmax, Rzmin, Rzsd, R3z, Rc, Rcmax, Rcmin, Rcsd, Rt, Rq, Rqmax, Rqmin, Rqsd, Rsk, Rskmax, Rskmin, Rsksd, Rku, Rkumax, Rkumin, Rkusd, Rsm, Rsmmax, Rsmmin, Rsmsd, Rs ,RΔa, RΔamax , RΔamin, RΔasd, RΔq, RΔqmax, RΔqmin, RΔqsd, Rk, Rpk, Rvk, Mr1, Mr2, Rλa, Rλamax, Rλamin, Rλasd, Rλq, Rλqmax, Rλqmin, Rλqsd, Rδc, Rpc, Rmrr
Waviness parameters	Wa, Wamax, Wamin, Wasd, Wsa, Wca, Wa08, Wc, Wcmax, Wcmin, Wcsd, Wt, Wz, Wzmax, Wzmin, Wzsd, Wp, Wpmax, Wpmin, Wpsd, Wv, Wvmax, Wvmin, Wvsd, Wq, Wqmax, Wqmin, Wqsd, Wsm, Wsmmax, Wsmmin, Wsmsd,Wsk, Wskmax, Wskmin, Wsksd, Wku, Wkumax, Wkumin, Wkusd, WΔq, WΔqmax, WΔqmin, WΔqsd, Wδc, Wmr
Primary profile parameters	Pa, Pt, Pp, Pc, Pv, Pz, Pq, Psm, Psk, Pku, RzJ, Rpq, Rvq, Rmq, Pmr, PΔq, Avh, Hmax, Hmin, Area, Pδc, Tilta
Motif parameter	Ncrx, R, Rx, AR, Nr, Cpm, Sr, Sar, W, Wx, Aw, Wte, Nw, Sw, Saw
X axis measuring range	120mm
X axis resolution	0.1μm
X axis straightness	0.5μm/100mm
X axis traverse speed	(0.1~10)mm/s
Z axis measuring range	±420μm
Z axis resolution	1: 65536
Z axis linear accuracy	≤±(10nm+3.5%)
Z axis traverse speed	(0.5~20)mm/s
Z axis repeatability	1δ≤2nm
Radius/angle of stylus	5μm/90°
Cut off length	0.025/0.08/0.25/0.8/2.5/8mm
Number of cut-offs	2~7
Measuring unit	μm
Drive mode	motor
Travel of Z axis	420mm
Dimension (L×W×H)	1200×700×1780mm
Power supply	220V±10%, 50Hz
Net weight	320kg

STANDARD DELIVERY

Main unit	1 pc
Roughness probe (with stylus)	1 pc of each
Calibration block	1 pc
Stage	1 pc
Vise	1 pc
Computer	1 pc
Software	1 set
Printer	1 pc
Installation tools	1 set

calibration block (included)

vise (included)



stage (included)

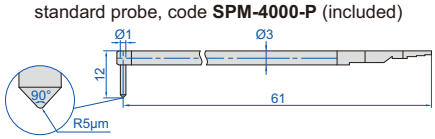
OPTIONAL ACCESSORY

Small roughness probe	refer to details

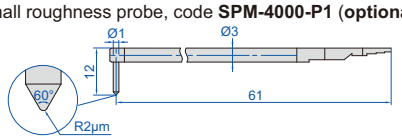
SPECIFICATION OF ROUGHNESS PROBE

Unit: mm

standard probe, code **SPM-4000-P** (included)



small roughness probe, code **SPM-4000-P1** (**optional**)



ROUGHNESS TESTER
CODE ISR-C002

- Roughness tester can be operated by mobile phones (only Android system) or computers
- Data can be sent to Excel by connecting to computers via bluetooth or SPC cable
- Support bluetooth printer
- 21 roughness parameters
- Display roughness value, profile and curve
- Memory of maximum 100 results
- Automatic power off

VIDEO

CAN BE OPERATED BY MOBILE PHONES OR COMPUTERS

BLUETOOTH

DATA OUTPUT

software flash disk (included)

probe cover (included)

put the small workpieces directly under the probe for measurement

adjustable stand (included)

bluetooth printer (**optional**)

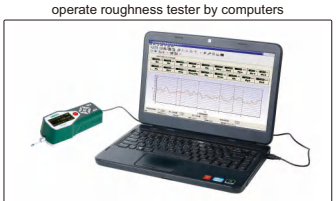
light duty test stand (**optional**)

the maximum workpiece height is 220mm

heavy duty test stand (**optional**)

the maximum workpiece height is 310mm

operate roughness tester by computers



connect to computers via USB cable (software is included), display roughness values, profile and curve

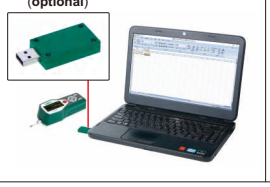
operate roughness tester by mobile phones

connect to mobile phones via bluetooth (only Android system), display roughness values, profile and curve

data can be sent to Excel by connecting to computer via bluetooth or SPC cable

via bluetooth

receiver (**optional**)



SPC cable (**optional**)

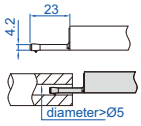
receiver (**optional**)

via SPC cable

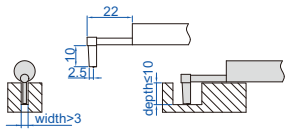
PROBE PARAMETERS

Unit: mm

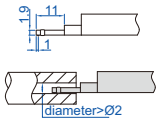
standard probe, 5μm/90° (included), code **ISR-C002-PROBE**



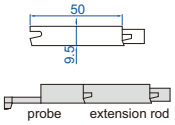
deep groove probe, 5μm/90° (**optional**), code **ISR-C002-DGP**



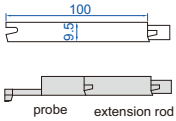
tiny hole probe, 5μm/90° (**optional**), code **ISR-C002-SBP**



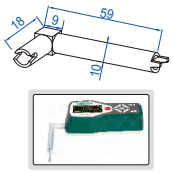
extension rod (**optional**), code **ISR-C002-ER**



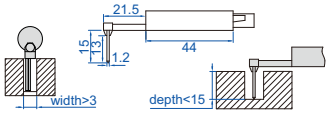
extension rod (**optional**), code **ISR-C002-ER100**



transverse rod (**optional**), code **ISR-C002-TR**



deep groove probe, 5μm/90° (**optional**), code **ISR-C002-DGP1**



need to be delivered with roughness tester **ISR-C002**, recommended for use above Ra0.1μm

SPECIFICATION

Parameters		Ra, Rz, Rq, Rv, Rp, RS, R3z, R3y, Rt, Rz (JIS), Rk, Rku, Rsm, Rpc, Rpk, Rvk, Rsk, Mr1, Mr2, Ry (JIS), Rmax
Range		320μm (-160μm~160μm)
Accuracy		±10%
Resolution (Ra)		0.001μm
Standard probe (ISR-C002-PROBE)	**type**	inductive
	stylus radius/angle	5μm/90°
	stylus material	diamond
Measuring force		4mN
Measuring unit		μm/μin
Cut off		0.25/0.8/2.5mm
Number of cut-off		1 to 5
Moving speed		0.5mm/s, 1mm/s
Memory		100 measurement results
Output		bluetooth and USB
Power supply		built-in rechargeable battery
Dimension (L×W×H)		141×55×40mm
Net weight		400g

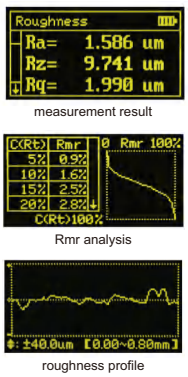
STANDARD DELIVERY

Main unit	1 pc
Standard probe	1 pc
Calibration block and support	1 pc of each
Adjustable stand	1 pc
Probe cover	1 pc
Software and USB cable	1 pc
AC/DC adapter	1 pc

OPTIONAL ACCESSORY

Tiny hole probe	**ISR-C002-SBP**
Deep groove probe	**ISR-C002-DGP**
Deep groove probe	**ISR-C002-DGP1**
Extension rod	**ISR-C002-ER**
Extension rod	**ISR-C002-ER100**
Transverse rod	**ISR-C002-TR**
Light duty test stand	**ISR-C002-STAND1**
Heavy duty test stand	**ISR-C002-STAND**
Bluetooth printer	**ISR-C002-PRINTER**
Receiver	**ISR-C300-RECEIVER**
SPC cable	**ISR-C300-SPC**

screen display



ROUGHNESS TESTER (SEPARABLE TYPE)
CODE ISR-C300

DATA OUTPUT | BLUETOOTH | TOUCH SCREEN | CAN BE OPERATED BY MOBILE PHONES OR COMPUTERS

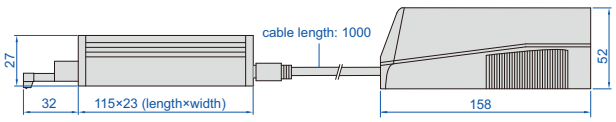
VIDEO

INSPECTION CERTIFICATE

POPULAR MODEL

- Roughness tester can be operated by mobile phones or computers
- Optional wireless or Bluetooth receivers can be used to output keyboard signals, connecting to a computer to send data to Excel
- Support bluetooth printer
- 36 roughness parameters
- Meet ISO, DIN, ANSI, JIS standards
- Display roughness values, profile and curve
- Memory of maximum 100 data and waveform
- Built-in lithium battery, working time more than 50 hours
- Touch screen
- Automatic power off

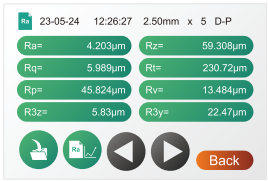
Unit: mm



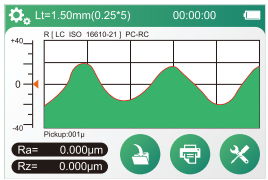
software flash disk (included)

bluetooth printer (**optional**)

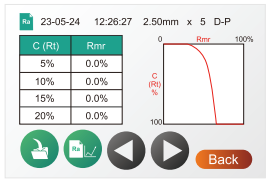
roughness tester screen display



measurement result



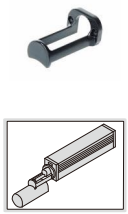
roughness profile



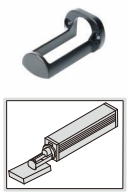
Rmr analysis

probe support

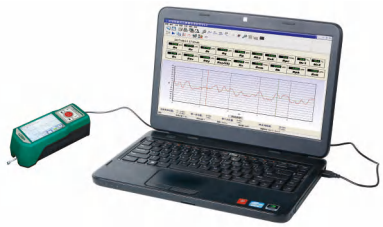
support for cylindrical surface (included)



support for flat surface (**optional**)



operate roughness tester by computers



connect to computers via USB cable (software is included), display roughness values, profile and curve

operate roughness tester by mobile phones

connect to mobile phones via bluetooth, display roughness values, profile and curve

can connect to a computer via Bluetooth or a SPC cable using an optional Bluetooth receiver (**ISR-C300-RECEIVER**) to send data to Excel

via bluetooth

receiver (**optional**)

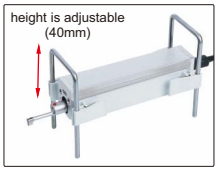
via SPC cable

SPC cable (**optional**)

receiver(**optional**)

adjustable stand (included)

height is adjustable (40mm)



magnetic stand adapter (included)

Ø8mm

can be installed on magnetic stands

probe and main unit can be combined together

height gauge adapter (**optional**)

9×9mm

can be installed on height gauges

NOTE: Please check whether the adapter can fit your height gauges. When using **INSIZE** height gauges, please use the dial test indicator holder of height gauges

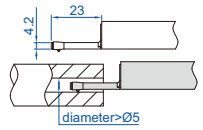
To be continued

Continued from previous page

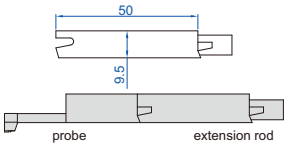
optional probes

Unit: mm

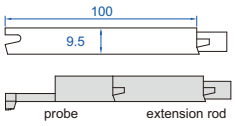
small hole probe, 5μm/90° (**optional**), code **ISR-C002-PROBE**



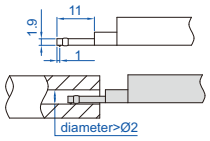
extension rod (**optional**), code **ISR-C002-ER**



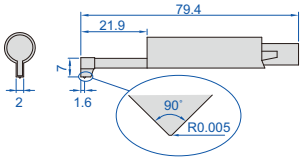
extension rod (**optional**), code **ISR-C002-ER100**



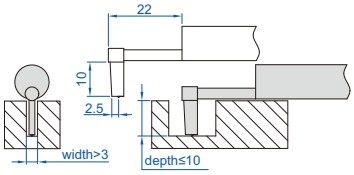
tiny hole probe, 5μm/90° (**optional**), code **ISR-C002-SBP**



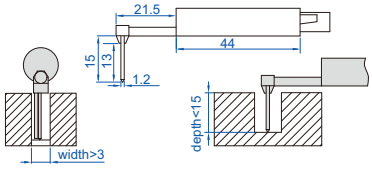
standard probe, 5μm/90°, (included) code **ISR-C300-PROBE**



deep groove probe, 5μm/90° (**optional**), code **ISR-C002-DGP**

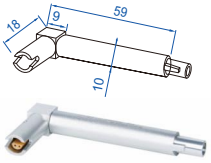


deep groove probe, 5μm/90° (**optional**), code **ISR-C002-DGP1**



need to be delivered with roughness tester **ISR-C300**,recommended for use above Ra 0.1μm

transverse rod (**optional**), code **ISR-C002-TR**



recommended for use with height gauges or stands

SPECIFICATION

Measuring force		4mN
Stylus radius/angle		5μm/90°
Parameters		Ra, Rz, Rq, Rv, Rp, Rs, R3z, R3y, Rt, Rc, Rz(JIS), Rk, Rku, Rsm, Rpc, Rpk, Rvk, Rsk, Mr1, Mr2, Ry, Rmax, R5p, R5v, R10z, Rpt, Rvt, Ry5, tp1, tp2, Rmrc1, Rmrc2, Rpkx, Rvkx, Ramax, Rzmax
Probe type		inductive
Stylus material		diamond
Range	**X axis**	17.5mm
	Z axis	400μm (-200μm~200μm)
Accuracy		±10%
Resolution (Ra)		0.001μm
Measuring unit		μm/μin
Cut off		0.25/0.8/2.5mm
Number of cut offs		1~5
Moving speed		0.135mm/s, 0.5mm/s, 1mm/s
Memory		100 measurement results
Output		USB and bluetooth*
Power		built-in rechargeable battery
Dimension (L×W×H)		158×64×52mm
Net weight		400g

*Bluetooth optional receiver needed: code **ISR-C300-RECEIVER**

STANDARD DELIVERY

Main unit	1 pc
Standard probe	1 pc
Calibration block and support	1 pc of each
Connecting cable (long and short)	1 pc of each
Magnetic stand adapter	1 pc
Adjustable stand	1 pc
Support for flat surface	1 pc
Touch pen	1 pc
Software and USB cable	1 pc
AC/DC adapter	1 pc

OPTIONAL ACCESSORY

Standard probe	**ISR-C300-PROBE**
Standard probe	**ISR-C301-PROBE**
Small hole probe	**ISR-C002-PROBE**
Tiny hole probe	**ISR-C002-SBP**
Extension rod	**ISR-C002-ER**
Extension rod	**ISR-C002-ER100**
Transverse rod	**ISR-C002-TR**
Deep groove probe	**ISR-C002-DGP**
Deep groove probe	**ISR-C002-DGP1**
Bluetooth printer	**ISR-C002-PRINTER**
Height gauge adapter	**ISR-C300-LB1**
Bluetooth receiver	**ISR-C300-RECEIVER**
Receiver	**7315-2/3/6/7/8/9**
SPC cable	**ISR-C300-SPC**
Support for cylindrical surface	**ISR-C300-COVER2**
Light duty test stand	**ISR-C002-STAND1**
Heavy duty test stand	**ISR-C002-STAND**

light duty test stand (**optional**)

maximum workpiece height is 220mm

heavy duty test stand (**optional**)

maximum workpiece height is 310mm

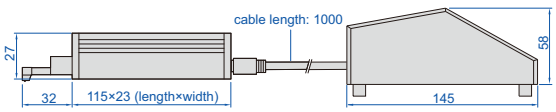
ROUGHNESS TESTER
CODE ISR-T120

DATA OUTPUT | BLUETOOTH | TOUCH SCREEN | CAN BE OPERATED BY MOBILE PHONES OR COMPUTERS

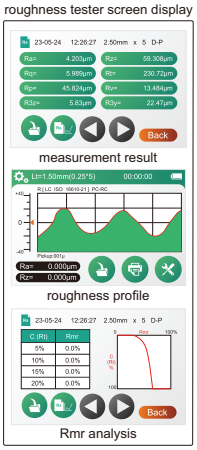
VIDEO

- Roughness tester can be operated by mobile phones or computers
- Data can be sent to Excel by connecting to computers via bluetooth or SPC cable
- Built-in printer can print measurement results and graphics
- 36 roughness parameters
- Meet ISO, DIN, ANSI, JIS standards
- Display roughness values, profile and curve
- Memory of maximum 100 data and waveform
- Built-in lithium battery, working time more than 50 hours
- Automatic power off

Unit: mm



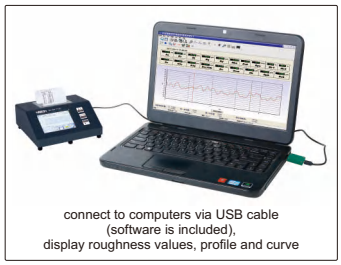
roughness tester screen display



operate roughness tester by mobile phones

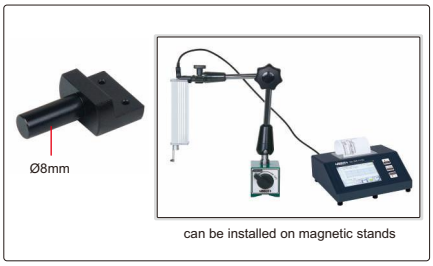
connect to mobile phones via bluetooth (only Android system), display roughness values, profile and curve

operate roughness tester by computers



connect to computers via USB cable (software is included), display roughness values, profile and curve

magnetic stand adapter (included)

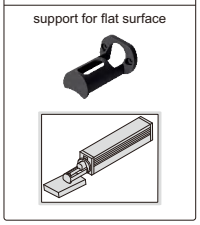


can be installed on magnetic stands

probe support (**optional**)

support for cylindrical surface

support for flat surface



data can be sent to Excel by connecting to computer via bluetooth or SPC cable

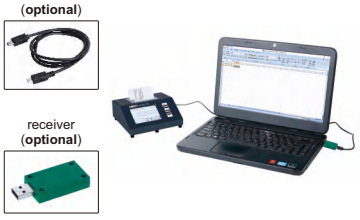
via bluetooth

receiver (**optional**)

via SPC cable

SPC cable (**optional**)

receiver (**optional**)



height gauge adapter (**optional**)

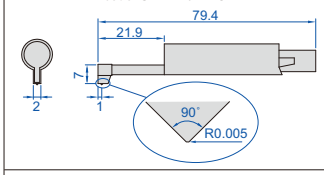
can be installed on height gauges

NOTE: Please check whether the adapter can fit your height gauges. When using **INSIZE** height gauges, please use the dial test indicator holder of height gauges

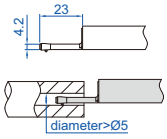
PROBE PARAMETERS

Unit: mm

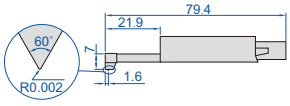
standard probe, 5μm/90° (included)
code **ISR-T120-PROBE**



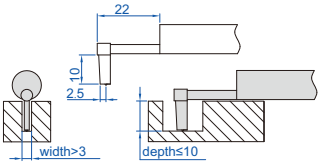
small hole probe, 5μm/90° (**optional**),
code **ISR-C002-PROBE**



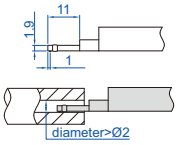
2μm/60° probe (optional),
code **ISR-C301-PROBE** (when Ra<0.5μm, the accuracy with this probe is better)



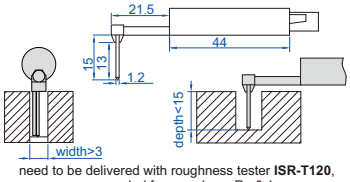
deep groove probe, 5μm/90° (**optional**),
code **ISR-C002-DGP**



tiny hole probe, 5μm/90° (**optional**),
code **ISR-C002-SBP**

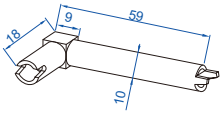


deep groove probe, 5μm/90° (**optional**),
code **ISR-C002-DGP1**



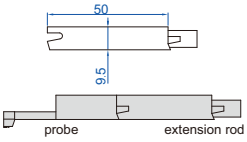
need to be delivered with roughness tester **ISR-T120**, recommended for use above Ra 0.1μm

transverse rod (**optional**),
code **ISR-C002-TR**

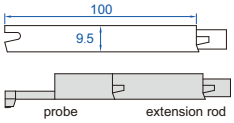


recommended for use with height calipers or stands

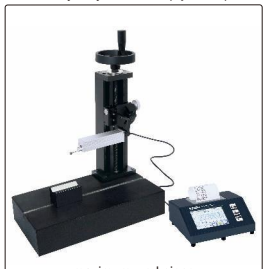
extension rod (**optional**),
code **ISR-C002-ER**



extension rod (**optional**),
code **ISR-C002-ER100**



heavy duty test stand (**optional**)



maximum workpiece height is 310mm

light duty test stand (**optional**)

maximum workpiece height is 220mm

To be continued

Continued from pevious page

SPECIFICATION

Parameters		Ra, Rz, Rq, Rv, Rp, Rs, R3z, R3y, Rt, Rc, Rz (JIS), Rk, Rku, Rsm, Rpc, Rpk, Rvk, Rsk, Mr1, Mr2, Ry, Rmax
Range	X axis	17.5mm
	Z axis	640μm (-320μm~320μm)
Accuracy		±10%
Resolution (Ra)		0.001μm
Probe	type	inductive
	stylus radius/angle	5μm/90°
	stylus material	diamond
Measuring force		4mN
Measuring unit		μm/μin
Cut off		0.25/0.8/2.5mm
Number of cut-offs		1~5
Traverse speed		0.135mm/s, 0.5mm/s, 1mm/s
Memory		100 measurement results
Output		bluetooth and USB
Power		built-in rechargeable battery
Dimension (L×W×H)		155×145×58mm
Net weight		1000g

STANDARD DELIVERY

Main unit	1 pc
Standard probe	1 pc
Calibration block and support	1 pc of each
Magnetic stand adapter	1 pc
Adjustable stand	1 pc
Touch pen	1 pc
Software and USB cable	1 pc
AC/DC adapter	1 pc

OPTIONAL ACCESSORY

Extension rod	ISR-C002-ER
Extension rod	ISR-C002-ER100
Transverse rod	ISR-C002-TR
Small hole probe	ISR-C002-PROBE
Tiny hole probe	ISR-C002-SBP
2μm/60° probe	ISR-C301-PROBE
Deep groove probe	ISR-C002-DGP
Deep groove probe	ISR-C002-DGP1
Height gauge adapter	ISR-C300-LB1
Receiver	ISR-C300-RECEIVER
SPC cable	ISR-C300-SPC
Support for flat surface	ISR-C300-COVER1
Support for cylindrical surface	ISR-C300-COVER2
Light duty test stand	ISR-C002-STAND1
Heavy duty test stand	ISR-C002-STAND

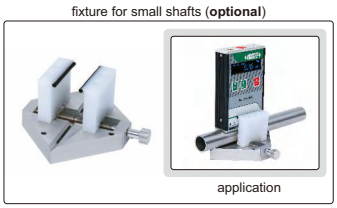
ROUGHNESS TESTER (BASIC TYPE)
CODE ISR-C003

VIDEO

ATTENTION: THIS ROUGHNESS TESTER IS NOT SUITABLE FOR ROUGH TURNING, MILLING AND PLANING WORKPIECES

- Unit: μm, μin
- Automatic power off

fixture for small shafts (**optional**)



application

calibration block (included)

SPECIFICATION

Parameters		Ra, Rz, Rq, Rt
Range		Ra, Rq: 0.05~15μm Rz, Rt: 0.1~50μm
Accuracy		±10%
Resolution (Ra)		0.01μm
Probe	type	piezoelectric
	stylus radius/angle	10μm/90°
	stylus material	diamond
Measuring unit		μm/μin
Cut off		0.25/0.8/2.5mm
Evaluation length		1.25mm for cut off 0.25mm 4mm for cut off 0.8mm 5mm for cut off 2.5mm
Moving speed		0.75mm/s
Power		built-in rechargeable battery
Dimension (L×W×H)		106×70×24mm
Net weight		200g

STANDARD DELIVERY

Main unit	1 pc
Calibration block	1 pc
AC/DC adapter	1 pc

OPTIONAL ACCESSORY

Fixture for small shafts	ISR-C003-FIXTURE

SURFACE ROUGHNESS SPECIMEN SET
CODE ISR-CS2

ATTENTION: PLEASE APPLY ANTI-RUST OIL AFTER USE

- For checking, identifying and specifying he roughness by symbol
- Made of carbon steel

Maching method	Roughness (Ra)*	Roughness (Rz) *	Quantity
Horizontal milling	0.4, 0.8, 1.6, 3.2, 6.3, 12.5μm	1.6, 3.2, 6.3, 12.5, 25, 50μm	6 pcs
Vertical milling	0.4, 0.8, 1.6, 3.2, 6.3, 12.5μm	1.6, 3.2, 6.3, 12.5, 25, 50μm	6 pcs
Turning	0.4, 0.8, 1.6, 3.2, 6.3, 12.5μm	1.6, 3.2, 6.3, 12.5, 25, 50μm	6 pcs
Plain grinding	0.05, 0.1, 0.2, 0.4, 0.8, 1.6μm	0.2, 0.4, 0.8, 1.6, 3.2, 6.3μm	6 pcs
Flat lapping	0.05, 0.1μm	0.2, 0.4μm	2 pcs
External grinding	0.2, 0.4, 0.8, 1.6μm	0.8, 1.6, 3.2, 6.3μm	4 pcs

*The actual value is the value to be calibrated

SURFACE ROUGHNESS SPECIMEN SET
CODE ISR-CS130-W

INSIZE PLUS

- For checking, identifying and specifying the roughness by symbol
- Rust-proof, made of pure Nickel

Machining method	Roughness (Ra)*	Roughness (Rz)*	Quantity
Flat lapping	0.05, 0.1, 0.2μm	0.55, 1, 1.6μm	3 pcs
	2, 4, 8μin		
Reaming	0.4, 0.8, 1.6μm	3, 6, 10μm	3 pcs
	16, 32, 63μin		
Plain grinding	0.05, 0.1, 0.2, 0.4, 0.8, 1.6μm	0.55, 1, 1.6, 3, 6, 10μm	6 pcs
	2, 4, 8, 16, 32, 63μin		
Horizontal milling	0.4, 0.8, 1.6, 3.2, 6.3, 12.5μm	2.5, 4, 8, 16, 32, 50μm	6 pcs
	16, 32, 63, 125, 250, 500μin		
Vertical milling	0.4, 0.8, 1.6, 3.2, 6.3, 12.5μm	2.5, 4, 8, 16, 32, 50μm	6 pcs
	16, 32, 63, 125, 250, 500μin		
Turning	0.4, 0.8, 1.6, 3.2, 6.3, 12.5μm	2.5, 4, 8, 16, 32, 50μm	6 pcs
	16, 32, 63, 125, 250, 500μin		

* The actual value is the value to be calibrated

SURFACE ROUGHNESS REFERENCE SPECIMENS

MEASURING ACCURACY OF ROUGHNESS TESTERS CAN BE IMPROVED, IF THE CALIBRATION IS MADE ON A REFERENCE SPECIMEN WITH THE ROUGHNESS VALUE CLOSE TO THE WORKPIECE TO BE MEASURED

- To calibrate roughness testers
- Made of glass

Code	Shape*	Roughness (Ra)	Deviation**	Uniformity
ISR-LS603S	simulated sine wave	0.4μm	±10%	3%
ISR-LS604S	simulated sine wave	0.8μm	±10%	3%
ISR-LS605S	simulated sine wave	1.6μm	±10%	3%
ISR-LS606S	simulated sine wave	3.2μm	±10%	2%

*Surface roughness reference specimens with simulated sine wave can be labeled with Rz parameter (customized)
**Deviation between the actual value when supply and the nominal value

ISR-LS603

WORKSHOP COORDINATE MEASURING MACHINE
CODE CMM-WM342B

VIDEO

- Measurement efficiency is three times of ordinary CMM
- Built-in temperature sensor, real-time temperature compensation
- No need to wait for a constant temperature to use
- Ready to use when connected to the power supply, no compressed air required
- Can be connected with automated production lines, data management systems, intelligent control systems, etc.
- Easy to move, small footprint

CMM-WM342B

SPECIFICATION

Range		300×400×200mm
Probe system	head	PH10T
	body	TP20
Accuracy	MPEE	±(2.7+L/200)μm
	MPEP	2.8μm
Max. load		50kg
Overall dimension (L×W×H)		1130×1010×1990mm
Net weight		800kg
Movement speed		860mm/s
Moving acceleration		5000mm/s²

To be continued

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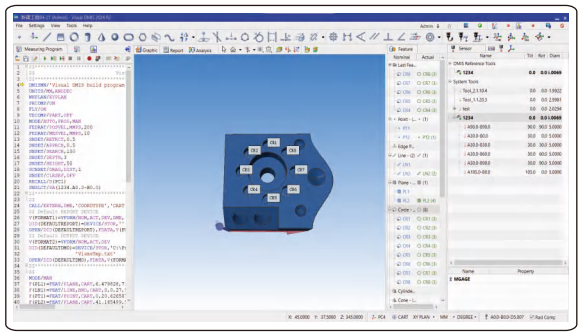
workshop specific software (inclued)



measurement software (inclued)

STANDARD DELIVERY

Main unit		1 pc
Probe system	probr head	1 pc
	probe body	1 pc
	styli	1 set
Control system		1 set
Calibration sphere		1 pc
Universal sphere seat		1 pc
Computer		1 pc
Software		1 set
Temperature sensor		1 set
Automation module		1 set

OPTIONAL SOFTWARE MODULE

Offline module	CMM-WM-OEM
Gear module	CMM-WM-GEM
Worm module	CMM-WM-WMM
Pipeline module	CMM-WM-PEM
Blade module	CMM-WM-BEM
SPC statistical analysis	CMM-WM-SPC
Network programming module	CMM-WM-NPM
Gear and worm kit module	CMM-WM-GSM

PH10T SPECIFICATION

Angular movement with horizontal axis	0°~105° in 7.5 steps
Angular movement with vertical axis	±180° in 7.5 steps
Number of positions	720
Steering mode	motorized
Max. output torque	0.45N.m
Max. extension length	300mm
Net weight	649g

OPERATION ENVIRONMENT

Working environment	temperature	10℃~40℃; <1℃/h, <4℃/24h
	humidity	30%~70%
Calibration environment	temperature	20℃±2℃; <0.5℃/h, <1℃/24h
	humidity	30%~70%
Power supply		220V±5%, 50HZ
Max. power		1000W
Shock		no source within 200 metres

STYLI SET INCLUDED IN TP20

Type	Material	Ball diameter	Length	Stem diameter	Effective working length	Quantity
styli	ruby ball/ stainless steel stem	SØ2.5mm	20mm	Ø1.4mm	14mm	4 pcs
		SØ4mm		Ø1.5mm	20mm	1 pc
		SØ3mm	10mm	Ø1.5mm	7.5mm	1 pc

Type	Material	Diameter	Length	Quantity
extension	stainless steel	Ø3mm	20mm	1 pc
		Ø3mm	30mm	1 pc
center base		Ø7mm	7.5mm	1 pc

COORDINATE MEASURING MACHINES (SMALL RANGE)

VIDEO

FEATURES

- Classic bridge structure, integrated workbench
- High precision air bearing
- Unique Z-axis anti torque design to reduce rotation error

RENISHAW SYSTEMS

- Precision grating system, including grating and data acquisition device
- UCC control system, including control box and manual operator
- Probe system, including probe head, probe body and styli

INSIZE DMIS CNC CAD+SOFTWARE

- The software is designed and developed based on the DMIS standard, with excellent compatibility and versatility
- Geometric element measurement, evaluation of shape and position
- Bidirectional data transmission with mainstream CAD systems, complete graphical display

CMM-LM8106C

STANDARD ACCURACY (LM SERIES)

Code	Range (X×Y×Z)	Probe system		Accuracy		Max. load	Overall dimension (mm)	Net weight (kg)
		Head	Body	MPEE (μm)	MPEP			
CMM-LM564A	500×600×400mm	MH20i	TP20	±(2.3+L/250)	2.4μm	500kg	1135×1420×2350	900
CMM-LM564B		PH10T						
CMM-LM686A	600×800×600mm	MH20i	TP20	±(2.6+L/250)	2.7μm	800kg	1420×1740×2760	1300
CMM-LM686B		PH10T						
CMM-LM686C		PH10M	SP25M	±(2.1+L/250)	2.1μm			
CMM-LM8106A	800×1000×600mm	MH20i	TP20	±(2.7+L/250)	2.8μm	1000kg	1620×1940×2760	1700
CMM-LM8106B		PH10T						
CMM-LM8106C		PH10M	SP25M	±(2.2+L/250)	2.2μm			
CMM-LM8126A	800×1200×600mm	MH20i	TP20	±(2.7+L/250)	2.8μm		1620×2140×2760	1900
CMM-LM8126B		PH10T						
CMM-LM8126C		PH10M	SP25M	±(2.2+L/250)	2.2μm			
CMM-LM8156A	800×1500×600mm	MH20i	TP20	±(2.7+L/250)	2.8μm		1620×2440×2760	2200
CMM-LM8156B		PH10T						
CMM-LM8156C		PH10M	SP25M	±(2.2+L/250)	2.2μm			

HIGH ACCURACY (LE SERIES)

Code	Range (X×Y×Z)	Probe system		Accuracy		Max. load	Overall dimension (mm)	Net weight (kg)
		Head	Body	MPEE (μm)	MPEP			
CMM-LE564A	500×600×400mm	MH20i	TP20	±(1.9+L/330)	2.1μm	500kg	1135×1420×2350	900
CMM-LE564B		PH10T						
CMM-LE686A	600×800×600mm	MH20i	TP20	±(2.0+L/330)	2.2μm	800kg	1420×1740×2760	1300
CMM-LE686B		PH10T						
CMM-LE686C		PH10M	SP25M	±(1.6+L/330)	1.6μm			
CMM-LE8106A	800×1000×600mm	MH20i	TP20	±(2.1+L/330)	2.3μm	1000kg	1620×1940×2760	1700
CMM-LE8106B		PH10T						
CMM-LE8106C		PH10M	SP25M	±(1.7+L/330)	1.7μm			
CMM-LE8126A	800×1200×600mm	MH20i	TP20	±(2.1+L/330)	2.3μm		1620×2140×2760	1900
CMM-LE8126B		PH10T						
CMM-LE8126C		PH10M	SP25M	±(1.7+L/330)	1.7μm			
CMM-LE8156A	800×1500×600mm	MH20i	TP20	±(2.1+L/330)	2.3μm		1620×2440×2760	2200
CMM-LE8156B		PH10T						
CMM-LE8156C		PH10M	SP25M	±(1.7+L/330)	1.7μm			

To be continued

Continued from previous page

STANDARD DELIVERY

Main unit		1 pc
Probe system	probe head	1 pc
	probe body	1 pc
	styli	1 set
Control system		1 set
Calibration sphere		1 pc
Universal sphere seat		1 pc
Computer		1 pc
Printer		1 pc
Software		1 set
Table and chair		1 set

OPERATION ENVIRONMENT

Air pressure	0.6-0.8MPa
Air supply	200L/min
Temperature	20°C±2°C; <0.5°C/h, <1°C/24h
Humidity	30%~70%
Max. power	1000W
Power supply	220V±5%, 50Hz

MH20i SPECIFICATION

Angular movement with horizontal axis	0°~90° in 15 steps
Angular movement with vertical axis	±180° in 15 steps
Number of positions	168
Steering mode	manual
Max. extension length	75mm
Net weight	210g

PH10T AND PH10M SPECIFICATION

Angular movement with horizontal axis	0°~105° in 7.5 steps
Angular movement with vertical axis	±180° in 7.5 steps
Number of positions	720
Steering mode	motorized
Max. output torque	0.45N.m
Max. extension length	300mm
Net weight	649g

OPTIONAL SOFTWARE MODULE

Offline module	CMM-WM-OEM
Gear module	CMM-WM-GEM
Worm module	CMM-WM-WMM
Pipeline module	CMM-WM-PEM
Blade module	CMM-WM-BEM
SPC statistical analysis	CMM-WM-SPC
Network statistical analysis	CMM-WM-NPM
Gear and worm kit module	CMM-WM-GSM
Automation module	CMM-WM-CNC

STYLI SET INCLUDED IN TP20

Type	Material	Ball diameter	Length	Stem diameter	Effective working length	Quantity
Styli	ruby ball/ stainless steel stem	SØ2.5mm	20mm	Ø1.4mm	14mm	4 pcs
		SØ4mm		Ø1.5mm	20mm	1 pc
		SØ3mm	10mm		7.5mm	1 pc

Type	Material	Diameter	Length	Quantity
Extension	stainless steel	Ø3mm	20mm	1 pc
			30mm	1 pc
Center base		7mm	7.5mm	1 pc

STYLI SET INCLUDED IN SP25M

Type	Material	Ball diameter	Length	Stem diameter	Effective working length	Quantity
Styli	ruby ball/ stainless steel stem	SØ1.5mm	21mm	Ø1mm	14mm	1 pc
		SØ2mm		Ø1.4mm	8mm	1 pc
		SØ3mm		Ø1.5mm	12mm	4 pcs
		SØ4mm	31mm	Ø2.5mm	27mm	1 pc
	ruby ball/ carbon fiber stem	SØ5mm	50mm	Ø3mm	42.5mm	1 pc
		SØ6mm	75mm	Ø4mm	75mm	1 pc

Type	Material	Diameter	Length	Quantity
Extension	stainless steel	Ø5mm	10mm	1 pc
		Ø4mm	20mm	1 pc
Center base		10mm	13mm	1 pc

MEASURING ARMS

VIDEO

- In accordance with ISO 10360-12
- Internal balance
- Dual high performance batteries
- Equivalent-arm design
- High-speed WiFi performance
- Aerospace grade carbon-fiber material
- Automatic power off
- U-shaped anti-collision design of the base

CMM-CM30

STANDARD PRECISION, BE SERIES, 6-AXIS (mm)

Code	Measuring range	Maximum permissible error				
		SPAT	EUNI	PSIZE	PFORM	LDIA
CMM-BE15	1500	0.028	0.036	0.015	0.029	0.038
CMM-BE20	2000	0.030	0.040	0.018	0.035	0.041
CMM-BE25	2500	0.035	0.045	0.020	0.038	0.050
CMM-BE30	3000	0.055	0.065	0.028	0.045	0.080
CMM-BE35	3500	0.075	0.080	0.035	0.058	0.098
CMM-BE40	4000	0.090	0.100	0.044	0.068	0.116
CMM-BE45	4500	0.112	0.120	0.048	0.086	0.128

HIGH PRECISION, CM SERIES, 6-AXIS (mm)

Code	Measuring range	Maximum permissible error				
		SPAT	EUNI	PSIZE	PFORM	LDIA
CMM-CM15	1500	0.018	0.025	0.009	0.016	0.026
CMM-CM20	2000	0.020	0.028	0.010	0.018	0.032
CMM-CM25	2500	0.023	0.030	0.012	0.022	0.038
CMM-CM30	3000	0.034	0.042	0.016	0.032	0.052
CMM-CM35	3500	0.043	0.056	0.020	0.038	0.066
CMM-CM40	4000	0.052	0.066	0.024	0.044	0.083
CMM-CM45	4500	0.061	0.089	0.038	0.078	0.108

HIGH PRECISION, CM SERIES, 7-AXIS (mm)

Code	Measuring range	Maximum permissible error				
		SPAT	EUNI	PSIZE	PFORM	LDIA
CMM-CM20S	2000	0.022	0.030	0.012	0.022	0.040
CMM-CM25S	2500	0.027	0.032	0.013	0.025	0.048
CMM-CM30S	3000	0.042	0.053	0.020	0.035	0.078
CMM-CM35S	3500	0.055	0.066	0.024	0.043	0.092
CMM-CM40S	4000	0.065	0.082	0.029	0.048	0.102
CMM-CM45S	4500	0.073	0.099	0.043	0.082	0.132

ULTRA HIGH PRECISE, HP SERIES, 6-AXIS (mm)

Code	Measuring range	Maximum permissible error				
		SPAT	EUNI	PSIZE	PFORM	LDIA
CMM-HP15	1500	0.012	0.022	0.007	0.012	0.024
CMM-HP20	2000	0.016	0.024	0.008	0.015	0.030
CMM-HP25	2500	0.018	0.026	0.009	0.018	0.032
CMM-HP30	3000	0.026	0.038	0.012	0.025	0.045
CMM-HP35	3500	0.036	0.052	0.016	0.034	0.060
CMM-HP40	4000	0.045	0.063	0.020	0.038	0.077
CMM-HP45	4500	0.055	0.080	0.028	0.050	0.101

ULTRA HIGH PRECISE, HP SERIES, 7-AXIS (mm)

Code	Measuring range	Maximum permissible error				
		SPAT	EUNI	PSIZE	PFORM	LDIA
CMM-HP20S	2000	0.018	0.026	0.010	0.019	0.038
CMM-HP25S	2500	0.020	0.028	0.011	0.022	0.042
CMM-HP30S	3000	0.032	0.048	0.016	0.032	0.072
CMM-HP35S	3500	0.045	0.061	0.020	0.039	0.088
CMM-HP40S	4000	0.055	0.076	0.026	0.044	0.098
CMM-HP45S	4500	0.065	0.095	0.036	0.065	0.122

To be continued

Continued from previous page

- SPAT — Single-point articulation test
- EUNI — Distance measurement error between two points
- PFORM — Sphere form measurement error
- PSIZE — Sphere size measurement error
- LDIA — Sphere diameter obtained from performing the articulated location test (diameter of the spherical zone containing the centers of a sphere measured from multiple orientations)

SPECIFICATION

Temperature rate	3°C/5min
Battery life	5h for one battery; 10h for two batteries
Output	USB, WIFI
Operation temperature	5°C~45°C
Operation humidity	0~95%, non-condensing
Power supply	100~240VAC, 50/60Hz
Net weight	8.8kg~10.6kg

STANDARD DELIVERY

Main unit	1 pc
3mm zircon ball probe	1 pc
6mm zircon ball probe	1 pc
Calibration cone	1 pc
Lithium batteries	2 pcs
USB cable	1 pc
Power adapter	1 pc
Dust cover	1 pc

LASER LINE PROBE SPECIFICATION

Code	CMM-CEM-SD	CMM-CEM-HD
Accuracy	±28μm (2σ)	±15μm (2σ)
Working distance	115mm	
Effective scan width	near field 80mm, far field 150mm	
Points per line	maximum 4000 points per line	
Scan rate	1200000 points per second	
Laser	class 2	
Net weight	536g	

SYSTEM ACCURACY WITH LASER LINE PROBE

Code	CMM-CEM-SD	CMM-CEM-HD
CMM-CM20S	0.050mm	0.040mm
CMM-CM25S	0.055mm	0.045mm
CMM-CM30S	0.062mm	0.052mm
CMM-CM35S	0.076mm	0.065mm
CMM-CM40S	0.090mm	0.081mm
CMM-CM45S	0.139mm	0.131mm
CMM-HP20S	0.043mm	0.038mm
CMM-HP25S	0.048mm	0.042mm
CMM-HP30S	0.055mm	0.047mm
CMM-HP35S	0.068mm	0.060mm
CMM-HP40S	0.080mm	0.074mm
CMM-HP45S	0.125mm	0.120mm

3mm zircon ball probe (included)

6mm zircon ball probe (included)

calibration cone (included)

OPTIONAL ACCESSORY

DELL laptop	CMM-CEM-PCE
Polyworks software	CMM-CEM-PW
Adjustable tripod	CMM-CEM-FAT
Electric vacuum base	CMM-CEM-EVCP
Magnetic base	CMM-CEM-IMM
Magnetic cones	CMM-CEM-MC
Magnetic spheres	CMM-CEM-MS
Point probe	CMM-CEM-PP
2mm ruby ball probe	CMM-CEM-RP2
5mm zircon ball probe	CMM-CEM-ZP5
10mm zircon ball probe	CMM-CEM-ZP10
3" straight probe extension	CMM-CEM-SPE3
4" straight probe extension	CMM-CEM-SPE4
60° probe adapter	CMM-CEM-DP60
90° probe adapter	CMM-CEM-DP90
3mm extended ball probe	CMM-CEM-EPB3
6mm extended ball probe	CMM-CEM-EPB6
Probe adapter	CMM-CEM-PA
High accuracy laser line probe	CMM-CEM-HD*
Standard accuracy laser line probe	CMM-CEM-SD*

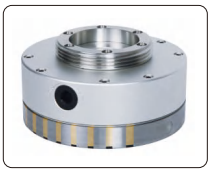
*Laser line probes are suitable for 7-axis measuring arms only

electric vacuum base (**optional**)

laser line probe (**optional**)

DELL laptop (**optional**)

adjustable tripod (**optional**)

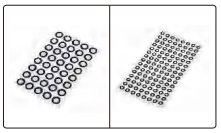

magnetic base (**optional**)

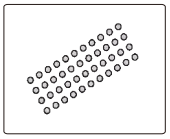
HANDHELD 3D SCANNER
CODE LSM-L340

VIDEO

calibration plate (included)

magnetic target ball (**optional**)


Ø3mm and Ø6mm marks (included)


magnetic target (**optional**)

photogrammetric rulers (**optional**)

- Three scanning modes to suit different situations
- AI algorithm module, greatly improve the scanning effect
- Highly efficient scanning with ultra-fast measuring speeds
- Metrology-grade measuring accuracy
- Optional photogrammetry function

SPECIFICATION

Scanning mode	hige-speed scanning	26 crossed blue laser lines
	precision scanning	7 parallel blue laser lines
	deep hole scanning	1 blue laser line
Maximum scanning speed		5400000 measurements/s
Volume accuracy		0.015mm+0.035mm/m (standard configuration) 0.015mm+0.025mm/m (required optional photogrammetric rulers)
Laser class		CLASS II (eye-safe)
Maximum resolution		0.01mm
Depth of field		550mm
Reference distance		300mm (high-speed scanning, deep hole scanning), 200mm (precision scanning)
Maximum scanning field		650mm×550mm
Output format		stl, ply, txt, asc
Operating temperature		-10°C~40°C
Interface		USB 3.0
Power supply		100~240V, 50/60Hz
Dimension (L×W×H)		335×140×70mm

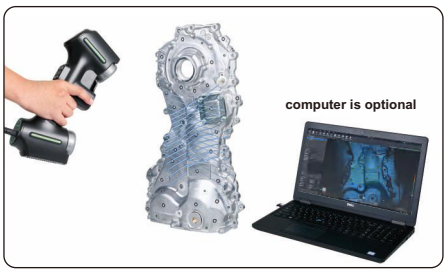
STANDARD DELIVERY

Main unit	1 pc
Scanning software	1 pc
Ø3mm mark	1000 pcs
Ø6mm mark	4000 pcs
Calibration plate	1 pc

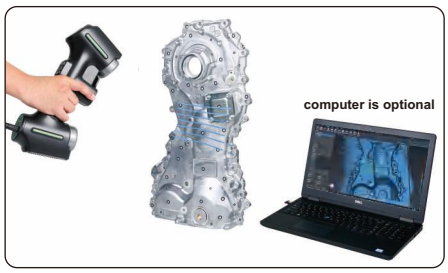
OPTIONAL ACCESSORY

3D measuring software	CMM-CEM-PI
Photogrammetric rulers	LSM-L340-RULER
Ø3mm mark (5000 pcs)	LSM-L-RM3
Ø6mm mark (5000 pcs)	LSM-L-RM6
Ø3mm magnetic target (500 pcs)	LSM-L-MRM3
Ø6mm magnetic target (500 pcs)	LSM-L-MRM6
Ø6mm magnetic target ball (10 pcs)	LSM-L-MRB6
Ø12mm magnetic target ball (5 pcs)	LSM-L-MRB12
Computer	customized according to measuring requirements

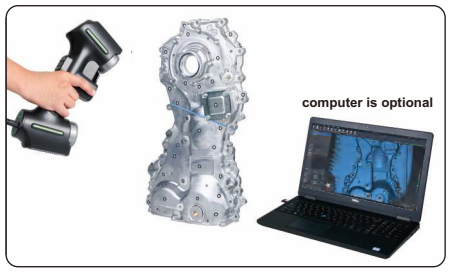
APPLICATION



high-speed scanning: 26 cross blue laser lines



precision scanning: 7 parallel blue laser lines



deep hole scanning: 1 blue laser line

SCANNING SOFTWARE (INCLUDED)

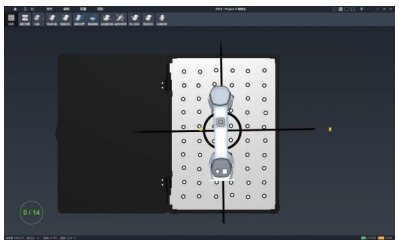
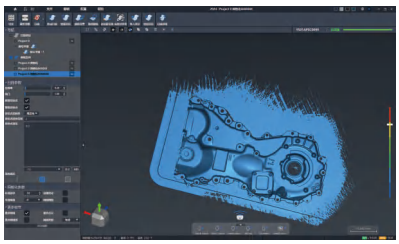
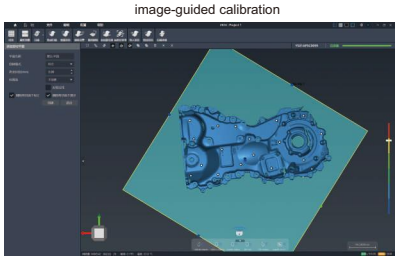
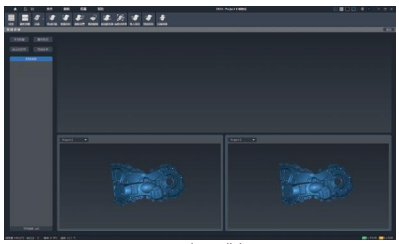


image-guided calibration


point cloud meshing

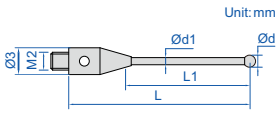

invalid area removal


scanning splicing

STYLI FOR CMM

- Roundness: 0.25μm

ISQ-20-071

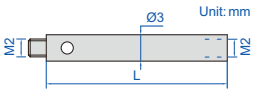


M2 styli (mm)

Code	Ød	Ød1	L	L1*	Material of rod	Material of tip
ISQ-20-056	1	0.8	10	4	carbide	ruby
ISQ-20-069	1	0.8	20	7		
ISQ-20-071	1	0.8	20	12.5		
ISQ-20-101	1	0.8	27	20.5		
ISQ-20-073	1.5	1	20	12.5		
ISQ-20-103	1.5	1	30	22.5		
ISQ-20-075	2	1	20	12.5		
ISQ-20-105	2	1.5	30	22.5		
ISQ-20-160	2	1.5	40	35		
ISQ-20-077	2.5	1.5	20	12		
ISQ-20-107	2.5	1.5	30	22.5		
ISQ-20-162	2.5	1.5	40	35		
ISQ-20-079	3	1.5	20	13		
ISQ-20-109	3	1.5	30	25		
ISQ-20-164	3	1.5	40	35		
ISQ-20-175	3	2	50	42.5		
ISQ-20-081	4	2	22	22		
ISQ-20-111	4	2	30	30		
ISQ-20-166	4	2	40	40		
ISQ-20-177	4	2	50	50		
ISQ-20-002	1	0.7	10	4.5	stainless steel	
ISQ-20-006	2	1	10	6		
ISQ-20-010	3	1.5	10	10		
ISQ-20-021	2	1.5	20	14		
ISQ-20-025	3	1.5	20	17.5		
ISQ-20-027	4	2	20	20		
ISQ-20-185	3	2	50	42.5	ceramic	
ISQ-20-120	3	2	30	27.5		
ISQ-20-201	4	3	50	50	carbon fibre	

* L1 is the effective working length, which is the distance from the center of the tip to the section of the stem with the same diameter as the tip

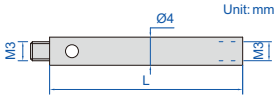
ISQ-25-110



M2 extension rods of styli (mm)

Code	L	Material
ISQ-25-100	5	stainless steel
ISQ-25-105	10	
ISQ-25-110	20	
ISQ-25-115	30	
ISQ-25-120	40	
ISQ-25-125	30	ceramic
ISQ-25-130	40	
ISQ-25-135	50	
ISQ-25-140	40	carbon fibre
ISQ-25-145	50	
ISQ-25-150	70	
ISQ-25-155	90	

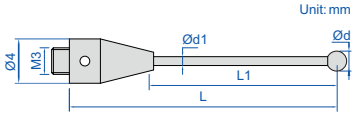
ISQ-35-110



M3 extension rods of styli (mm)

Code	L	Material
ISQ-35-100	10	stainless steel
ISQ-35-105	20	
ISQ-35-110	35	
ISQ-35-115	50	ceramic
ISQ-35-120	75	carbon fibre
ISQ-35-125	100	

ISQ-30-066



M3 styli (mm)

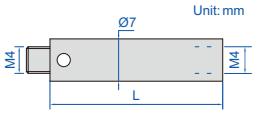
Code	Ød	Ød1	L	L1*	Material of rod	Material of tip
ISQ-30-013	0.5	0.4	21	2	carbide	ruby
ISQ-30-017	1.5	1	20	12.5		
ISQ-30-028	1.5	1	30	22.5		
ISQ-30-031	2	1.5	30	22.5		
ISQ-30-040	2	1.5	40	32.5		
ISQ-30-020	2.5	2	20	12.5		
ISQ-30-043	2.5	2	40	32.5		
ISQ-30-034	2.5	2	30	22.5		
ISQ-30-046	3	2	40	32.5		
ISQ-30-055	3	2	50	42.5		
ISQ-30-049	4	2	40	36		
ISQ-30-058	4	2	50	46		
ISQ-30-037	3	2	30	22.5		
ISQ-30-052	5	2.5	40	40		
ISQ-30-066	3	2	50	42.5	ceramic	
ISQ-30-070	4	2	50	46		
ISQ-30-075	5	2	50	50		
ISQ-30-080	6	4	75	75	carbon fibre	
ISQ-30-085	6	4	100	100		
ISQ-30-082	8	4	75	75		
ISQ-30-088	8	4	100	100		

* L1 is the effective working length, which is the distance from the center of the tip to the section of the stem with the same diameter as the tip.

To be continued

Continued from previous page

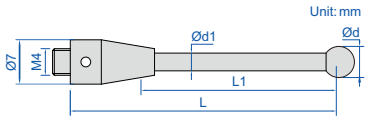
ISQ-45-025



M4 extension rods of styli (mm)

Code	L	Material
ISQ-45-007	20	stainless steel
ISQ-45-009	30	
ISQ-45-025	30	ceramic
ISQ-45-028	50	
ISQ-45-031	100	
ISQ-45-043	200	

ISQ-40-195



M4 styli (mm)

Code	Ød	Ød1	L	L1*	Material of rod	Material of tip
ISQ-40-106	1	0.7	19.5	4	stainless steel	ruby
ISQ-40-109	2	1.5	19	8		
ISQ-40-113	3	2	18.5	13		
ISQ-40-141	1	0.7	20	10	carbide	
ISQ-40-145	2	1.5	20	10		
ISQ-40-195	2	2	50	40		
ISQ-40-149	3	2	20	10		
ISQ-40-198	3	2	50	38		
ISQ-40-153	4	2	20	10		
ISQ-40-202	4	2	50	38		
ISQ-40-172	4	3	50	36	ceramic	
ISQ-40-173	5	4	50	34		
ISQ-40-179	6	4	50	36		
ISQ-40-222	6	4	75	63		
ISQ-40-240	5	4	100	84		
ISQ-40-245	6	4	100	86		

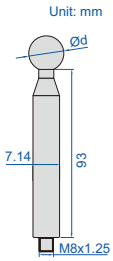
* L1 is the effective working length, which is the distance from the center of the tip to the section of the stem with the same diameter as the tip.

CERAMIC BALL GAUGES

INSPECTION CERTIFICATE

- To calibrate CMM probes
- Zirconia material, high strength and hardness, extremly wear resistance and corrosion resistance good insulation, antistatic and magnetic resistance
- Mirror surface, with pole
- Supplied with manufacturer inspection certificate

4198-20



High accuracy

Code	Diameter (Ød)	Accuracy	Roundness
4198-20	20mm	±5μm	0.5μm
4198-25D4	25.4mm	±5μm	0.5μm

Standard accuracy

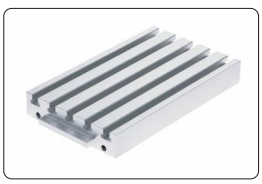
Code	Diameter (Ød)	Accuracy	Roundness
4198-20A	20mm	±5μm	1μm
4198-25D4A	25.4mm	±5μm	1μm

GAUGE BLOCK STAND FOR CMM

VIDEO

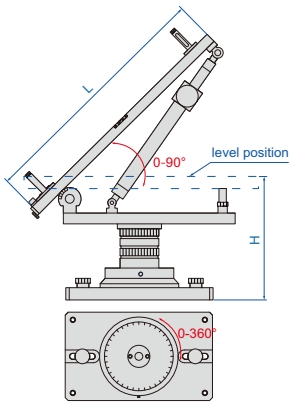
- Made of aluminum
- Used with gauge blocks to calibrate CMM
- Optional accessory: gauge blocks (**4101**, **4103** and **4104** series)

height column (included, 2pcs)



extension plate (included, 4pcs)

6885-1000



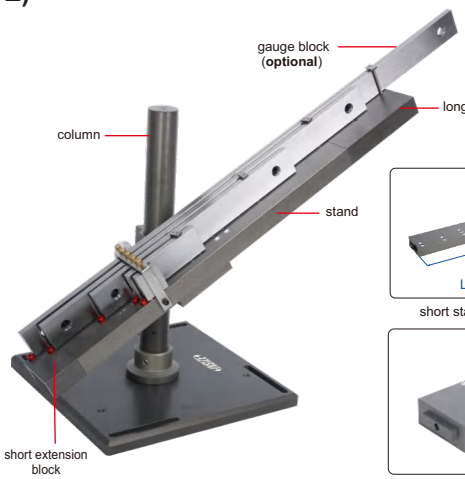
(mm)

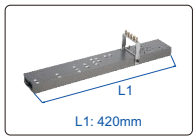
Code	Length (L)	Height (H)
6885-1000	500, 600, 650, 700, 750, 800, 850, 900, 1000	235, 355, 475

GAUGE BLOCK STAND FOR CMM (BASIC TYPE)
CODE 7398-1000

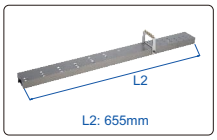
VIDEO

- Made of aluminum
- Used in conjunction with a gauge block to calibrate and compensate for CMM errors
- Minimum height for CMM: 400mm
- Angle adjustment range (0~90)°
- Optional accessory: gauge blocks (**4101**, **4103** and **4104** series)



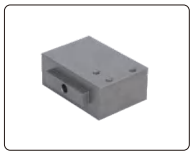


short stand (included)



long stand (included)

long extension block (included)


short extension block (included)

(mm)

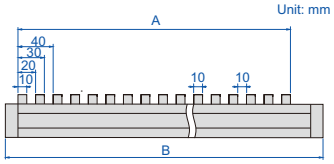
Code	Applicable block length	Column height
7398-1000	30, 100, 125, 150, 175, 200, 250, 300, 400, 500, 600, 700, 800, 900, 1000	450

CMM CHECK MASTERS

INSPECTION CERTIFICATE

6882-600A

- To check the accuracy of table movements of machine tools and calibrate CMM, digital height gauge, height gauge, caliper
- Horizontal use and vertical use
- Constructed with ceramic gauge blocks
- Optional accessory: stand



stand (**optional**)

horizontal use

STANDARD ACCURACY

Code	Size	Step	A (mm)	B (mm)	Range of inside measurement (mm)	Range of outside measurement (mm)	Range of height measurement (mm)
6882-1000A*	0-1000mm	10mm	1010	1050	10, 30, 50, 70, 90, 110, 130, 150, 170, 190, 210, 230, 250, 270, 290, 310, 330, 350, 370, 390, 410, 430, 450, 470, 490, 510, 530, 550, 570, 590, 610, 630, 650, 670, 690, 710, 730, 750, 770, 790, 810, 830, 850, 870, 890, 910, 930, 950, 970, 990	10, 30, 50, 70, 90, 110, 130, 150, 170, 190, 210, 230, 250, 270, 290, 310, 330, 350, 370, 390, 410, 430, 450, 470, 490, 510, 530, 550, 570, 590, 610, 630, 650, 670, 690, 710, 730, 750, 770, 790, 810, 830, 850, 870, 890, 910, 930, 950, 970, 990, 1010	30, 50, 70, 90, 110, 130, 150, 170, 190, 210, 230, 250, 270, 290, 310, 330, 350, 370, 390, 410, 430, 450, 470, 490, 510, 530, 550, 570, 590, 610, 630, 650, 670, 690, 710, 730, 750, 770, 790, 810, 830, 850, 870, 890, 910, 930, 950, 970, 990, 1010, 1030

HIGH ACCURACY

Code	Size	Step	A (mm)	B (mm)	Range of inside measurement (mm)	Range of outside measurement (mm)	Range of height measurement (mm)
6882-1000H*	0-1000mm	10mm	1010	1050	10, 30, 50, 70, 90, 110, 130, 150, 170, 190, 210, 230, 250, 270, 290, 310, 330, 350, 370, 390, 410, 430, 450, 470, 490, 510, 530, 550, 570, 590, 610, 630, 650, 670, 690, 710, 730, 750, 770, 790, 810, 830, 850, 870, 890, 910, 930, 950, 970, 990	10, 30, 50, 70, 90, 110, 130, 150, 170, 190, 210, 230, 250, 270, 290, 310, 330, 350, 370, 390, 410, 430, 450, 470, 490, 510, 530, 550, 570, 590, 610, 630, 650, 670, 690, 710, 730, 750, 770, 790, 810, 830, 850, 870, 890, 910, 930, 950, 970, 990, 1010	30, 50, 70, 90, 110, 130, 150, 170, 190, 210, 230, 250, 270, 290, 310, 330, 350, 370, 390, 410, 430, 450, 470, 490, 510, 530, 550, 570, 590, 610, 630, 650, 670, 690, 710, 730, 750, 770, 790, 810, 830, 850, 870, 890, 910, 930, 950, 970, 990, 1010, 1030

*Supplied with manufacturer inspection certificate

Accuracy

Range (mm)	Standard accuracy	High accuracy
≤300	±1.3μm	±0.8μm
>300, ≤400	±1.6μm	±1.0μm
>400, ≤500	±2.0μm	±1.0μm
>500, ≤600	±2.5μm	±1.0μm
>600, ≤800	±3.0μm	±2.5μm
>800, ≤1000	±4.0μm	±2.5μm

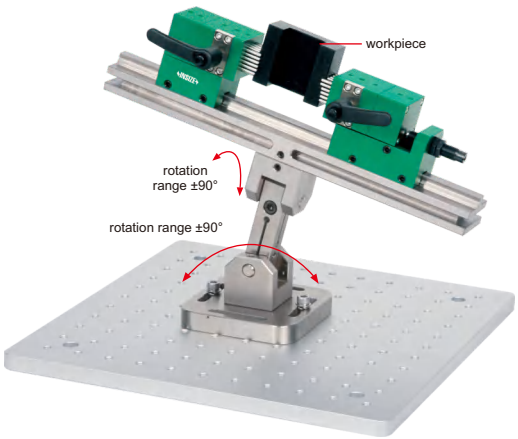
Stand (optional)

Code	Applicable check masters
6882-S1	6882-300A, 6882-300H
6882-S2	6882-400A, 6882-400H
6882-S3	6882-500A, 6882-500H
6882-S4	6882-600A, 6882-600H
6882-S5	6882-1000A, 6882-1000H

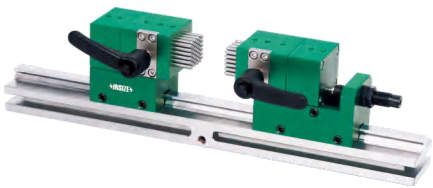
JIGS FOR CMM (ANVIL Ø2.5mm)

CAN BE CUSTOMIZED

VIDEO



ISY-200



ISY-200-A

ISY-200-3

ISY-200-5

Code	Product	Remark
ISY-200	3-piece jig set	including 1 pc **ISY-200-A**, 1 pc **ISY-200-3**, 1 pc **ISY-200-5**

(mm)

Code	Product	Clamping range	Anvil area	Anvil stroke
ISY-200-A	jigs for cmm	0~170	20.5×23.3	12

(mm)

Code	Product	Size	Hole size
ISY-200-3	base plate	300×300×12	M8

(mm)

Code	Product	Size
ISY-200-5	two-way adjustable stand	110×110×134.5

JIGS FOR CMM (ANVIL Ø6mm)

CAN BE CUSTOMIZED

VIDEO

ISY-500

ISY-500-1

ISY-500-2

ISY-500-3

ISY-500-4

ISY-500-5

ISY-500-6

ISY-500-7

Code	Product	Remark
ISY-500	19-piece jig set	including 1 pc **ISY-500-1**, 1 pc **ISY-500-2**, 2 pcs **ISY-500-3**, 10 pcs **ISY-500-4**, 2 pcs **ISY-500-5**, 1 pc **ISY-500-6**, 2 pcs **ISY-500-7**

(mm)

Code	Product	Size	Anvil area	Anvil stroke
ISY-500-1	spring anvil	134×90×90	36×100	24
ISY-500-2	adjustable spring anvil (range 0-40mm)	134×120×130	36×100	24

(mm)

Code	Product	Size
ISY-500-3	base plate	300×240×20
ISY-500-4	block	120×90×20
ISY-500-5	connecting plate	170×90×15
ISY-500-6	connecting block of base plate	80×50×10
ISY-500-7	clamp handle	—

JIGS FOR CMM (ANVIL Ø6mm)

CAN BE CUSTOMIZED

VIDEO

ISY-400

ISY-400-1

ISY-400-2

ISY-400-3

ISY-400-4

ISY-400-5

ISY-400-6

Code	Product	Remark
ISY-400	28-piece jig set	including 3 pcs **ISY-400-1**, 9 pcs **ISY-400-2**, 9 pcs **ISY-400-3**, 1 pc **ISY-400-4**, 3 pcs **ISY-400-5**, 3 pcs **ISY-400-6**

(mm)

Code	Product	Size	Anvil area	Anvil stroke
ISY-400-1	spring anvil	135×60×90	36×100	24

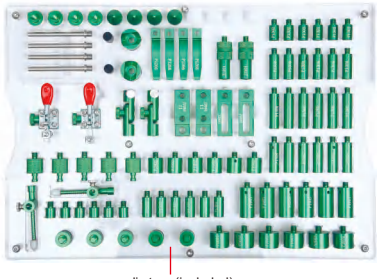
(mm)

Code	Product	Size
ISY-400-2	block	120×60×20
ISY-400-3	block	120×60×30
ISY-400-4	base plate	500×500×12
ISY-400-5	connecting plate	125×120×12
ISY-400-6	clamp handle	—

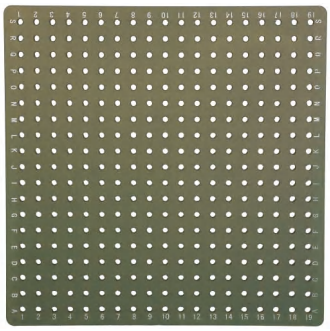
99-PIECE JIG SET FOR CMM
CODE ISY-600

VIDEO

application example



acrylic tray (included)



ISY-600

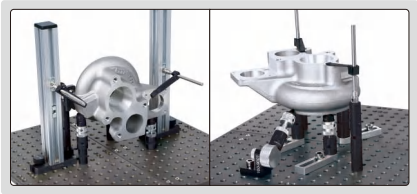
Product	Code	Size (mm)	Quantity
stand	ISY-600-P1301	Ø13×13	6
	ISY-600-P1302	Ø13×20	6
	ISY-600-P1303	Ø13×26	6
stand	ISY-600-P1304	Ø13×32	6
	ISY-600-P1305	Ø13×40	6
	ISY-600-P1306	Ø13×45	6
stand	ISY-600-P1902	Ø20×20	6
	ISY-600-P1905	Ø20×38	6
	ISY-600-P2602	Ø26×20	6
spring stand	ISY-600-P1522	—	2
universal support	ISY-600-J1560	—	2
stand with fine adjustment	ISY-600-J1501	48~60	2
magnetic stand (magnetic top surface)	ISY-600-J2020	Ø20×20	4
adaptor	ISY-600-J2021	Ø20×19	2
V shaped support	ISY-600-J2520	Ø25×20	2
clamping screw	ISY-600-P2003	M8x1.25	4

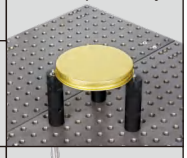
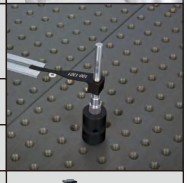
Product	Code	Size (mm)	Quantity
sliding support plate	ISY-600-J2060	60×20×10	2
sliding support plate	ISY-600-J2060-2	60×20×10	2
clip	ISY-600-P1266	12×66	4
chuck support	ISY-600-JS201	—	2
clip stand	ISY-600-P0684	Ø6×74	4
aluminum support head	ISY-600-P2002	—	4
nylon support head	ISY-600-P2001	—	4
base plate	ISY-600-400	400×400×18 hole size: M8X1.25	1

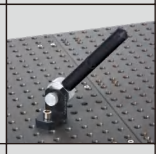
158-PIECE JIG SET FOR CMM
CODE ISY-100

VIDEO

application examples



Product	Code	Size (mm)	Quantity	Application
stand	ISY-100-1001	Ø16×30	5	
	ISY-100-1002	Ø16×50	5	
	ISY-100-1003	Ø16×100	3	
stand	ISY-100-1004	Ø20×30	5	
	ISY-100-1005	Ø20×50	5	
	ISY-100-1006	Ø20×100	3	
stand with fine adjustment	ISY-100-2001	Ø16×45~60	2	height adjustment: 45~60mm
stand with fine adjustment	ISY-100-2003	Ø20×45~60	2	
horizontal spring stand	ISY-100-4001	—	2	
horizontal screw stand	ISY-100-5001	—	2	
magnetic stand (magnetic top surface)	ISY-100-7001	Ø20×25	3	
stand for slice parts	ISY-100-8001	Ø20×25	2	**ISY-100-8001** and **ISY-100-8002** use cooperatively 
clamping stand for slice parts	ISY-100-8002		1	
clip	ISY-100-1201	—	2	
clip	ISY-100-1301	—	2	
clip stand	ISY-100-1401	Ø6×60	2	
	ISY-100-1402	Ø6×100	2	
vertical square column	ISY-100-3003	30×30×250	2	

Product	Code	Size (mm)	Quantity	Application
sliding support plate	ISY-100-1801	78×20×10	3	
clamping screw	ISY-100-2301	Ø8×20	6	
screw	ISY-100-2302	Ø8×20	6	
base plate	ISY-600-400200	400×400×12 hole size: M8×1.25 hole center distance: 20	2 pcs	—
wrench	ISY-100-3701	Ø3.8×70	1	—
wrench	ISY-100-3801	M2.5	1	—
	ISY-100-3802	M5	1	—
	ISY-100-3803	M6	1	—
45° stand	ISY-100-9001	—	2	
V shaped support	ISY-100-1901	—	2	
V shaped support	ISY-100-1902	—	2	
marker	ISY-6100-1501	—	52*	
dust cleaner	ISY-100-3501	—	1	—
lubricating oil	ISY-100-3601	—	1	—

*Letter A~Z, number 0~25

To be continued

Continued from previous page

Product	Code	Quantity	Material	Application
support head	ISY-100-27016	2	aluminum	
	ISY-100-27018	2	nylon	
support head	ISY-100-27026	2	aluminum	
	ISY-100-27028	2	nylon	
support head	ISY-100-27036	2	aluminum	
	ISY-100-27038	2	nylon	

Product	Code	Quantity	Material	Application
support head	ISY-100-27046	2	aluminum	
	ISY-100-27048	2	nylon	
support head	ISY-100-27056	2	aluminum	
	ISY-100-27058	2	nylon	
support head	ISY-100-27066	2	aluminum	
	ISY-100-27068	2	nylon	
support head	ISY-100-27076	2	aluminum	
	ISY-100-27078	2	nylon	

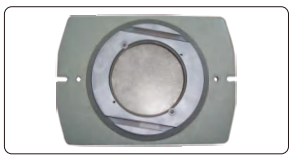
PROFILE PROJECTOR CODE ISP-Z3015

VIDEO

INSPECTION CERTIFICATE

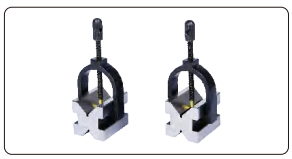
OPTIONAL ACCESSORY

lens

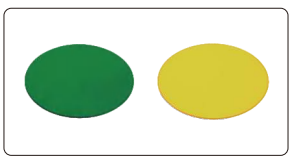


rotary table
(glass plate diameter 100mm)

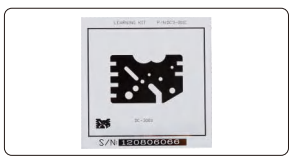
swivel center support



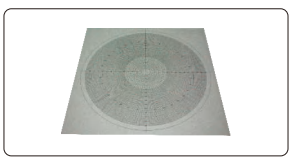
V-block set



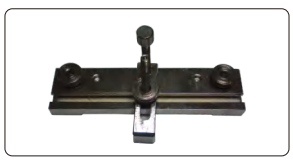
green/yellow filter



demo sample

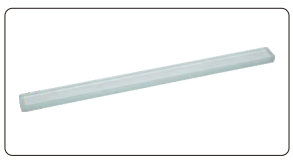


overlay chart (protractor with 1° graduation, radius with 1mm increment)



holder with clamp

50mm reading scale
(check magnification accuracy)



300mm calibration scale (check magnification accuracy together with 50mm reading scale or calibrate measuring accuracy)

ISP-Z3015

To be continued

Continued from previous page

SPECIFICATION

Lens	magnification	10X (included)	20X (**optional**)	50X (**optional**)	100X (**optional**)
	view field	Ø30mm	Ø15mm	Ø6mm	Ø3mm
	working distance	77.7mm	44.3mm	38.4mm	25.3mm
Max. workpiece height		90mm	90mm	90mm	90mm
Magnification accuracy		±0.08%			
Image		erect image			
Projector screen		diameter: Ø300mm			
		rotation range: 0°~360°, resolution: 1" or 0.01°			
		reference lines: cross-hairs			
Stage	metal stage size	340×152mm			
	glass stage size	196×96mm			
	X-Y stage travel	range: 150×50mm			
		resolution: 0.5μm			
		accuracy: (4+L/25)μm L is the measuring length in mm			
	Z (focus) travel range	90mm			
	max. load capacity	4kg			
Illumination		contour illumination: 24V/150W halogen lamp, brightness is adjustable			
		surface illumination: 24V/150W halogen lamp			
Data processing unit	display	X-Y stage travel, screen rotation			
	output	RS232C			
	function	measure coordinate of point measure coordinate of line measure center coordinate, radius of circle with three points measure distance between two objects measure angle with four points or two lines set origin of coordinate coordinate transform set midpoint of coordinate			
Power supply		220V, 50/60Hz			
Dimension (L×W×H)		550×770×1100mm			
Net weight		135kg			

STANDARD DELIVERY

Main unit	1 pc
10X lens with half-reflection mirror and oblique illuminator mirror	1 pc
Overlay chart clip	4 pcs
Foot-switch	1 pc
Anti-dust cover	1 pc
Blue filter	1 pc

OPTIONAL ACCESSORY

20X lens with half-reflection mirror and oblique illuminator mirror	ISP-A1000-LENS20X
50X lens with half-reflection mirror	ISP-A1000-LENS50X
100X lens with half-reflection mirror	ISP-A1000-LENS100X
Rotary table	ISP-A1000-TABLE
Overlay chart	ISP-A1000-CHART
Holder with clamp	ISP-A1000-HOLDER
Swivel center support	ISP-A1000-SUPPORT
Swivel center support	ISP-A1000-SUPPORT
V-block set	6896-12
50mm reading scale	ISP-A1000-SCALE50
300mm calibration scale	ISP-A1000-RULE
Green filter	ISP-A1000-GR-FILTER
Yellow filter	ISP-A1000-YE-FILTER
Demo sample	ISP-A1000-DEMO

HIGH PRECISION PROFILE PROJECTOR (WITH EDGE DETECTOR)
CODE ISP-A5000E

INSPECTION CERTIFICATE

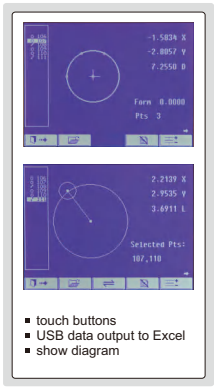
THE STAGE DOESN'T MOVE UP AND DOWN

VIDEO

software flash disk
(included)

ISP-A5000E

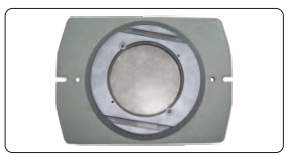
digital readout



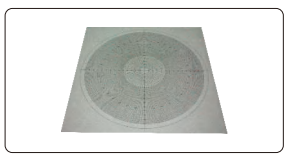
- Adjust the focus by ascending and descending the projector head, the stage doesn't move up and down
- Maximum workpiece weight 30kg

OPTIONAL ACCESSORY

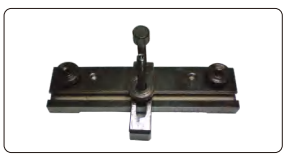
lens



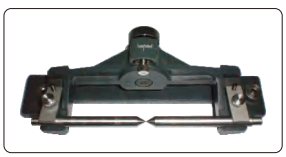
rotary table
(glass plate diameter 100mm)



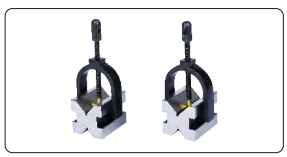
overlay chart (protractor with 1° graduation, radius with 1mm increment)



holder with clamp

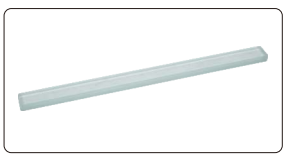


swivel center support

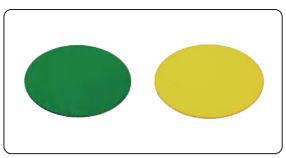


V-block set

50mm reading scale
(check magnification accuracy)



300mm calibration scale (check magnification accuracy together with 50mm reading scale or calibrate measuring accuracy)



green/yellow filter

demo sample

printer

To be continued

Continued from previous page

SPECIFICATION

Edge detector		included			
Lens	magnification	10X (included)	20X (**optional**)	50X (**optional**)	100X (**optional**)
	view field	Ø30mm	Ø15mm	Ø6mm	Ø3mm
	working distance	77.7mm	44.3mm	38.4mm	25.3mm
Max. workpiece height		90mm	90mm	90mm	90mm
Magnification accuracy		±0.08%			
Image		erect image			
Projector screen		diameter: Ø300mm			
		rotation range: 0°~360°, resolution: 1" or 0.01°			
		reference lines: cross-hairs			
Stage	metal stage size	404×228mm			
	glass stage size	260×160mm			
	X-Y stage travel range	200×100mm			
	resolution	0.5μm			
	accuracy	(3+L/75)μm L is the measuring length in mm			
	Z (focus) travel range	100mm			
	max. load capacity	30kg			
Illumination		contour illumination: 24V/150W halogen lamp, brightness is adjustable			
		surface illumination: 24V/150W halogen lamp			
Data processing unit	display	X-Y stage travel, screen rotation			
	output	RS232C, USB (data output to Excel)			
	function	measure coordinate of point measure coordinate of line measure center coordinate, radius of circle with three points measure distance between two objects measure angle with four points or two lines coordinate transform choose measurement object automatically according to the selective point and display the result			
	advanced function	programming for batch measurements			
Power supply		220V, 50/60Hz			
Dimension (L×W×H)		780×780×1100mm			
Net weight		160kg			

STANDARD DELIVERY

Main unit	1 pc
10X lens with half-reflection mirror and oblique illuminator mirror	1 pc
Overlay chart clip	4 pcs
Foot-switch	1 pc
Blue filter	1 pc
Anti-dust cover	1 pc

OPTIONAL ACCESSORY

20X lens with half-reflection mirror and oblique illuminator mirror	ISP-A1000-LENS20X
50X lens with half-reflection mirror	ISP-A1000-LENS50X
100X lens with half-reflection mirror	ISP-A1000-LENS100X
Rotary table	ISP-A5000-TABLE
Printer	ISP-A1000-PRINTER
Swivel center support	ISP-A5000-SUPPORT
Overlay chart	ISP-A1000-CHART

Holder with clamp	ISP-A1000-HOLDER
V-block set	6896-12
50mm reading scale	ISP-A1000-SCALE50
300mm calibration scale	ISP-A1000-RULE
Green filter	ISP-A1000-GR-FILTER
Yellow filter	ISP-A1000-YE-FILTER
Demo sample	ISP-A1000-DEMO

HORIZONTAL PROFILE PROJECTOR
CODE ISP-A3000E

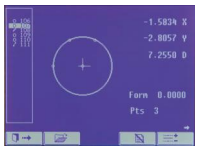
INSPECTION CERTIFICATE

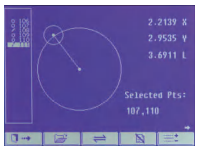
VIDEO

ISP-A3000E

digital readout

- touch buttons
- USB data output to Excel
- show diagram

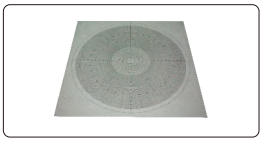




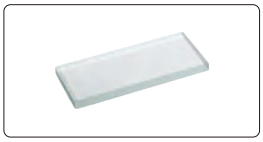
software flash disk
(included)

OPTIONAL ACCESSORY

lens

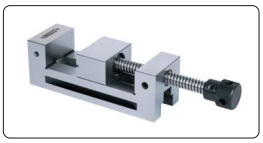


overlay chart (protractor with 1° graduation, radius with 1mm increment)

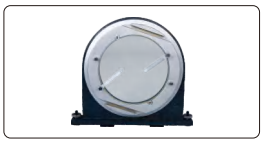


50mm reading scale
(check magnification accuracy)

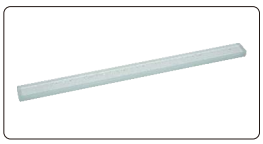
demo sample



vise



rotary table



300mm calibration scale (check magnification accuracy together with 50mm reading scale or calibrate measuring accuracy)

printer

To be continued

Continued from previous page

SPECIFICATION

Edge detector		included			
Lens	magnification	10X (included)	20X (**optional**)	50X (**optional**)	100X (**optional**)
	view field	Ø30mm	Ø15mm	Ø6mm	Ø3mm
	working distance	77.7mm	44.3mm	38.4mm	25.3mm
Magnification accuracy		±0.08%			
Projector screen		diameter: Ø300mm			
		rotation range: 0°~360°, resolution: 1" or 0.01°			
		reference lines: cross-hairs			
Stage	metal stage size	400×150mm			
	turning range	±15°			
	X-Z stage travel	range: 200×100mm			
		resolution: 0.5μm			
		accuracy: (4+L/25)μm L is the measuring length in mm			
	Y (focus) travel range	75mm			
	max. load capacity	50kg			
Illumination		contour illumination: 24V/150W halogen lamp, brightness is adjustable			
		surface illumination: 24V/150W halogen lamp (with 2 fibers), position is adjustable			
Data processing unit	display	X-Z stage travel, screen rotation			
	output	RS232C, USB (data output to Excel)			
	function	measure coordinate of point measure coordinate of line measure center coordinate, radius of circle with three points measure distance between two objects measure angle with four points or two lines coordinate transform choose measurement object automatically according to the selective point and display the result			
	advanced function	programming for batch measurements			
Power supply		220V, 50/60Hz			
Dimension (L×W×H)		830×1090×1010mm			
Net weight		160kg			

STANDARD DELIVERY

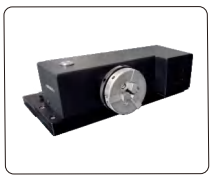
Main unit	1 pc
10X lens	1 pc
Overlay chart clip	4 pcs
Foot-switch	1 pc
Anti-dust cover	1 pc
Software and USB cable	1 pc

OPTIONAL ACCESSORY

20X lens	ISP-A3000-LENS20X
50X lens	ISP-A3000-LENS50X
100X lens	ISP-A3000-LENS100X
Overlay chart	ISP-A1000-CHART
50mm reading scale	ISP-A1000-SCALE50
300mm calibration scale	ISP-A1000-RULE

Swivel center support	ISP-A3000-SUPPORT
Demo sample	ISP-A1000-DEMO
V-block with clamp	ISP-A3000-VBLOCK
Rotary table	ISP-A3000-RTABLE
Vise	ISP-A3000-VISE
Printer	ISP-A1000-PRINTER

LARGE SIZE QUICK MEASUREMENT SYSTEM
CODE QMS-A450



rotary table (**optional**)

SPECIFICATION

Optical lens		dual-field dual-telecentric low-distortion lens	
Measurement range		wide view field	small view field
		500×400mm	430×350mm
Measurement accuracy *	**without stitching**	±3μm①	±1μm②
	with stitching	±(5+0.02L)μm③	±(3+0.02L)μm④
Repeatability	**without stitching**	±1μm	±0.5μm
	with stitching	±2μm	±1.5μm
Illumination system	**transmission light**	telecentric illuminator, green light	
	surface light	vertical illuminator, high angle ring white light vertical illuminator, 4-zone low and medium angle ring white light (eletric) vertical illuminator, circular (directional) green light (eletric)	
	coaxial light (optional)	vertical illuminator, white light	
Max. weight of workpiece		25kg	
Measurement time		<2s	
Measurement data		2D measurement	
Environmental requirement		temperature: 20°C±2°C, relative humidity: 30%~80%, vibration: <0.002g, less than 15Hz	
Power supply		220V, 50Hz, 1200W	
Dimension (L×W×H)		1060×860×1890mm	
Net weight		650kg	

* The optimum temperature is 20°C±1°C
①Within 73×49mm, on focal position and environment temperature at 20°C±1°C
②Within 16×12mm, on focal position and environment temperature at 20°C±1°C
③Within 450×360mm, on focal position and environment temperature at 20°C±1°C
④Within 387×315mm, on focal position and environment temperature at 20°C±1°C

- One or more workpieces can be measured by one step operation
- Place workpieces at any position
- Focus and measure automatically
- Measurement of 999+dimensions and 200+workpieces
- Suitable for parts with high precision requirements for large, medium, and small sizes

STANDARD DELIVERY

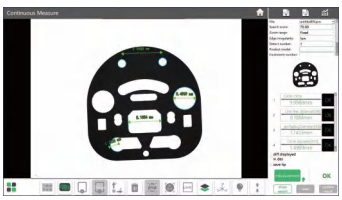
Main unit	1 pc
Computer	1 pc
Software	1 pc
Data transmission function	1 pc

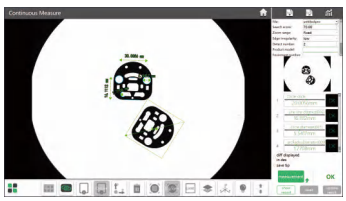
OPTIONAL ACCESSORY

Coaxial light illumination	**QMS-43-A1** (must be installed in factory)
CAD import function of software	**QMS-23-C1**
Laser sensor	**QMS-43-SJ1** (must be installed in factory)
Foot-switch	**QMS-43-FS1**
Glass calibration plate	**QMS-CALIBRATION**
MES transmission function	**QMS-23-E1**
Rotary table	**QMS-43-RT1** (must be installed in factory)

Software (included)

- Automatically measure widths, holes, rings, angles at the same time, simple and efficient
- Measuring result can be stored automatically. OK items and NG items can be counted automatically





QUICK MEASUREMENT SYSTEMS (WITH STITCHING)

SMALL VIEW FIELD SUITABLE FOR MEASURING SMALL SIZES SUCH AS THREADS AND CHAMFERS

VIDEO

11.6" LCD (**optional**)

rotary table (**optional**)

QMS-A220

SPECIFICATION

Code		QMS-A220		QMS-A315	
Optical lens		dual-field dual-telecentric low-distortion lens			
		wide view field: Ø100mm small view field: Ø25mm			
View field range		wide view field	small view field	wide view field	small view field
		100×80mm	20×16mm	100×80mm	25×20mm
Measurement range		200×200mm	130×130mm	300×200mm	230×130mm
Measurement accuracy *	without stitching	±3μm①	±1μm②	±3μm①	±1μm②
	with stitching	±(5+0.02L)μm③	±(3+0.02L)μm④	±(5+0.02L)μm⑤	±(3+0.02L)μm⑥
Repeatability	without stitching	±1μm	±0.5μm	±1μm	±0.5μm
	with stitching	±2μm	±1.5μm	±2μm	±1.5μm
Max. weight of workpiece		5kg			
Measurement time		<2s			
Measurement data		2D measurement			
Power supply		220V, 50Hz, 600W			
Illumination system	back light	telecentric illuminator, green light			
	ring light	4-zone circular white high light circular (directional) low-angle green light (eletric)			
	coaxial light (optional)	vertical illuminator, white light			
Environmental requirement		temperature: 20°C±2°C, relative humidity: 30%~80%, vibration: <0.002g, less than 15Hz			
Dimension (L×W×H)		532×480×766mm		532×497×766mm	
Net weight		50kg		60kg	

* The optimum temperature is 20°C±1°C
① Within 80×64mm, on focal position and environment temperature at 20°C±1°C
② Within 20×16mm, on focal position and environment temperature at 20°C±1°C
③ Within 180×180mm, on focal position, environment temperature at 20°C±1°C, and workpiece is less than 2kg, L is the travel of stage
④ Within 117×117mm, on focal position, environment temperature at 20°C±1°C, and workpiece is less than 2kg, L is the travel of stage
⑤ Within 270×180mm, on focal position, environment temperature at 20°C±1°C, and workpiece is less than 2kg, L is the travel of stage
⑥ Within 207×117mm, on focal position, environment temperature at 20°C±1°C, and workpiece is less than 2kg, L is the travel of stage

- One or more workpieces can be measured by one step operation
- Place workpieces at any position
- Focus and measure automatically
- Measurement of 999+dimensions and 200+workpieces

STANDARD DELIVERY

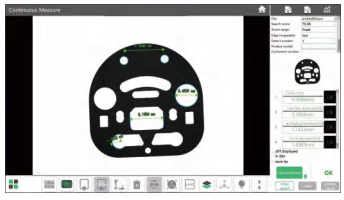
Main unit	1 pc
Computer	1 pc
Software	1 pc
Data transmission function	1 pc

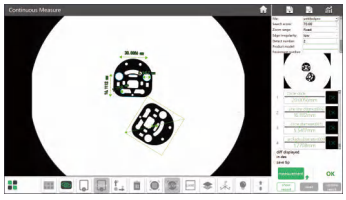
OPTIONAL ACCESSORY

Coaxial light illumination	**QMS-23-A3** (must be installed in factory)
Glass calibration plate	**QMS-CALIBRATION**
MES transmission function	**QMS-23-E1**
CAD import function	**QMS-23-C1**
Laser sensor	**QMS-43-SJ1** (for **QMS-A315**, must be installed in factory)
Foot-switch	**QMS-43-FS1**
11.6" LCD	**QMS-23-B1** (must be installed in factory)
Rotary table	**QMS-43-RT1** (must be installed in factory)

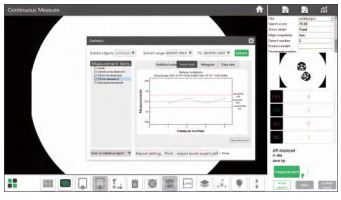
Software (included)

- Automatically measure widths, holes, rings, angles at the same time, simple and efficient





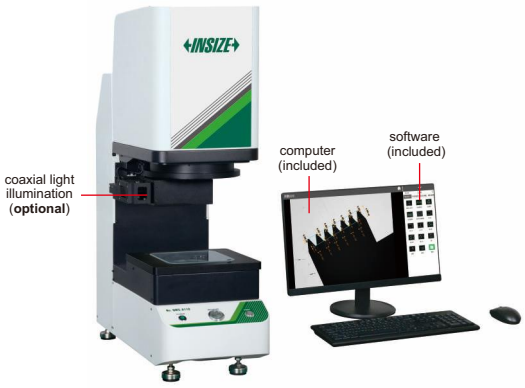
- Measuring result can be stored automatically. OK items and NG items can be counted automatically



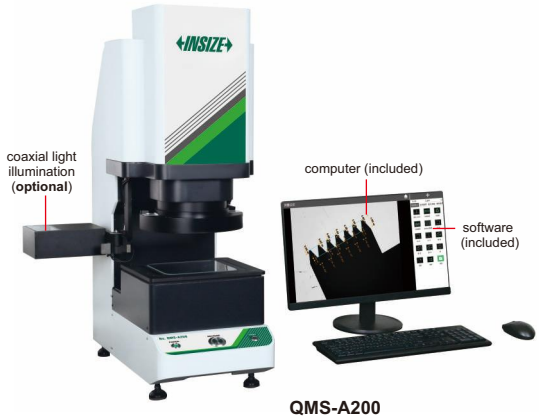
QUICK MEASUREMENT SYSTEMS (WITHOUT STITCHING)

NOTE: NOT SUITABLE FOR SMALL SIZES SUCH AS THREADS, CHAMFERS, ETC.

VIDEO



QMS-A110



QMS-A200

11.6" LCD (**optional**)

SPECIFICATION

Code		QMS-A110	QMS-A200	
Optical lens		low-distortion lens, single-field telecentric Ø100mm	dual-field dual-telecentric low-distortion lens wide view field: Ø150mm small view field: Ø50mm	
View field range		100×80mm	wide view field	small view field
			150×110mm	50×35mm
Measurement range (X×Y)		98×78mm	148×108mm	48×33mm
Measurement accuracy*		±3μm①	±5μm ②	±2μm ③
Repeatability		±1μm	±1μm	±0.5μm
Max. weight of workpiece		5kg		
Measurement time		<2s		
Measurement data		2D measurement		
Power supply		220V, 50Hz, 600W		
Illumination system	back light	telecentric illuminator, green light		
	ring light	4-zone circular white high light circular (directional) low-angle green light (eletric)		
	coaxial light (optional)	vertical illuminator, white light		
Environmental requirement		temperature: 20°C±2°C, relative humidity: 30%~80%, vibration: <0.002g, less than 15Hz		
Dimension (L×W×H)		580×235×790mm	638×336×885mm	
Net weight		40kg	60kg	

* The optimum temperature is 20°C±1°C
①Within 80×64mm, on focal position and environment temperature at 20°C±1°C
②Within 120×88mm, on focal position and environment temperature at 20°C±1°C
③Within 40×28mm, on focal position and environment temperature at 20°C±1°C

- One or more workpieces can be measured by one step operation
- Place workpieces at any position
- Focus and measure automatically
- Measurement of 999+dimensions and 200+workpieces
- **QMS-A110** is suitable for measuring small flat parts
- **QMS-A200** is suitable for measuring flat parts with low precision requirements and small surface sizes

STANDARD DELIVERY

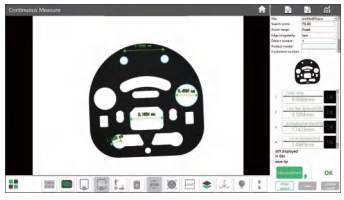
Main unit	1 pc
Computer	1 pc
Software	1 pc
Data transmission function	1 pc

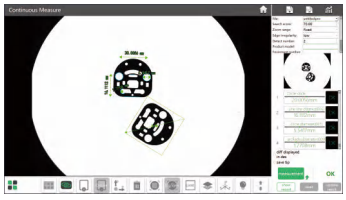
OPTIONAL ACCESSORY

Coaxial light illumination	**QMS-23-A3** (must be installed in factory, for **QMS-A110**)
	QMS-23-A4 (must be installed in factory, for **QMS-A200**)
CAD import function of software	**QMS-23-C1**
Foot-switch	**QMS-43-FS1**
11.6" LCD	**QMS-23-B1** (must be installed in factory)
Glass calibration plate	**QMS-CALIBRATION**
MES transmission function	**QMS-23-E1**

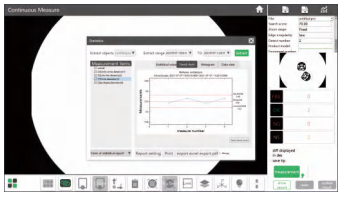
Software (included)

- Automatically measure widths, holes, rings, angles at the same time, simple and efficient





- Measuring result can be stored automatically. OK items and NG items can be counted automatically

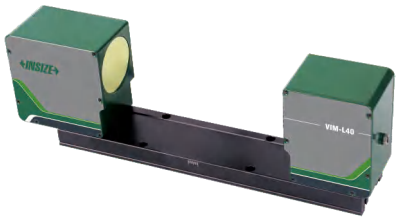


ONLINE/OFFLINE QUICK MEASUREMENT SYSTEM
CODE VIM-L40

TELECENTRIC SYSTEM WITH LARGE DEPTH OF FIELD

ONLINE/OFFLINE DIMENSION MEASUREMENT

VIDEO



monitor (**optional**) for offline use

- Low-distortion system assures the accuracy throughout the field of view
- The dual telecentric optical system ensures sharp edges without losing accuracy even for misaligned targets
- Easy to use measurement tools for simplifi setup

SPECIFICATION

Distance between transmitter and receiver			180mm
Measurement range	view field	high precision measurement area	Ø26mm
		full measurement area	Ø40mm
	depth of field	high precision measurement area	10mm
		full measurement area	20mm
Illumination			InGaN green LED
Measurement accuracy *		high precision measurement area	±2μm
		full measurement area	±3μm
Repeatability			±1μm
Dust/waterproof			IP64
Environment requirement			temperature: 0~45˚C, relative humidity: less than 85%
Shell material			aluminium
Net weight			2.2kg

* The optimum temperature is 20°C±1°C

STANDARD DELIVERY

Main unit	1 pc
Industrial computer	1 pc
Dongle	1 pc

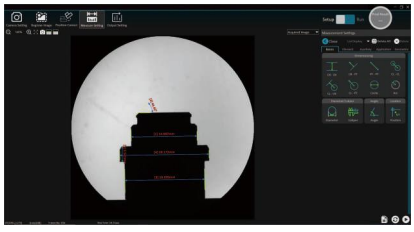
OPTIONAL ACCESSORY

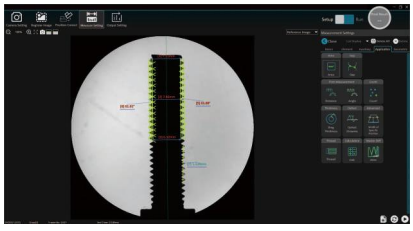
Monitor	VIM-L-SCREEN
Rotary table	VIM-L-RT

SOFTWARE (INCLUDED)

APPLICATION

- Automatically measure widths, pitch, arc, angles at the same time, simple and efficient





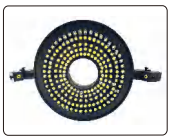
2D+3D COMPOSITE CNC VISION MEASURING SYSTEMS

3D PROBE WITH 3D SOFTWARE FOR 3D MEASUREMENT

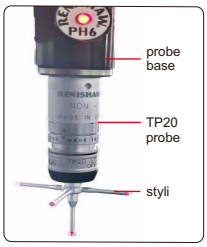
VIDEO

INSPECTION CERTIFICATE

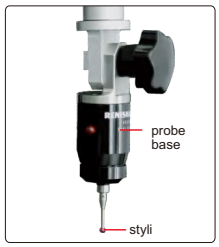
lens with coaxial light (included)



programmable segmented ring light (included)



advanced probe set **(optional)**



standard probe set **(optional)**

ISD-U322

- Motorized zoom objective
- Can import 3D drawings
- Vision measurement and probe measurement can be used in the same program
- Granite platform, column and stage, more stable
- Double close-loop motion control, with precise positioning performance in high-speed movement
- Panasonic servo control motor
- 40 independent surface light source, 200-step adjustment
- Servo motors for X, Y, Z axis

SPECIFICATION

Code		ISD-U322	ISD-U432	ISD-U532	ISD-U542
Measuring range (X×Y×Z)		300×200×200mm	400×300×200mm	500×300×200mm	500×400×200mm
Stage size		600×390mm	700×490mm	800×490mm	800×590mm
Glass stage size		350×250mm	450×350mm	550×350mm	550×450mm
Resolution of X/Y/Z axis		0.5μm			
Accuracy (vision)		≤(2+L/200)μm (L is the measuring length in mm)			
Accuracy (probe)		≤(3+L/200)μm (L is the measuring length in mm)			
Repeatability		1.5μm			
Objective		0.7X~4.5X (zoom)			
Working distance		55mm			
View field (diagonal length)		1.3~7.9mm			
Magnification		36X~210X (on 21.5" monitor)			
Camera		1/2"color CCD, 2M pixel			
Illumination	surface	coaxial light, programmable segmented ring light			
	contour	adjustable LED light			
Max. height of workpiece		195mm			
Max. weight of workpiece		20kg	30kg	35kg	35kg
Operation system		Windows 10/11			
Drive method		automatic			
Power supply		220V, 50/60Hz			
Dimension (L×W×H)		1400×900×1780mm	1600×1120×1780mm	1650×1120×1780mm	1650×1220×1780mm
Net weight		440kg	560kg	580kg	620kg

To be continued

Continued from previous page

STANDARD DELIVERY

Main unit	1 pc
Dongle	1 pc
Software	1 pc
Lens with coaxial light	1 pc
Controller	1 pc
Computer	1 pc
Calibration glass chart	1 pc
Laser positioner	1 pc
Clay	1 pc
Anti-dust cover	1 pc

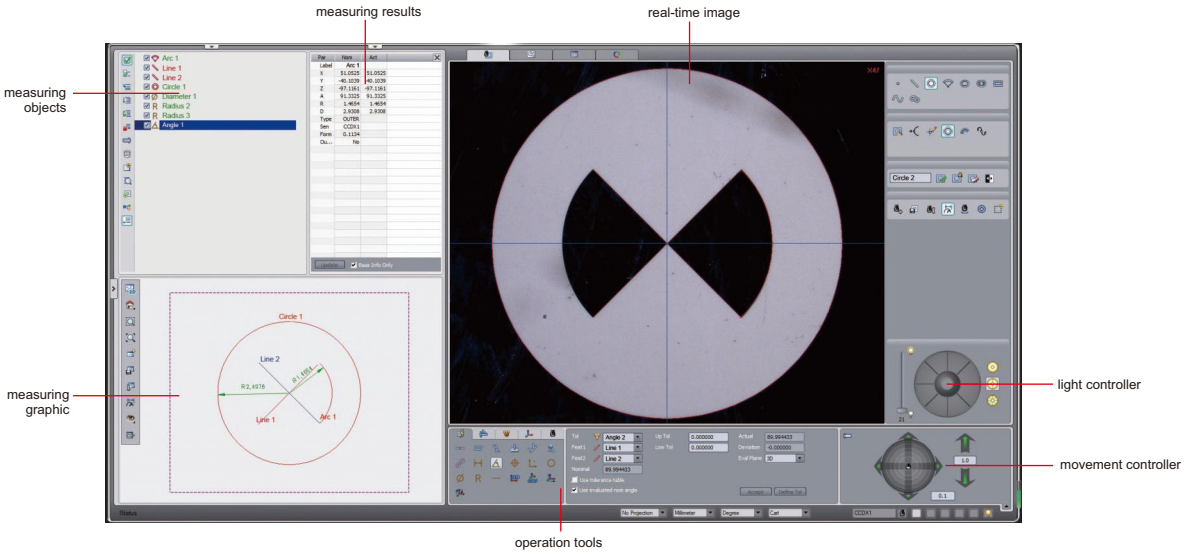
OPTIONAL ACCESSORY

0.5X auxiliary objective		code: **ISD-U-OB05X**, working distance: 175mm magnification: 18~105X (on 21.5" monitor)
2X auxiliary objective		code: **ISD-U-OB2X**, working distance: 36mm magnification: 72~420X (on 21.5" monitor)
Standard probe set * (RENISHAW)		code: **ISD-U-MCP** (must be installed in factory) includes MCP probe base, Ø2mm and Ø3mm styli, Ø25mm calibration ball
Advanced * probe set (RENISHAW)	probe base	code: **ISD-U-BASE** (must be installed in factory)
	probe	code: **ISD-U-TP20**, includes Ø2mm styli
	styli	**ISQ-20** series (M2) **optional**
Probe replacement rack		code: **ISD-U-MCR20**
Office software		code: **7313-OFFICE**

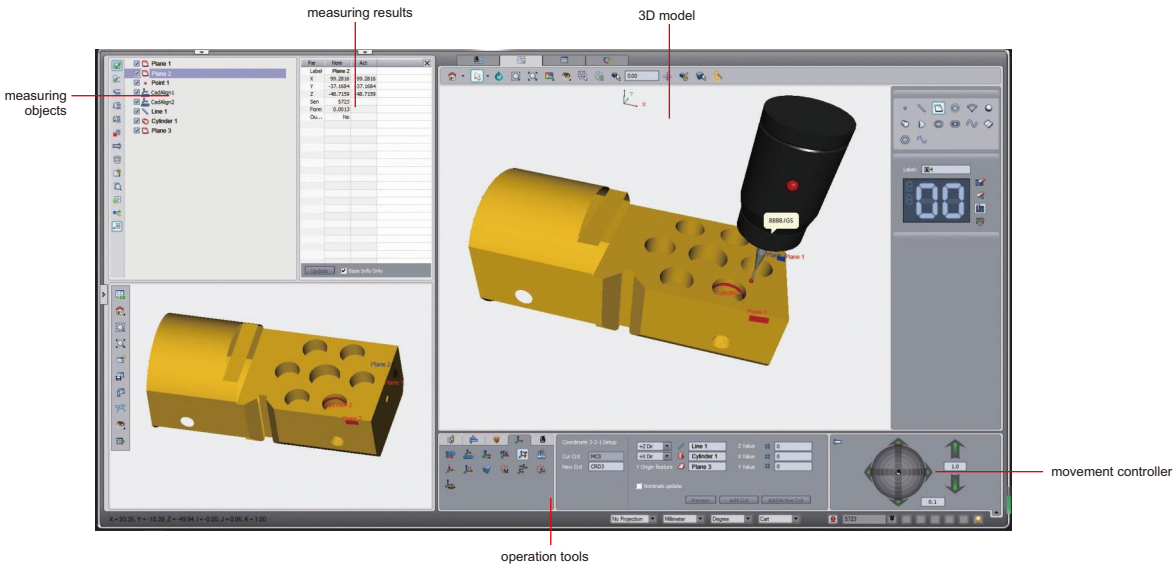
* Must purchase standard probe set or advanced probe set

SOFTWARE (INCLUDED)

2D MEASUREMENT



3D MEASUREMENT



CNC VISION MEASURING SYSTEM (ADVANCED TYPE)
CODE ISD-K322

VIDEO

NAVIGATION CAMERA

HIGH-RESOLUTION AUTO ZOOM LENS

INSPECTION CERTIFICATE

- Motorized zoom objective
- Granite body, high accuracy and stability
- Panasonic servo control motor, with precise positioning performance in high-speed movement
- RSF brand linear scales

ISD-K322

STANDARD DELIVERY

Main unit	1 pc
Dongle	1 pc
Software	1 pc
Lens with coaxial light	1 pc
Controller	1 pc
Computer	1 pc
Calibration glass chart	1 pc
Desk	1 pc
Clay	1 pc
Anti-dust cover	1 pc

anillo luminoso segmentado programable (included)

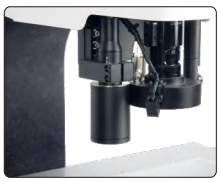
SPECIFICATION

Measuring range (X×Y×Z)		300×200×200mm
Stage size		620×380mm
Glass stage size		360×260mm
Resolution of X/Y/Z axis		0.5μm
Accuracy of X/Y axis		≤(2.0+L/200)μm (L is the measuring length in mm)
Repeatability		2μm
Objective		0.6X~8.0X (13.3:1 continuous zoom ratio)
Working distance		83mm
View field (diagonal length)		0.81~10.72mm
Magnification		27X~356X (on 23.8" monitor)
Camera		1/1.2"color CCD, 2.3M pixel
Max. height of workpiece		200mm
Illumination	surface	coaxial light, three-ring eight-zone adjustable ring light
	contour	adjustable LED light
Operation system		Windows 10/11
Max. weight of workpiece		35kg
Drive method		automatic
Environmental requirement		temperature: 20°C±5°C, relative humidity: 20%~80%, vibration: <0.002g, less than 15Hz
Power supply		190~230V, 50Hz, 1500W
Dimension (L×W×H)		620×780×1750mm
Net weight		350kg

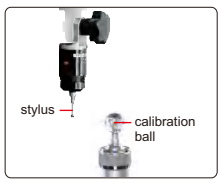
OPTIONAL ACCESSORY

0.5X auxiliary objective	code: **ISD-K-OB05X**, working distance: 175mm magnification: 13.5~178X (on 23.8" monitor)
2X auxiliary objective	code: **ISD-K-OB2X**, working distance: 36mm magnification: 54~712X (on 23.8 " monitor)
Spectral confocal sensor	code: **ISD-K-SCS** (must be installed in factory)
Laser probe	code: **ISD-K-LASER** (must be installed in factory)
Probe	code: **ISD-K-PROBE**, includes Ø1mm styli and Ø2mm styli, Ø20mm calibration ball
Line laser sensor	code: **ISD-K-LINE** (must be installed in factory)
Line profile software	code: **ISD-K-LP**
Gear software	code: **ISD-K-GEAR**
Thread software	code: **ISD-K-THREAD**
Stitching software	code: **ISD-K-STITCHING**
Office software	code: **7313-OFFICE**

laser proble (**optional**) measuring accuracy is 4μm



spectral confocal sensor (**optional**) measuring accuracy is 5μm



probe (**optional**), includes Ø1mm and Ø2mm styli, Ø20mm calibration ball, measuring accuracy is 5μm

line laser sensor (**optional**) quick measurement of flatness, height, measuring accuracy is 10μm

To be continued

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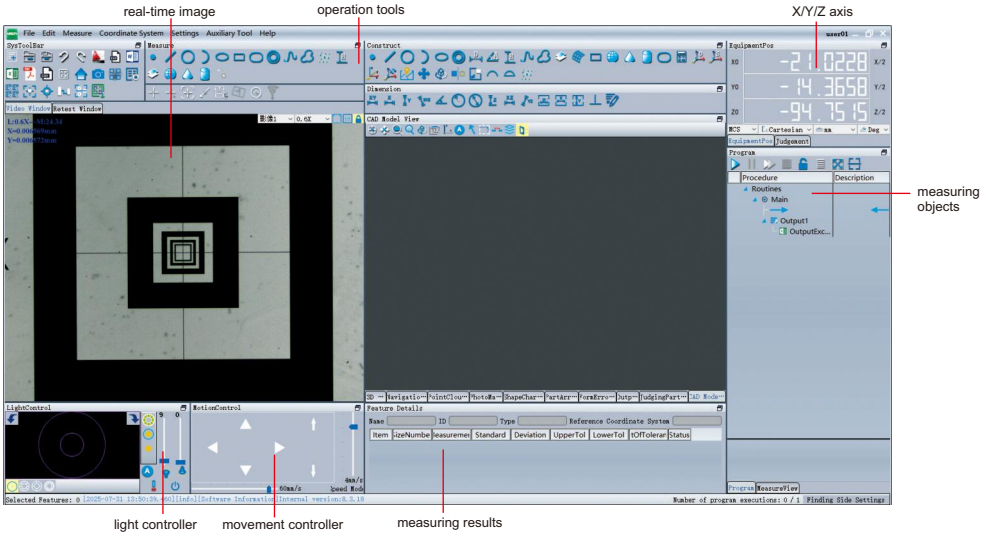
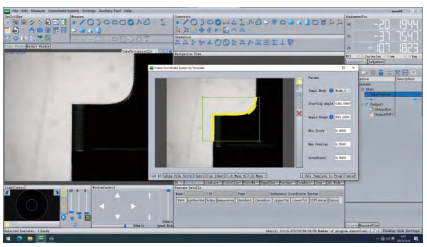
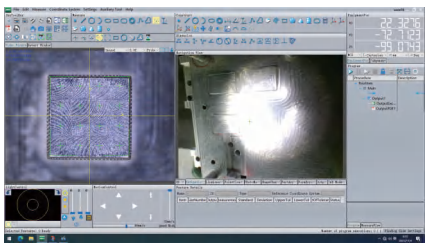
SOFTWARE (INCLUDED)

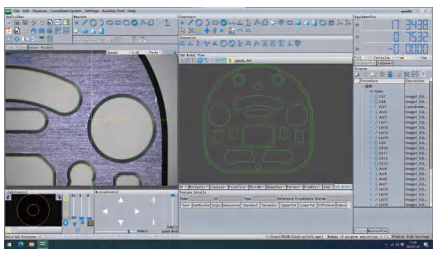




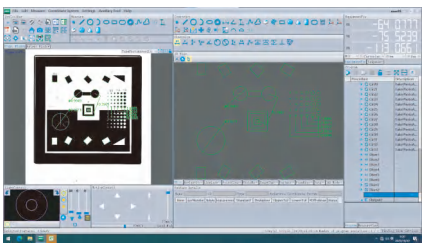
template assisted positioning function (included)
when the program runs repeatedly, as long as the positioning feature appears within the field of view, automatic measurement will be performed



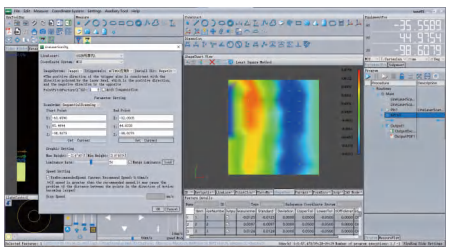
multi point autofocus function (included)
a single autofocus operation acquires height information of multi points, enabling efficient height measurement and flatness measurement



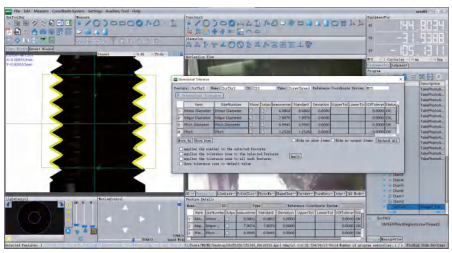
CAD import programming function (included)
import CAD drawings for quick programming



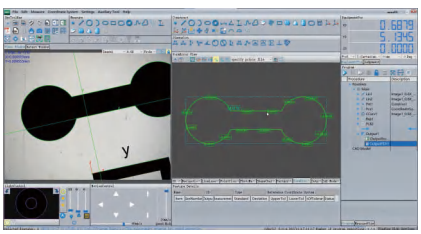
stitching software (optional)
stitching measurement for workpieces out of the field of view



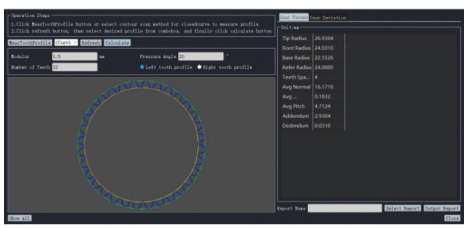
line laser sensor (**optional**)
high measurement efficiency, capturing all point data along a line segment in a single scan



thread software (**optional**)
capture thread images, extract features through edge detection and contour fitting algorithms, and calculate parameters



line profile software (**optional**)
import the theoretical profile model and calculate the profile measurement results



gear software (**optional**)
non-contact measurement technology based on optical imaging for detecting critical dimensions of gears

CNC VISION MEASURING SYSTEMS (ADVANCED TYPE)

NAVIGATION CAMERA

HIGH-RESOLUTION AUTO ZOOM LENS

INSPECTION CERTIFICATE

VIDEO

programmable segmented ring light (included)

ISD-Q1210

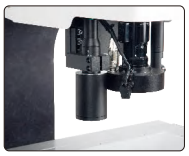
- Motorized zoom objective
- Panasonic servo control motor, with precise positioning performance in high-speed movement
- Granite body, high accuracy and stability
- RSF brand linear scales

SPECIFICATION

Code		ISD-Q542	ISD-Q1210	ISD-Q2015
Measuring range (X×Y×Z)		400×500×200mm	1000×1200×200mm	1500×2000×200mm
Glass stage size		560×630mm	1140×1370mm	1700×2260mm
Resolution of X/Y/Z axis		0.5μm		
Accuracy of X/Y axis		≤(2.5+L/200)μm (L is the measuring length in mm)		
Repeatability		2μm		
Objective		0.6X~8.0X (13.3:1 continuous zoom ratio)	0.6X~8.0X (zoom)	
Working distance		83mm		
View field (diagonal length)		0.81~10.72mm		
Magnification		27X~356X (on 23.8" monitor)		
Camera		2/3"color CCD, 5M pixel		
Max. height of workpiece		200mm		
Illumination	surface	coaxial light, three-ring eight-zone adjustable ring light		
	contour	adjustable LED light		
Operation system		Windows 10/11		
Max. weight of workpiece		35kg		
Drive method		automatic		
Environmental requirement		temperature: 20°C±5°C, relative humidity: 20%~80%, vibration: <0.002g, less than 15Hz		
Power supply		190~230V, 50Hz, 1650W	190~230V, 50Hz, 2750W	
Dimension (L×W×H)		1400×1010×1780mm	2120×1590×1780mm	3100×2120×1780mm
Net weight		825kg	2300kg	4900kg

STANDARD DELIVERY

Main unit	1 pc
Dongle	1 pc
Software	1 pc
Controller	1 pc
Lens with coaxial light	1 pc
Computer	1 pc
Calibration glass chart	1 pc
Desk	1 pc
Clay	1 pc



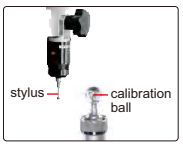
spectral confocal sensor (**optional**) measuring accuracy is 5μm

laser proble (**optional**) measuring accuracy is 4μm

OPTIONAL ACCESSORY

0.5X auxiliary objective	code: **ISD-K-OB05X**, working distance: 175mm magnification: 13.5~178X (on 23.8" monitor)
2X auxiliary objective	code: **ISD-K-OB2X**, working distance: 36mm magnification: 54~712X (on 23.8 " monitor)
Spectral confocal sensor	code: **ISD-K-SCS** (must be installed in factory)
Laser probe	code: **ISD-K-LASER** (must be installed in factory)
Probe	code: **ISD-K-PROBE**, includes Ø1mm styli and Ø2mm styli, Ø20mm calibration ball
Line laser sensor	code: **ISD-K-LINE** (must be installed in factory)
Line profile software	code: **ISD-K-LP**
Gear software	code: **ISD-K-GEAR**
Thread software	code: **ISD-K-THREAD**
Stitching software	code: **ISD-K-STITCHING**
Office software	code: **7313-OFFICE**

line laser sensor (**optional**) quick measurement of flatness, height, measuring accuracy is 10μm

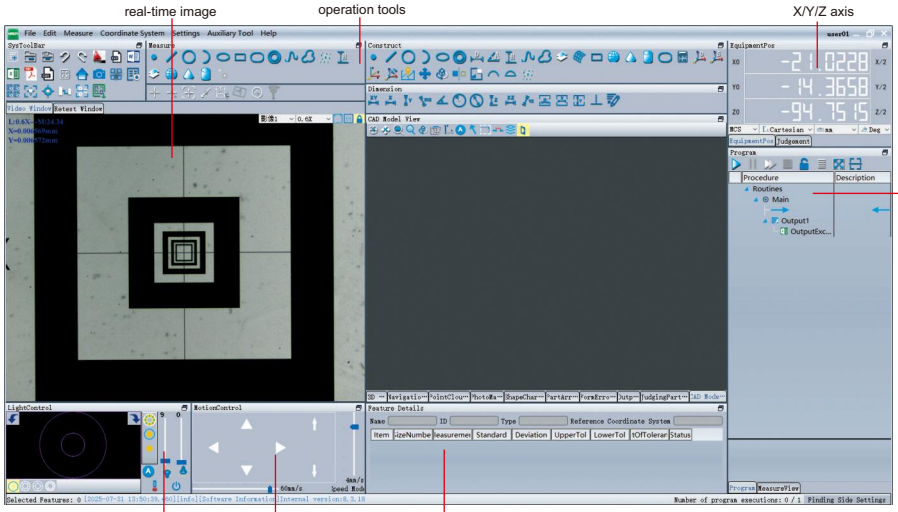


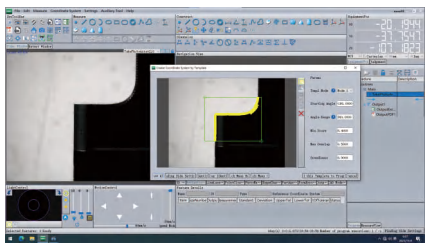
probe (**optional**), includes Ø1mm and Ø2mm styli, Ø20mm calibration ball, measuring accuracy is 5μm

To be continued

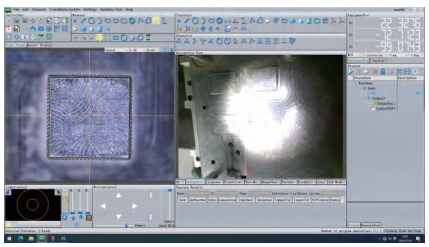
Continued from previous page

SOFTWARE (INCLUDED)

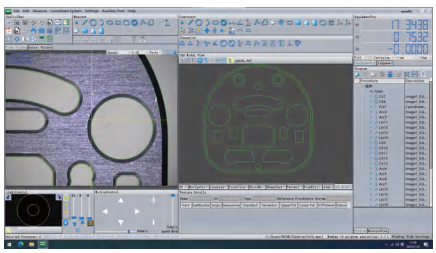




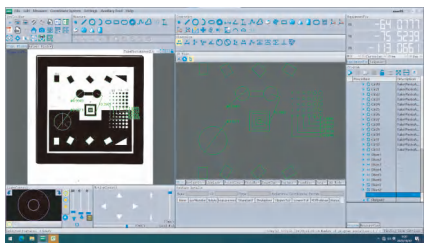
template assisted positioning function (included)
when the program runs repeatedly, as long as the positioning feature appears within the field of view, automatic measurement will be performed



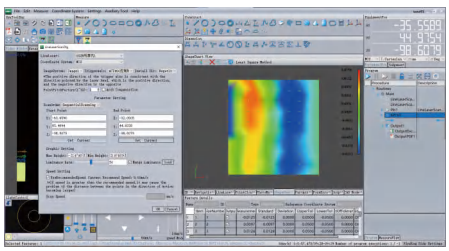
multi point autofocus function (included)
a single autofocus operation acquires height information of multi points, enabling efficient height measurement and flatness measurement



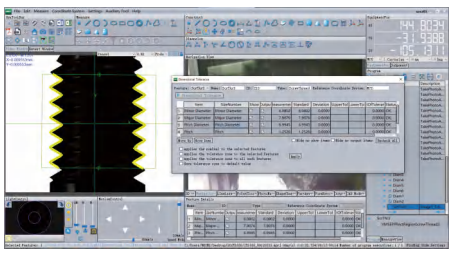
CAD import programming function (included)
import CAD drawings for quick programming



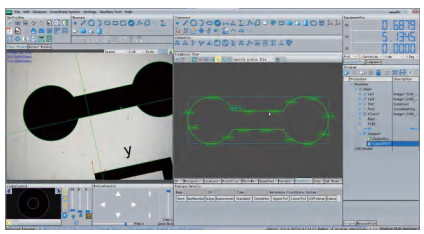
stitching software (optional)
stitching measurement for workpieces out of the field of view



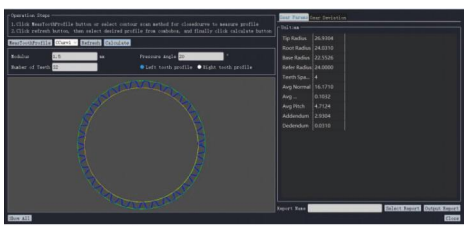
line laser sensor (**optional**)
high measurement efficiency, capturing all point data along a line segment in a single scan



thread software (**optional**)
capture thread images, extract features through edge detection and contour fitting algorithms, and calculate parameters



line profile software (**optional**)
import the theoretical profile model and calculate the profile measurement results



gear software (**optional**)
non-contact measurement technology based on optical imaging for detecting critical dimensions of gears

CNC VISION MEASURING SYSTEMS (STANDARD TYPE)

INSPECTION CERTIFICATE

- Automatic edge-detection, focus, measuring, contour scanning, calibration, etc.
- Servo motors for X, Y, Z axis
- SPC function for large quantity measurement
- Measuring software is included

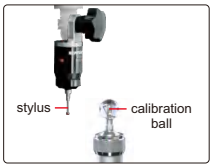
VIDEO

STANDARD DELIVERY

Main unit	1 pc
Software	1 pc
Computer	1 pc
24" display	1 pc
Len with coaxial light	1 pc
Controller	1 pc
Calibration glass chart	1 pc
Laser positioner	1 pc
Clay	1 pc
Anti-dust cover	1 pc

SPECIFICATION

Code	motorized zoom lens	ISD-V220ZA	ISD-V220ZHN	ISD-V270ZA	ISD-V270ZHN	ISD-V370ZA	ISD-V370ZHN
	manual zoom lens	ISD-V220CNCA	ISD-V220HN	ISD-V270CNCA	ISD-V270HN	ISD-V370CNCA	ISD-V370HN
Measuring range (X×Y×Z)		220×120 ×150mm	220×120 ×300mm	270×170 ×150mm	270×170 ×300mm	370×270 ×150mm	370×270 ×300mm
Stage size		450×280mm	450×280mm	500×330mm	500×330mm	606×466mm	606×466mm
Glass stage size		306×196mm	306×196mm	350×250mm	350×250mm	450×350mm	450×350mm
Resolution of X/Y/Z axis		0.5μm					
Accuracy of X/Y axis		≤(2.5+L/100)μm (L is the measuring length in mm)				≤(3.5+L/100)μm (L is the measuring length in mm)	
Repeatability of X/Y axis		2μm					
Objective		0.7X~4.5X (zoom)					
Working distance		92mm					
Magnification		33.0X~208.6X (with manual zoom lens, on 24" monitor)					
		31.9X~188.7X (with motorized zoom lens, on 24" monitor)					
Camera		giga-bit network camera					
Illumination	surface	coaxial light, programmable segmented ring light					
	contour	adjustable LED light					
View field (diagonal length)		1.5~10.8mm					
Max. height of workpiece		150mm	300mm	150mm	300mm	150mm	300mm
Max. weight of workpiece		30kg					
Operation system		Windows 7/8/10					
Drive method		automatic					
Power supply		220V, 50/60Hz					
Dimension (L×W×H)		760×600 ×900mm	760×600 ×1050mm	760×600 ×900mm	760×600 ×1050mm	970×670 ×940mm	970×670 ×1090mm
Net weight		146kg	156kg	168kg	178kg	266kg	276kg

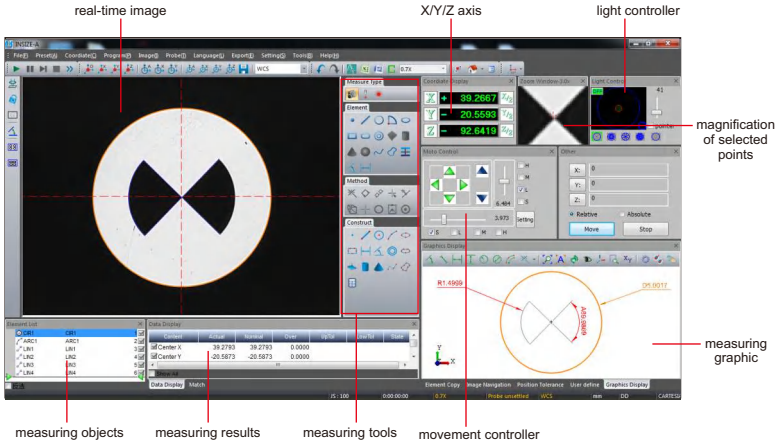


probe (**optional**), includes Ø2mm and Ø3mm styli, Ø25mm calibration ball, measuring accuracy is 10μm

laser probe (**optional**) measuring accuracy is 5μm

software flash disk (included)

SOFTWARE (INCLUDED)



OPTIONAL ACCESSORY

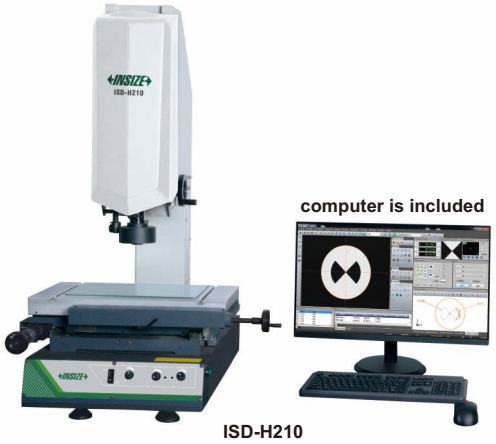
0.5X auxiliary objective	code: **ISD-V-OB05X**, working distance: 175mm magnification: 16.5~104.3X (with manual zoom lens, on 24" monitor), 16.0~94.4X (with motorized zoom lens, on 24" monitor)
2X auxiliary objective	code: **ISD-V-OB2X**, working distance: 36mm magnification: 66~417.2X (with manual zoom lens, on 24" monitor), 63.8~377.4X (with motorized zoom lens, on 24" monitor)
Probe	code: **ISD-V-PROBE**, includes Ø2mm and Ø3mm styli, Ø25mm calibration ball
Laser probe	code: **ISD-V-LASER**
Office software	code: **7313-OFFICE**

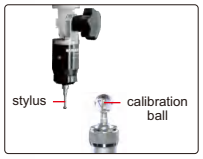
HIGH-DEFINITION MANUAL VISION MEASURING SYSTEMS

INSPECTION CERTIFICATE

VIDEO

- High-definition image
- Large view field
- Electronic magnification feedback lens: when the objective lens magnification is changed manually, the software automatically selects the corresponding pre-calibration data and calibration is not needed





probe (**optional**), includes Ø2mm and Ø3mm styli, Ø25mm calibration ball, measuring accuracy is 10μm

lens with coaxial light (**optional**, must be installed in factory)

STANDARD DELIVERY

Main unit	1 pc
Computer	1 pc
Calibration glass chart	1 pc
Clay	1 pc
Foot switch	1 pc
Anti-dust cover	1 pc

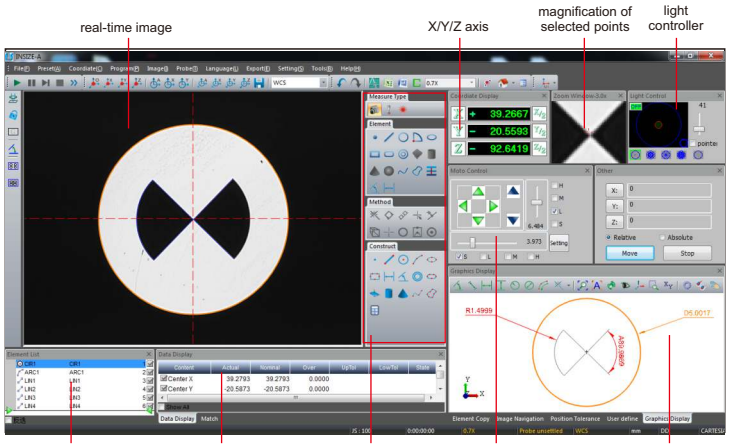
SPECIFICATION

Code	**ISD-H210**	**ISD-H320**	**ISD-H430**
Measuring range (X×Y×Z)	200×100×150mm	300×200×150mm	400×300×150mm
Stage size	404×228mm	500×330mm	606×466mm
Glass stage size	260×160mm	350×250mm	450×350mm
Resolution of X/Y/Z axis	0.5μm		
Accuracy of X/Y axis	≤(2.5+L/100)μm (L is the measuring length in mm)		
Repeatability of X/Y axis	2μm		
Objective	0.58X~7.5X (zoom)		
View field (diagonal length)	1.4mm~14mm		
Working distance	82mm		
Magnification	27.4X~351X (on 24" monitor)		
Camera	giga-bit network camera		
Illumination	surface and contour with adjustable LED		
Max. height of workpiece	150mm		
Max. weight of workpiece	20kg		
Operation system	Windows 7/8/10		
Drive method	manual		
Power supply	110~240V, 50/60Hz		
Dimension (L×W×H)	540×560×850mm	760×600×900mm	970×670×940mm
Net weight	110kg	140kg	240kg

OPTIONAL ACCESSORY

0.5X auxiliary objective	code: **ISD-H-OB05X** working distance: 155mm, magnification: 13.7~175.5X (on 24" monitor)
2X auxiliary objective	code: **ISD-H-OB2X** working distance: 34.5mm, magnification: 54.8~702X (on 24" monitor)
Probe	code: **ISD-V-PROBE** includes Ø2mm and Ø3mm styli, Ø25mm calibration ball
Vision measuring system with coaxial light lens	code: **ISD-H210CL, ISD-H320CL, ISD-H430CL**
Office software	code: **7313-OFFICE**

SOFTWARE (INCLUDED)



MANUAL VISION MEASURING SYSTEMS (STANDARD TYPE)

INSPECTION CERTIFICATE

VIDEO

computer is included

ISD-V250A

OPTIONAL ACCESSORY

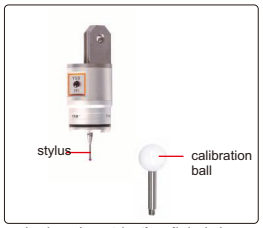
0.5X auxiliary objective	code: **ISD-V-OB05X** working distance: 175mm magnification: 14.5~92X (on 21.5" monitor)
2X auxiliary objective	code: **ISD-V-OB2X** working distance: 36mm magnification: 58~368X (on 21.5" monitor)
Standard probe set (RENISHAW)	code: **ISD-V-PROBE** includes Ø2mm and Ø3mm styli, Ø25mm calibration ball
Basic probe set	code: **ISD-V-PROBE1** includes Ø1mm, Ø2mm, Ø3mm styli, Ø25mm calibration ball
Vision measuring system with coaxial light lens (with computer)	code: **ISD-V150ACL, ISD-V150HCL** **ISD-V250ACL, ISD-V250HCL** **ISD-V300ACL, ISD-V300HCL** **ISD-V400ACL, ISD-V400HCL**
Office software	code: **7313-OFFICE**

SPECIFICATION

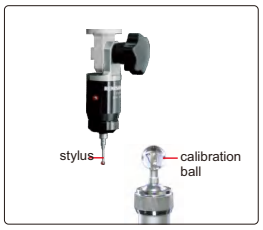
Code	ISD-V150A	ISD-V250A	ISD-V300A	ISD-V400A
Measuring range (X×Y×Z)	150×100×150mm	250×150×150mm	300×200×150mm	400×300×150mm
Stage size	354×228mm	450×280mm	500×330mm	606×466mm
Glass stage size	210×160mm	306×196mm	350×250mm	450×350mm
Resolution of X/Y/Z axis	0.5μm			
Accuracy of X/Y axis	≤(2.5+L/100)μm (L is the measuring length in mm)			
Repeatability of X/Y axis	2μm			
Objective	0.7X~4.5X (zoom)			
Working distance	92mm			
Magnification	29X~184X (on 21.5" monitor)			
Camera	1/3" color CCD, 0.3M pixel			
Illumination	surface and contour with adjustable LED			
Max. height of workpiece	150mm			
Max. weight of workpiece	20kg			
Operation system	Windows 10/11			
Drive method	manual			
Power supply	110/220V, 50/60Hz			
Dimension (L×W×H)	560×540×850mm	760×600×900mm	760×600×900mm	970×670×940mm
Net weight	100kg	120kg	140kg	240kg

Code	ISD-V150H	ISD-V250H	ISD-V300H	ISD-V400H
Measuring range (X×Y×Z)	150×100×300mm	250×150×300mm	300×200×300mm	400×300×150mm
Stage size	354×228mm	450×280mm	500×330mm	606×466mm
Glass stage size	210×160mm	306×196mm	350×250mm	450×350mm
Resolution of X/Y/Z axis	0.5μm			
Accuracy of X/Y axis	≤(2.5+L/100)μm (L is the measuring length in mm)			
Repeatability of X/Y axis	2μm			
Objective	0.7X~4.5X (zoom)			
Working distance	92mm			
Magnification	29X~184X (on 21.5" monitor)			
Camera	1/3" color CCD, 0.3M pixel			
Illumination	surface and contour with adjustable LED			
Max. height of workpiece	300mm			
Max. weight of workpiece	20kg			
Operation system	Windows 10/11			
Drive method	manual			
Power supply	110/220V, 50/60Hz			
Dimension (L×W×H)	560×540×1000mm	760×600×1050mm	760×600×1050mm	970×670×1090mm
Net weight	110kg	130kg	150kg	250kg

lens with coaxial light (**optional**, must be installed in factory)



basic probe set (**optional**), includes Ø1mm, Ø2mm, Ø3mm styli, Ø25mm calibration ball, measuring accuracy is 10μm



standard probe set (**optional**), includes Ø2mm and Ø3mm styli, Ø25mm calibration ball, measuring accuracy is 10μm

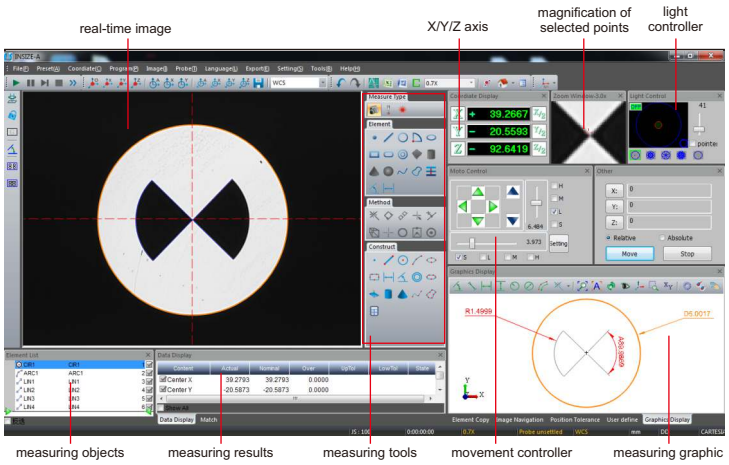
STANDARD DELIVERY

Main unit	1 pc
Computer	1 pc
Calibration glass chart	1 pc
Clay	1 pc
Foot switch	1 pc
Anti-dust cover	1 pc

To be continued

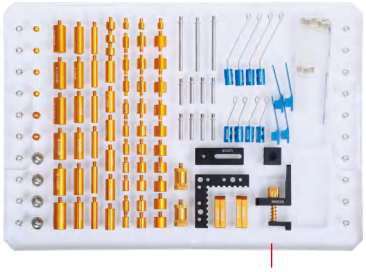
Continued from previous page

SOFTWARE (INCLUDED)

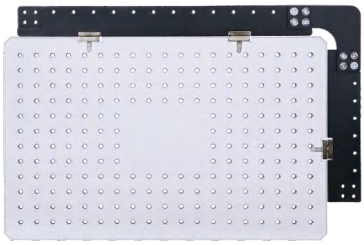


113-PIECE JIG SET FOR VISION MEASURING SYSTEMS CODE ISY-700

VIDEO

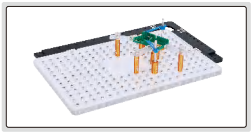


acrylic tray (included)



ISY-700

application example



Product	Code	Size (mm)	Quantity
clip	ISY-700-90001	7×34	4
clip	ISY-700-90002	Ø1.5×24	4
	ISY-700-90003	Ø1.5×50	4
clip stand	ISY-700-90004	Ø4×20	8
	ISY-700-90005	Ø4×46	3
spherical support head	ISY-700-90006	—	4
stand	ISY-700-90007	Ø6×10	6
	ISY-700-90008	Ø6×25	6
	ISY-700-90019	Ø6×6	3
stand	ISY-700-90009	Ø9×7	3
	ISY-700-90010	Ø9×10	6
	ISY-700-90011	Ø9×20	6
	ISY-700-90012	Ø9×25	6
stand	ISY-700-90013	Ø12×10	6
	ISY-700-90014	Ø12×25	6
stand for slice parts	ISY-700-90015	Ø6×10	4
	ISY-700-90016	Ø9×10	4
	ISY-700-90017	Ø12×10	4
stand with fine adjustment	ISY-700-90018	Ø12×20~25	2

Product	Code	Size (mm)	Quantity
adapter for square support	ISY-700-90020	—	2
clamping screw	ISY-700-90021	—	4
L-shaped positioning plate	ISY-700-90022	50×50×6	1
sliding support plate	ISY-700-90023	30×12×5	4
square support	ISY-700-90024	20×16×16	1
base for square support	ISY-700-90025	45×16×6	1
spring stand	ISY-700-90026	—	1
acrylic sliding support plate	ISY-700-90028	45×12×5	8
wrench	ISY-700-90029	M3	1
acrylic base plate	ISY-700-90030	300×200×12 hole size: M4×0.7	1

TOOL PRESETTER
CODE ISP-A350

INSIZE PLUS

CHECK, PRESET AND MEASURE CUTTING TOOLS

AUTOMATIC RECOGNITION OF CUTTING EDGE SHAPES

DATA OUTPUT

VIDEO

attach the printed label on the tool

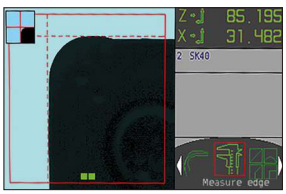
ISO/SK/BT50 to HSK63 A/C/E, HSK80 B/D/F converter (**optional**)

ISO/SK/BT50 to ISO/SK/BT40 converter (**optional**)

- Check, preset and measure cutting tools
- Telecentric lens CCD camera system
- Use Bosch or Festo pneumatic components, THK guide ways and HEIDENHAIN scales
- Built-in 104 cutting edge shapes, automatic recognition
- Measuring modes: absolute, relative and incremental measurement
- Measuring radius, angle, concentricity, axial runout, etc.
- Storage of 1000 tool parameters
- View, print and export measurement results

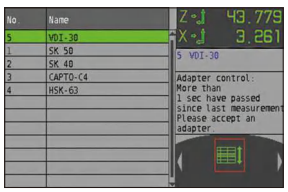
SPECIFICATION

Maximum tool diameter (X axis)		320mm
Maximum tool height (Z axis)		350mm
Repeatability	X axis	2μm
	Z axis	2μm
X/Z axis resolution		1μm
Camera		color CCD
Image processing accuracy		1μm
Magnification		12X
View field		7×7mm
Illumination		adjustable LED light
Spindle		ISO/SK/BT50 (concentricity 2μm)
Data output		USB, RS232
Working air pressure		0.6~0.8MPa
Environmental requirement		temperature: 5~35°C
		relative humidity: 10%~95%
Power supply		100~240V, 50/60Hz
Dimension (L×W×H)		1900×750×1650mm
Net weight		170kg



automatic recognition of cutting edge shapes

scan and measure the maximum profile of the cutting tool



can store 99 sets of converter parameters and automatically prompt to check the zero position at fixed time

check cutting edge wear

OPTIONAL ACCESSORY

ISO/SK/BT50 to ISO/SK/BT40 converter	ISP-A350-C1
ISO/SK/BT50 to ISO/SK/BT30 converter	ISP-A350-C5
ISO/SK/BT50 to HSK100 A/C/E, HSK120 B/D/F converter	ISP-A350-C8
ISO/SK/BT50 to HSK80 A/C/E, HSK100 B/D/F converter	ISP-A350-C7
ISO/SK/BT50 to HSK63 A/C/E, HSK80 B/D/F converter	ISP-A350-C2
ISO/SK/BT50 to HSK50 A/C/E, HSK63 B/D/F converter	ISP-A350-C3
ISO/SK/BT50 to HSK40 A/C/E, HSK50 B/D/F converter	ISP-A350-C4
ISO/SK/BT50 to HSK32 A/C/E, HSK40 B/D/F converter	ISP-A350-C6
Spindle vacuum clamping	ISP-A350-VC
Printer label paper	ISP-A350-TAB

STANDARD DELIVERY

Main unit	1 pc
Controller	1 pc
ISO/SK/BT50 spindle (including 360° clamping and 4×90° clamping	1 pc
Printer	1 pc
Printer label paper	1 pc

TOOL PRESETTER (PROJECTOR TYPE)
CODE TLP-P340B

VIDEO

BT50/BT40 converter
(**optional**)

standard rod (included)

BT50/BT30 converter
(**optional**)

SPECIFICATION

Maximum tool diameter (X axis)		Ø300mm
Height measuring range (Z axis)		45~450mm
Accuracy	X axis	±6μm
	Z axis	±13μm
Resolution		0.5μm
Diameter of projection screen		Ø120mm
Lens	magnification	20X
	view filed	Ø6mm
Illumination		3W LED
Spindle holder		BT50
Working air pressure		0.6MPa
Power supply		110/220V, 50/60Hz
Dimension (L×W×H)		690×620×922mm
Net weight		160kg

STANDARD DELIVERY

Main unit	1 pc
BT50 spindle holder	1 pc
Standard rod	1 pc
Foot-switch	1 pc
Anti-dust cover	1 pc

OPTIONAL ACCESSORY

BT50/BT30 converter	TLP-P340B-C1
BT30 rod	TLP-P340B-R1
BT50/BT40 converter	TLP-P340B-C2
BT40 rod	TLP-P340B-R2
Printer	TLP-P340B-PRINTER

TOOL PRESETTER (BASIC TYPE)
CODE TLP-300H

VIDEO

rotate tools

standard rod (included)

SPECIFICATION

Maximum tool diameter (X axis)	Ø300mm
Height measuring range	60~300mm
Repeatability	0.005mm
Measuring accuracy	0.02mm
Linear scale resolution	0.005mm
Dial indicator graduation	0.01mm
Spindle holder	BT50
Power supply	110/220V, 50/60HZ
Dimension (L×W×H)	600×365×690mm
Net weight	68kg

STANDARD DELIVERY

Main unit	1 pc
BT50 spindle holder	1 pc
Standard rod	1 pc
Dial indicator	2 pcs
Wrench	1 set
Anti-dust cover	1 pc

OPTIONAL ACCESSORY

BT50/BT30 converter	TLP-300H-C1
BT50/BT40 converter	TLP-300H-C2

- Absolute linear scales, zero setting is not needed after power on and off

BT50/BT40 converter (**optional**)

BT50/BT30 converter (**optional**)

TOOL PRESETTER
CODE TLP-A100

VIDEO

VACUUM CLAMPING

- Vacuum clamping function
- Measurement of cutting tools runout with precision dial indicator
- Measurement of cutting tools length with height gauge
- Conveniently adjust settings for close-toothed cutting tools, boring cutting tools, etc.

application

measurement of cutting tools runout with precision dial indicator

measurement of cutting tools length with height gauge

pressure regulating valve (included)

SPECIFICATION

Max. tool diameter	Ø160mm
Max. tool height	300mm
Spindle	BT50
Spindle accuracy	0.005mm
Working air pressure	0.4~0.6MPa
Dimension (L×W×H)	425×220×225mm
Net weight	37.5kg

STANDARD DELIVERY

Main unit	1 pc
BT50 spindle	1 pc
Pressure regulating valve	1 pc
Cleaning rod	1 pc
Air ducts	1 pc

OPTIONAL ACCESSORY

BT40 spindle	TLP-A100-S1
BT30 spindle	TLP-A100-S2

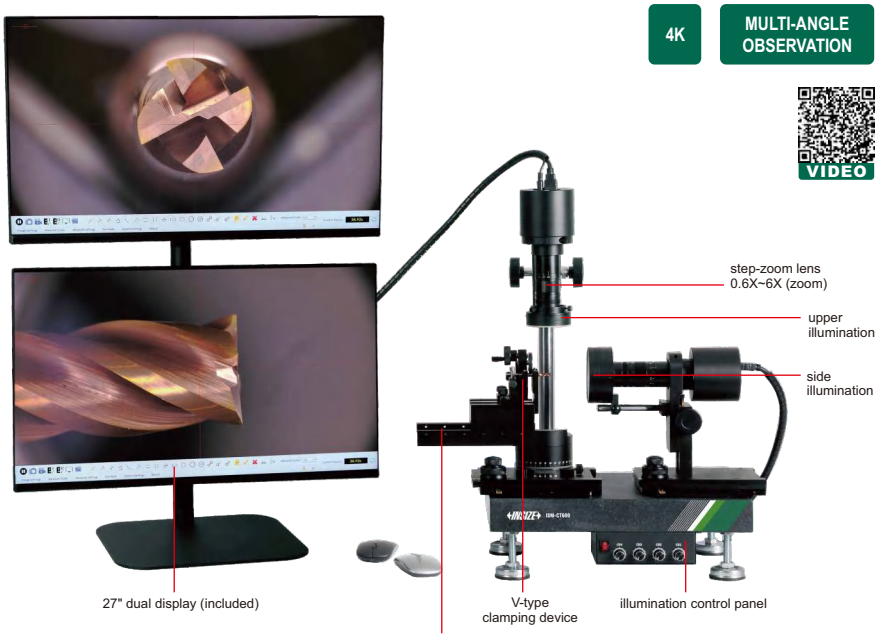
DUAL-DISPLAY CUTTING TOOLS MICROSCOPE CODE ISM-CT600

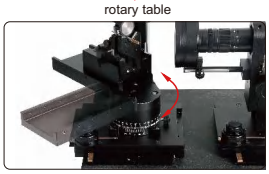
4K

MULTI-ANGLE OBSERVATION

VIDEO

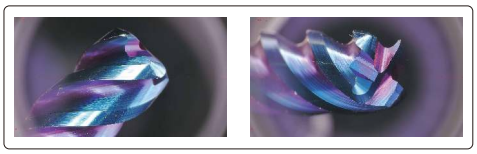
- 27" dual display, 4K high-definition image
- With a rotary slide table for multi-angle tool observation
- Display cross hairs
- Measure point, line, circle, parallel lines, angle, etc
- Take pictures and videos, saved to USB flash disk



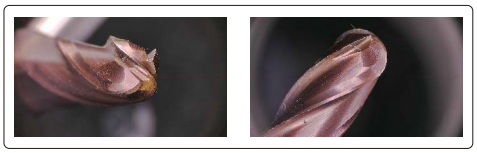


Multi-angle observation of various cutting tools

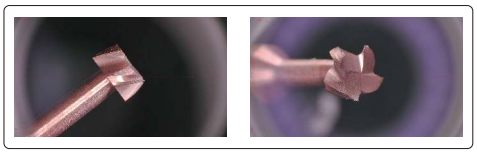
milling cutter



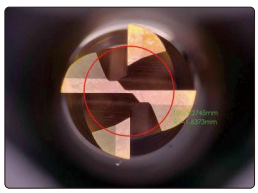
round-nose cutter



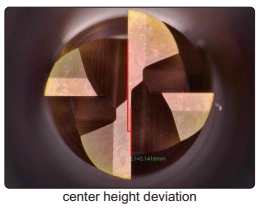
ball cutter



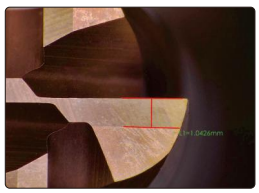
slot milling cutter



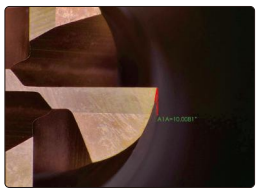
core thickness



center height deviation

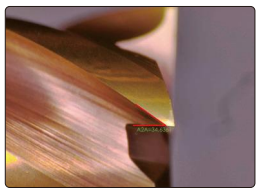


rear blade width

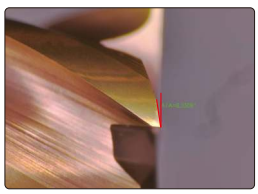


the first rear corner of peripheral flute

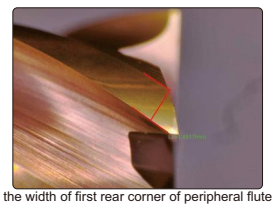
the second rear corner of peripheral flute



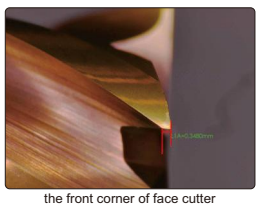
helix angle



the first rear corner of face cutter



the width of first rear corner of peripheral flute



the front corner of face cutter

SPECIFICATION

Cutting tools range	Ø3~20mm, length 20~60mm
Lens	step-zoom lens (0.6X~6X)*
Resolution	3840×2160
View field	1.4×2.5~14×25mm
Focus distance	80mm
Magnification	23X~230X (on 27" monitor)
Measuring accurary	±0.02mm
Output	HDMI/USB
Rotary table	sliding distance: 90mm, rotation range: 0~220°
Power supply	100~240V, 50/60Hz
Dimension (L×W×H)	1150×400×880mm
Net weight	43kg

*When lens magnification is 0.6X~1X, measurement is not recommended

STANDARD DELIVERY

Main unit	1 pc
Display	2 pcs
Mouse	2 pcs
Glass calibration plate	1 pc
HDMI cable	2 pcs

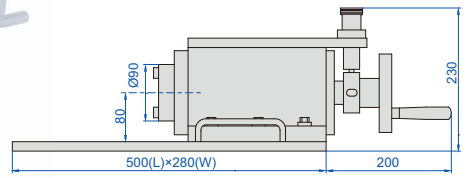
SHANK RUNOUT TESTERS

VIDEO

- Measure the radial runout of shanks, collets and cutting tools
- Optional accessory: dial test indicator, magnetic stand

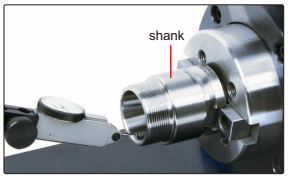
Code	Taper	Accuracy
4771-30	BT30	1μm
4771-40	BT40	1μm
4771-50	BT50	1μm

4771-30

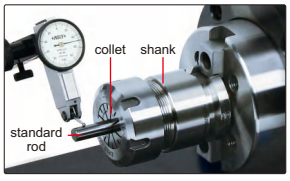


standard shank (included)

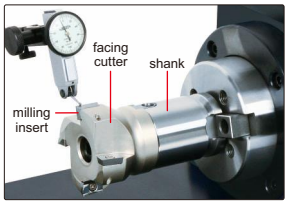
measure radial runout of shank



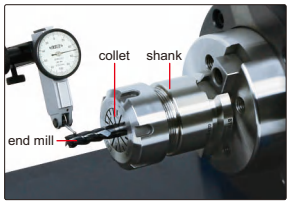
measure radial runout of collet



measure radial runout of cutter



measure radial runout of end mill



LARGE DEPTH OF FIELD 3D MEASURING MICROSCOPE (ADVANCED TYPE) CODE ISM-H5000

STEREOSCOPIC 3D IMAGING | IMAGE STITCHING | MOTORIZED XYZ AXIS | 2D/3D MEASUREMENT | MAGNIFICATION 30~6000X | MOTORIZED ZOOM LENS | MAP NAVIGATION

VIDEO

controller

computer (included)

side camera shows the relationship between the lens and the workpiece, reducing the risk of collision

- High definition telecentric imaging lens
- Auto focus
- 4 motorized switching objectives
- Split-screen display
- Rotatable stage
- Take picture and video
- Multiple illumination options for different products and scenarios
- Elimination of reflections and dark field halos, HDR, optical shadows
- Automatic stitching for large field view and measurement after stitching
- Measurements can be saved in reports and exported

tiltable observation

STANDARD DELIVERY

Main unit	1 pc
Computer	1 pc
Glass calibration plate	1 pc
Anti-dust cover	1 pc
16G USB flash disk	1 pc

To be continued

Continued from previous page

SPECIFICATION

Magnification		30X~6000X
		(30X, 40X, 50X, 80X, 100X, 150X, 200X, 300X, 300X, 400X, 500X, 700X, 1000X, 1500X, 2000X, 2500X, 4000X, 5000X, 6000X) 5000X and 6000X are digital magnification
Objective		1.5X, 5X, 20X, 50X
Horizontal resolution		0.42μm
Maximum depth of field		30mm
Working distance		2~30mm
Max. height of workpieces		90mm
View field		50.60×38.00μm~9977.30×7483.00μm
Accuracy		±(0.5+0.005L)μm (L is measuring length or height in μm)
Illumination		bright field (full/zoned), dark field (full/zoned), hybrid lighting, projected lighting
Light source life		LED, life span about 40,000 hours
Maximum viewable pixel size		2D: 5 billion pixels, 3D: 2.5 billion pixels
Tilting angle range		-89°~+89°
Camera	sensor	1/1.7"CMOS
	pixel	12.22M (4168×3062)
	frame rate	30fps
	resolution	quick: 2048×1536, standard: 2880×2160, high resolution: 4000×3000, high definition: 8000×6000/12000×9000
Display	size	27"
	screen size	596.736×335.664mm
	pixel pitching	0.1554×0.1554mm
	resolution	3840×2160
Motorized stage	movement axis	X/Y/θ axis
	range	40mm×40mm
	size	228mm×204mm
	moving speed	10mm/s
	resolution	1μm
	θ angle of rotation	-90°~+90
	max. weight of workpiece	5kg
Upper Z-axis	control mode	motorized
	moving speed	16.5mm/s
	resolution	0.1μm
	range	50mm
Lower Z-axis	control mode	motorized
	resolution	1μm
	moving speed	6mm/s
	range	50mm
Power supply		220V
Dimension (L×W×H)		600×320×710mm
Net weight		70kg

SOFTWARE FUNCTION

Imaging	2D imaging, 3D imaging
	adjustable elimination of reflection
	adjustable elimination of ring halos
	HDR, adjustable brightness/contrast/color difference
	optical shadow
	jitter correction
	2D stitching, 3D stitching
	fast 3D synthesis, high precision 3D synthesis
	chromatogram height
Measuring	stitching measurement
	plane measurement (distance/angle/radius/area, automatic edge detection, scale display)
	3D measurement (point height/profile etc.)
File	take and save pictures, videos
	export report to Excel

COMPUTER SOFTWARE (INCLUDED)

LARGE DEPTH OF FIELD 3D MEASURING MICROSCOPE
CODE 5324-K210

AUTO FOCUS

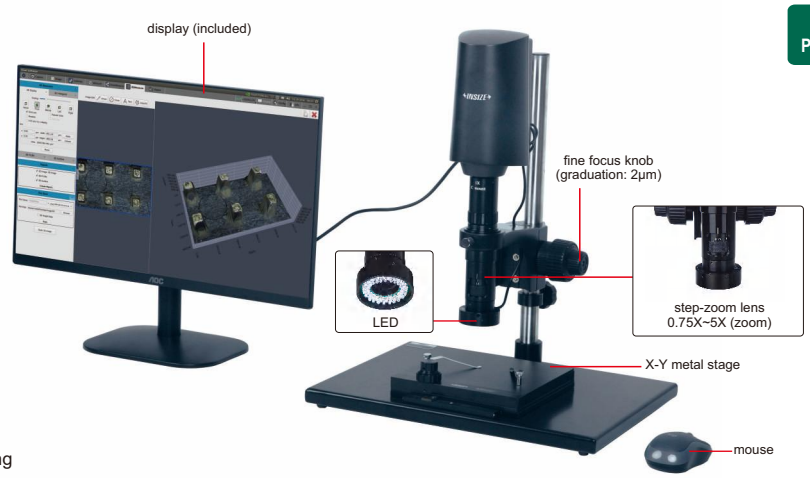
BUILT-IN SOFTWARE WITHOUT COMPUTER

STEREOSCOPIC 3D IMAGING

ROTATABLE OBSERVATION

PLANE MEASUREMENT AND PROFILE HEIGHT MEASUREMENT

VIDEO



- Auto focus camera
- Built-in motor, automatic focus stacking
- PDF report can be exported
- Fast generation of large depth of field images
- Plane measurement and profile height measurement

SPECIFICATION

Sensor	1/2" CMOS
Pixel	2M
Resolution	1920x1080
Magnification	100~750X
Z-axis measurement range	2mm
View field	0.6x0.32~4.5x2.5mm
Working distance	30~40mm
Frame rate	60fps
Plane measuring accuracy	±8μm
Output	HDMI/LAN
Power supply	power adapter
Dimension (L×W×H)	570×300×430mm
Net weight	10kg

STANDARD DELIVERY

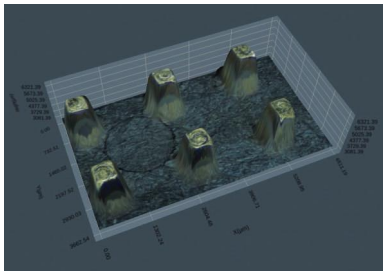
Main unit	1 pc
X-Y metal stage	1 pc
Mouse	1 pc
Keyboard	1 pc
Power adapter	3 pcs
Glass calibration ruler	1 pc
Calibration block	1 set
16G USB flash disk	1 pc

PROFILE HEIGHT MEASUREMENT ACCURACY

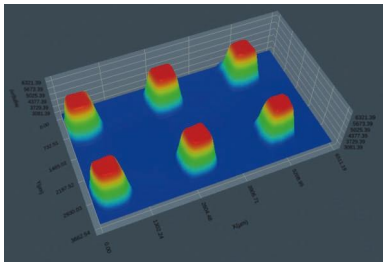
Objective magnification	Measuring range	Measuring accuracy
1.5X	2000μm	±20μm
2X	1200μm	±10μm
2.5X	800μm	±10μm
3X	600μm	±6μm
3.5X	400μm	±5μm
4X	320μm	±5μm
4.5X	250μm	±5μm
5X	200μm	±3μm

*Measurement of profile height at 0.75X and 1X is not recommended

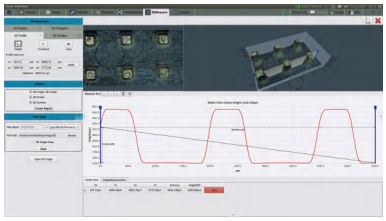
SOFTWARE (INCLUDED)



constructing stereoscopic 3D imaging that can be dragged and rotated for viewing



the chromatogram height clearly shows the difference in three-dimensional height

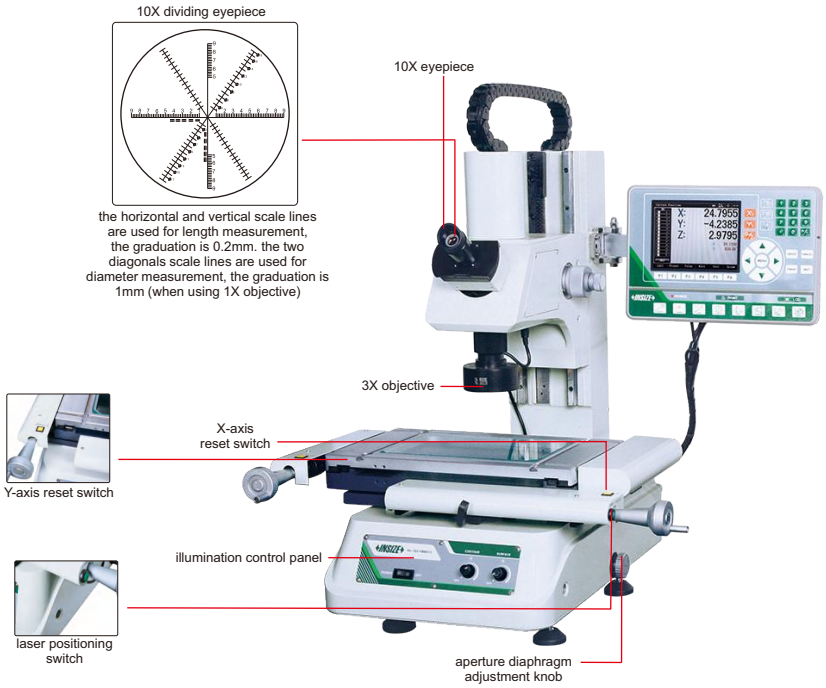


fast measurement of profile height difference

TOOLMAKER MICROSCOPE
CODE ISD-VMM215D

INSPECTION CERTIFICATE

VIDEO



ISD-VMM215D

SPECIFICATION

Code	**ISD-VMM215D** (binocular)
X/Y axis travel	200×100mm
Z axis travel	150mm
Metal stage size	404×228mm
Glass stage size	260×160mm
Resolution of X/Y/Z axis	0.5μm
Accuracy of X/Y axis	≤(3.5+L/100)μm (L is the measuring length in mm)
Repeatability	2μm
Optical magnification	30X (with 3X objective)
Illumination	surface and contour with adjustable LED
Max. weight of workpiece	25kg
Power supply	100V~240V, 50/60Hz
Drive method	manual
Dimension (L×W×H)	540×667×850mm
Net weight	110kg

DATA PROCESSING UNIT

Output	RS232
Function	simple measuring tools measure coordinate of points measure lines measure center coordinate, radius of circle with three points measure distances betwen two objects measure angles set origin of coordinate skew and calibrate the workpiece measure rectangle (including length, width, perimeter and center coordinate) measure thread (including thread diameter, screw pitch, screw angle) measure slot (including center coordinate, length, width)

STANDARD DELIVERY

Main unit	1 pc
Calibration glass chart	1 pc
Demo sample	1 pc
Foot switch	1 pc
3X objective	1 pc

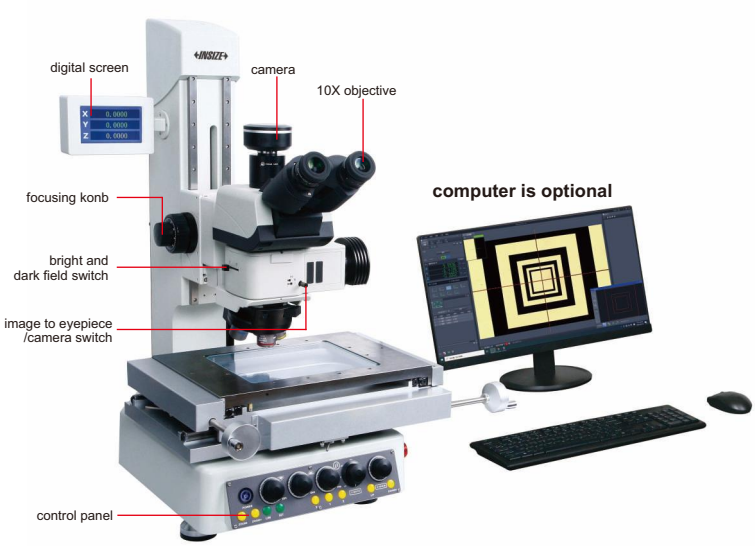
OPTIONAL ACCESSORY

1X objective	**ISD-VMM-LENS1X**
5X objective	**ISD-VMM-LENS5X**
10X objective	**ISD-VMM-LENS10X**

HIGH MAGNIFICATION TOOLMAKER MEASURING MICROSCOPES (ADVANCED TYPE)

INSPECTION CERTIFICATE

VIDEO



ISD-TM215

- For precision measurement and observation of industrial devices
- ECGO infinite chromatic aberration correction optical system
- High-density super power white LED chip array, high color rendering index, long life
- High precision linear scales
- Adopting motorized objective lens switching and supporting light intensity management
- Motorized Z-axis and focusing assist are included
- Measuring software is included, in-field image direct measurement, quick reading, out of image measurement for large workpieces, accurate measurement through image point selection, vectorlayer construction

SPECIFICATION

Code	ISD-TM215	ISD-TM320	ISD-TM330	ISD-TM430
X/Y axis travel	200×150mm	300×200mm	300×300mm	400×300mm
Metal stage size	400×280mm	500×350mm	500×450mm	600×450mm
Glass stage size	245×192mm	350×250mm	350×300mm	450×300mm
Z axis travel	210mm			
Z axis drive method	manual coarse and fine adjustment, motorized coarse and fine adjustment			
Resolution of X/Y/Z axis	0.1μm			
Accuracy of X/Y axis	≤(2.5+L/50)μm (L is the measuring length in mm)			
Repeatability of X/Y axis	2μm			
Optical magnification	50X~500X (up to 1000X with optional 100X objective)			
Digital magnification	150X~1500X (on 23.8" monitor), up to 3000X with optional 100X objective			
Eyepiece	large field SWH10X-H (view field: 25mm, adjustable visibility), with crossline			
Illumination	critical/kohler Illumination, supporting bright field, polarized light, dark field and other lighting methods			
Observation tube	15~45° adjustable, inverse image, distance adjustable: 45~78mm, 0/100, 100/0 binocular			
Diopter adjustment	±5 diopter (two eyepieces)			
Max. weight of workpiece	30kg			
Power supply	110~220V, 50/60Hz			
Dimension (L×W×H)	675×645×785mm	680×645×785mm	680×645×785mm	780×750×820mm
Net weight	125kg	150kg	185kg	215kg

To be continued

Continued from previous page

OBJECTIVES SPECIFICATION

Objective (flat field semi apochromatic)	5X (included)	10X (included)	20X (included)	50X (included)	100X (**optional**)
Illumination	coaxial vertical light, bright and dark field				
Working distance	15.0mm	8.5mm	11.9mm	8mm	3.0mm
Depth of field range	12.27μm	3.06μm	1.72μm	1.00μm	0.43μm
Visible range	5.3mm	2.65mm	1.32mm	0.53mm	0.26mm
Numerical aperture	0.15	0.3	0.4	0.55	0.8

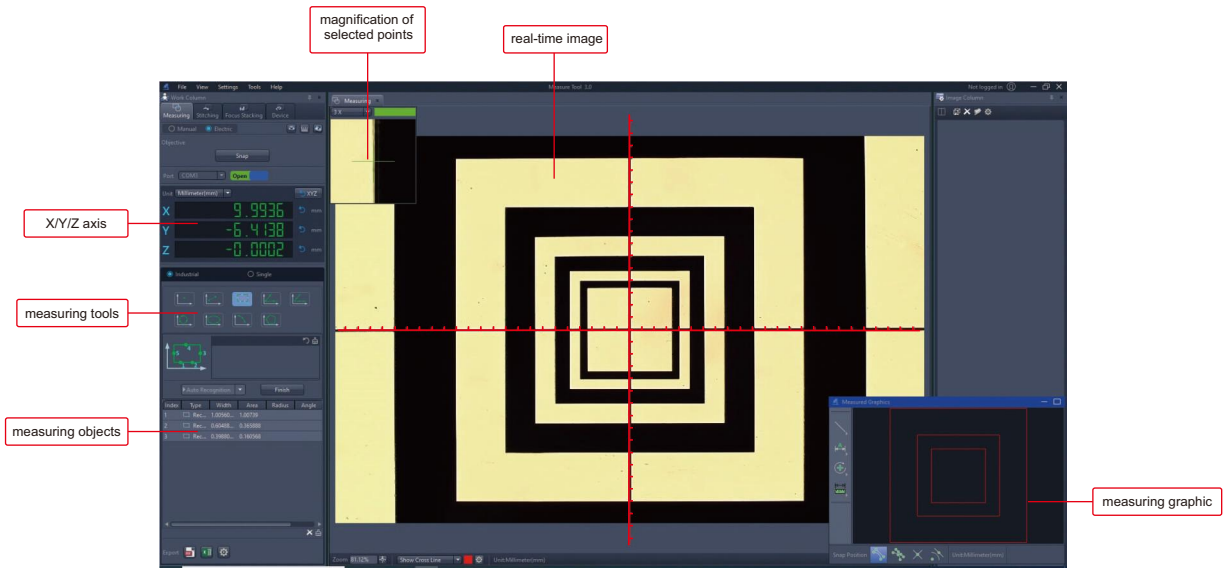
STANDARD DELIVERY

Main unit	1 pc
Anti-dust cover	1 pc
0.63X camera adapter (adjustable focus)	1 pc
Camera (20M pixels)	1 pc

OPTIONAL ACCESSORY

Glass calibration ruler	ISM-MAS-SCALE
100X objective	ISD-TM-100X
Polarizer	ISD-TM-PO
Analyzer	ISD-TM-AN
Differential interference module (DIC)	ISD-TM-DIC
Computer	ISD-TM-COMPUTER-E

MEASURING SOFTWARE (INCLUDED)

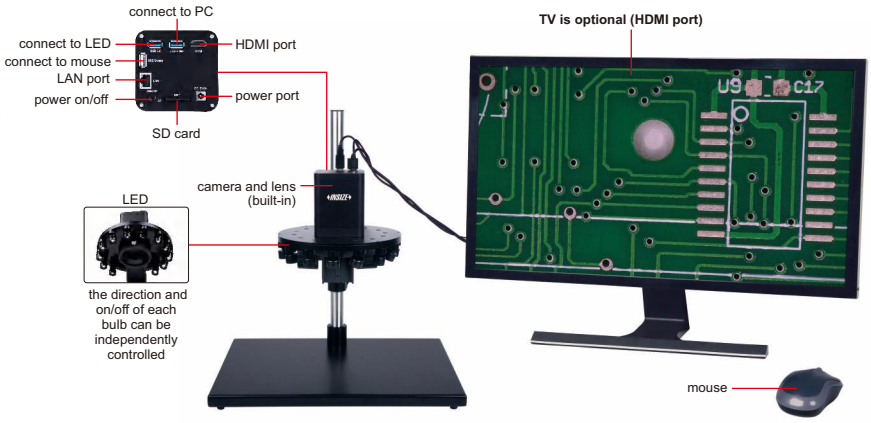


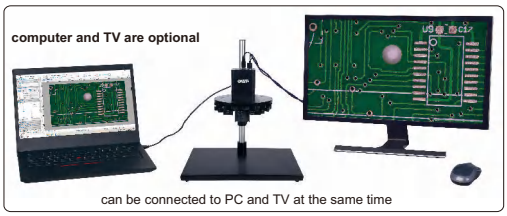
HIGH-DEFINITION AUTO FOCUS DIGITAL MICROSCOPE (LARGE VIEW FIELD)
CODE 5320-AF410

VIDEO

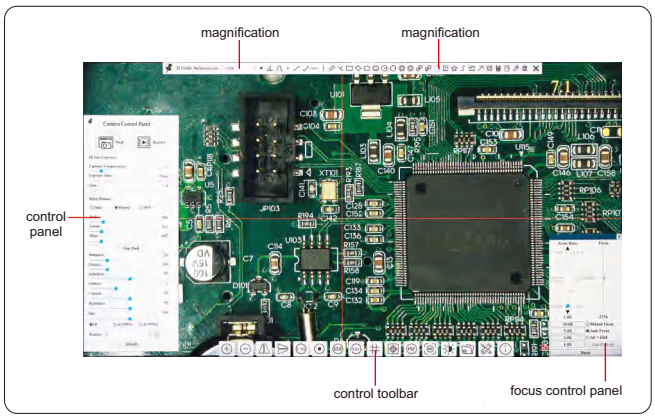
AUTO FOCUS | AUTOMATIC MEASUREMENT | FOCUS STACKING | DXF IMPORT

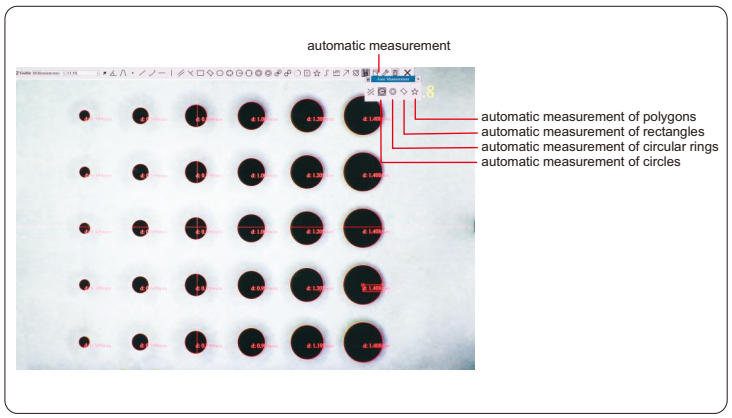
- Auto focus camera
- Take pictures and videos
- Built-in measuring software
- Automatic exposure, sharpening, denoising and white balance
- 4K/1080P automatically switched by display resolution
- Display actual magnification
- Digital magnification
- Motorized light control
- Display cross hair and gridline
- Confirm camera's MAC address



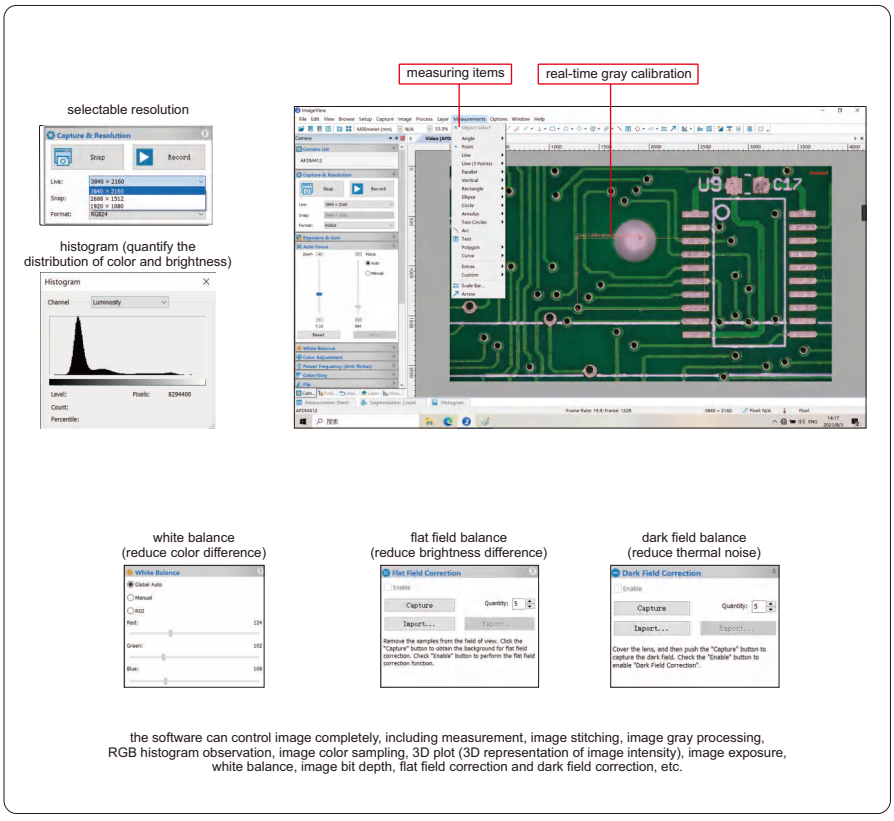


SOFTWARE FOR TV (INCLUDED)





PROFESSIONAL SOFTWARE (INCLUDED, FOR COMPUTER)



the software can control image completely, including measurement, image stitching, image gray processing, RGB histogram observation, image color sampling, 3D plot (3D representation of image intensity), image exposure, white balance, image bit depth, flat field correction and dark field correction, etc.

SPECIFICATION

Magnification (on 28" TV)	2.4X~43.7X
View field	14.2×8~255×145mm
Auto focus distance	200~255mm
Sensor	1/2.8" CMOS
Pixel	8M
Resolution	3840×2160
Frame rate	60fps
Output	HDMI/USB/LAN
Power supply	power adapter
Dimension (L×W×H)	400×300×450mm
Net weight	5.8kg

STANDARD DELIVERY

Main unit (with stand)	1 pc
LED illumination	1 pc
32G memory card and holder	1 pc
Mouse	1 pc
HDMI cable	1 pc
USB 3.0 cable	1 pc
Power adapter	1 pc

MEASURING ACCURACY (ON 28" TV)

Optical magnification	Measuring accuracy
2X	±0.1mm
4X	±0.1mm
6X	±0.04mm
10X	±0.02mm
14X	±0.02mm
18X	±0.01mm

AUTO FOCUS DIGITAL MICROSCOPE (LARGE VIEW FIELD)
CODE 5302-AF105

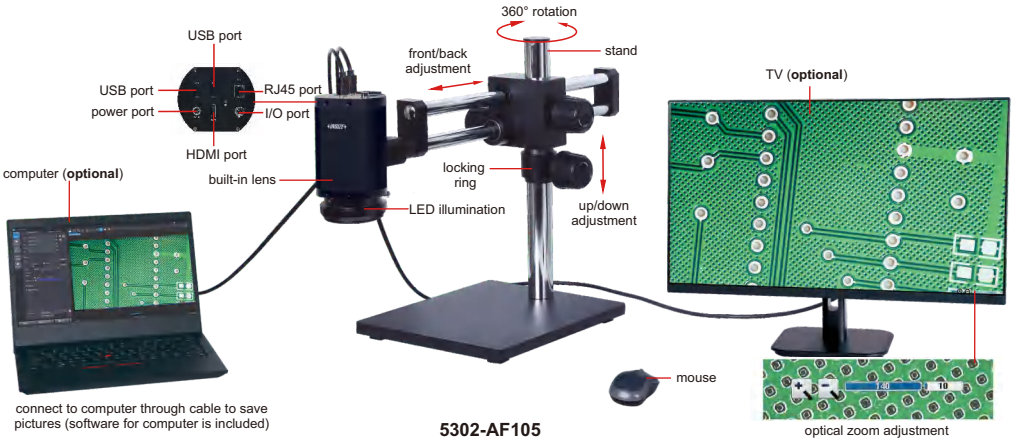
CAN BE CONNECTED TO PC AND TV AT THE SAME TIME

MEASUREMENT

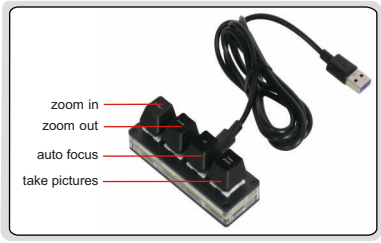
AUTO FOCUS

TAKE PICTURES AND VIDEOS

VIDEO



- Auto focus camera
- Take pictures and videos
- Can be connected to TV (HDMI port) and computer (RJ45 port) at the same time
- Built-in measuring software for TV
- Measuring software for computers is included
- Automatic exposure and white balance
- Brightness, contrast ratio, gain are adjustable
- Display cross hair



controller (**optional**, for TV)

SPECIFICATION

Code	**5302-AF105** (standard type)
Pixel	2M
Resolution	1920×1080
Magnification	1.6X~22.2X (on 27" TV)
Sensor	1/2.8" CMOS
Auto focus distance	100mm~∞
Output	HDMI, RJ45
Frame rate	HDMI:60fps, RJ45:30fps
Power supply	power adapter
Dimension (L×W×H)	500×280×410mm
Net weight	17kg

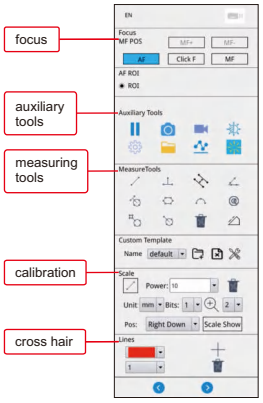
STANDARD DELIVERY

Main unit (with stand)	1 pc
LED illumination	1 pc
16G USB flash disk	1 pc
Mouse	1 pc
HDMI cable (for TV)	1 pc
Network cable (for computer)	1 pc
Switch	1 pc
Software for computer	1 pc
Power adapter	2 pcs

VIEW FIELD

Focus distance	Adjustable magnification (on 27" TV)	View field
100mm	3.3~22.2X	26×14~170×102mm
150mm	2.3~17.8X	33×18~230×142mm
200mm	1.9~15.5X	38×21~290×180mm
250mm	1.6~13.5X	43×24~350×216mm

SOFTWARE (INCLUDED)



MEASURING ACCURACY

Optical magnification	Measuring accuracy
2X	±0.1mm
4X	±0.1mm
6X	±0.04mm
8X	±0.02mm
14X	±0.02mm

OPTIONAL ACCESSORY

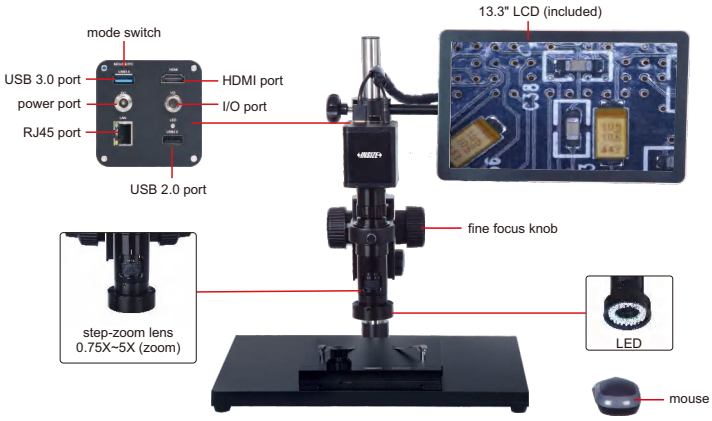
Controller	**5302-AF-CONTROLLER**

AUTO FOCUS DIGITAL MICROSCOPE
CODE 5303-AF103

VIDEO

FOCUS STACKING | AUTO FOCUS | IMAGE TRANSMISSION | IMAGE STICHING

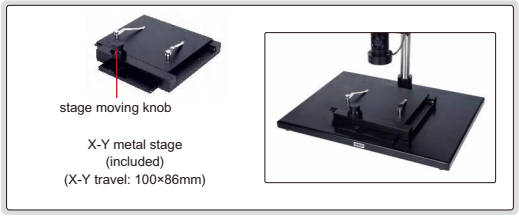
- High-definition image
- Take pictures and videos, save to USB flash disk
- Measurement results can be sent to Excel
- Auto focus
- Automatic white balance and exposure
- Built-in measurement software
- Can be connected to PC and LCD at the same time



calibration plate
(included)

1X camera adapter
(**optional**)

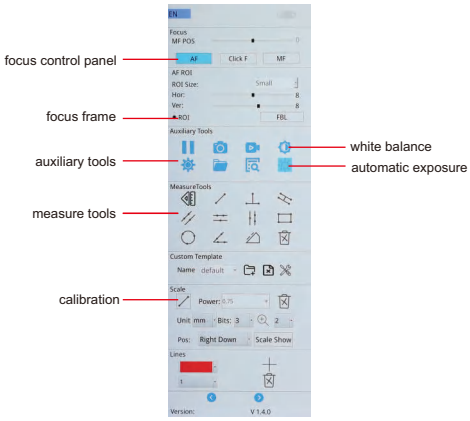
2X auxiliary objective
(**optional**)



0.5X camera adapter
(included)

1X auxiliary objective
1X auxiliary objective
(included)

SOFTWARE FOR LCD (INCLUDED)



SPECIFICATION

Magnification	20X~123X (on 13.3" LCD)
Sensor	1/2.8" CMOS
Pixel	2M
Resolution	1920×1080
Frame rate	60fps
Output	HDMI/USB/LAN
Power supply	power adapter
Dimension (L×W×H)	570×300×430mm
Net weight	6.5kg

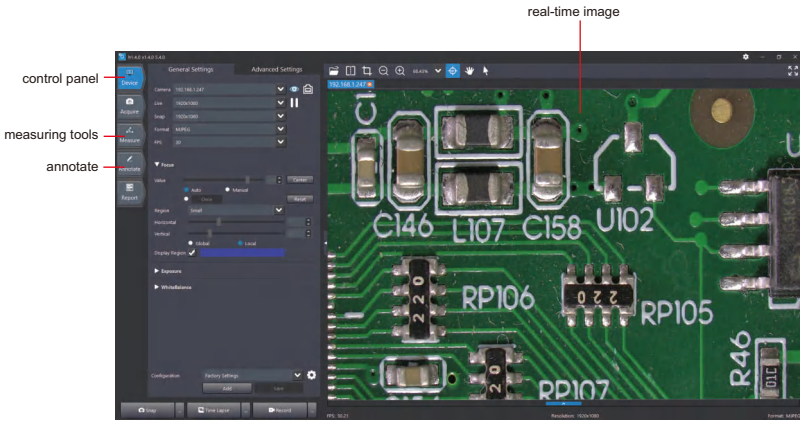
MAGNIFICATION, FOCUS DISTANCE AND VIEW FIELD

Specification	Camera adapter	
	0.5X (included)	1X (optional)
Magnification	20~123X	40~246X
Focus distance	48~84mm	48~84mm
View field	13×7~2.2×1mm	6.5×3.5~1.1×0.5mm
Measuring accuracy	±0.02mm	±0.02mm

STANDARD DELIVERY

Main unit	1 pc
LCD	1 pc
0.5X camera adapter	1 pc
1X auxiliary objective	1 pc
Calibration plate	1 pc
16G USB flash drive	1 pc
Mouse	1 pc
X-Y metal stage	1 pc
HDMI	1 pc

PROFESSIONAL SOFTWARE (INCLUDED, FOR COMPUTER)



OPTIONAL ACCESSORY

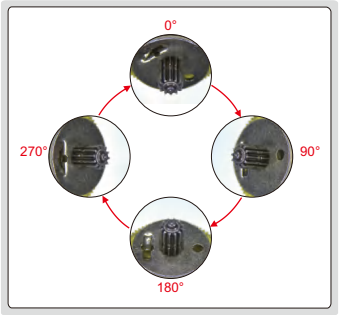
1X camera adapter	**ISM-DL-CA1X**
2X auxiliary objective	**ISM-DL-OB2X**
Computer	**ISM-DL-COMPUTER**
LED light	
Auxiliary objective	

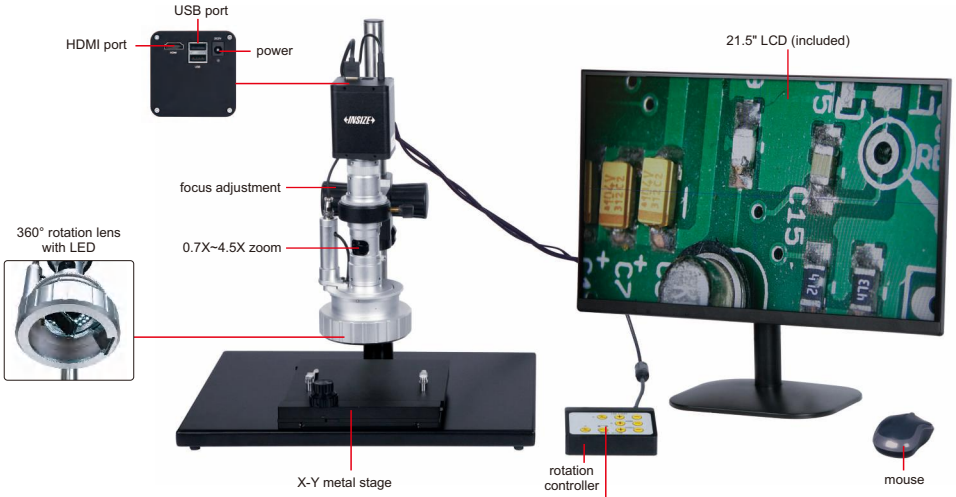
MOTORIZED 3D ROTATION MICROSCOPE
CODE 5301-D400

TAKE PICTURES AND VIDEOS

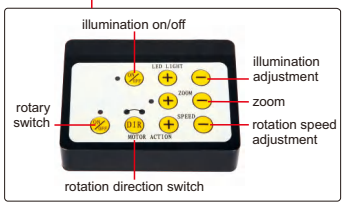
SUITABLE TO CHECK CONVEX OBJECTS AND WALL OF HOLE

360° rotation observation





- 1080P high-definition 3D image
- Take pictures and videos, save to USB flash disk
- Automatic white balance and exposure
- Brightness, contrast ratio and gain are adjustable



VIDEO

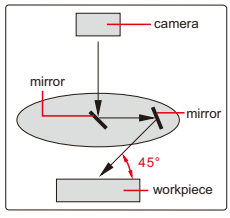
SPECIFICATION

Magnification	15X~100X
View field	4.2×2.7mm~28×18mm
Focus distance	40mm
View angle	45°
Sensor	1/2.8" CMOS
Pixel	2M
Resolution	1920×1080
Frame rate	60fps
Output	HDMI
Rotation speed	2~4RPM
Power supply	110/220V, 50/60Hz
Dimension (L×W×H)	570×300×430mm
Net weight	10kg

STANDARD DELIVERY

Main unit	1 pc
Rotation controller	1 pc
X-Y metal stage	1 pc
16G USB flash disk	1 pc
White/black plate	1 pc
Mouse	1 pc
Power adapter	2 pcs

working principle



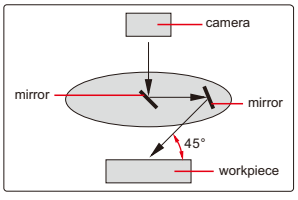
MANUAL 3D ROTATION MICROSCOPE
CODE 5313-S407

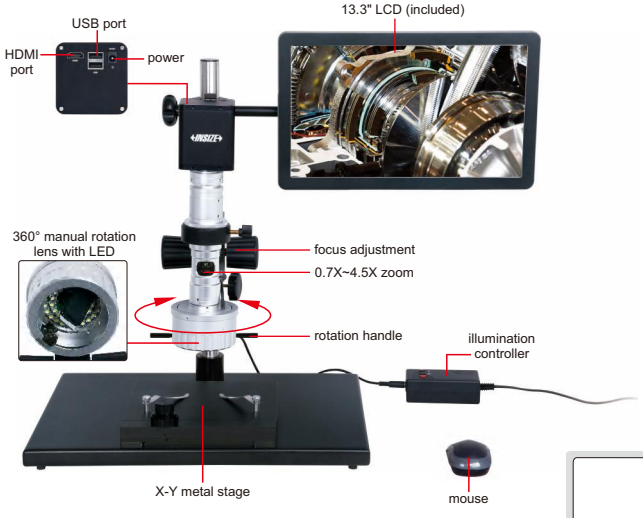
SUITABLE TO CHECK CONVEX OBJECTS AND WALL OF HOLES

TAKE PICTURES AND VIDEOS

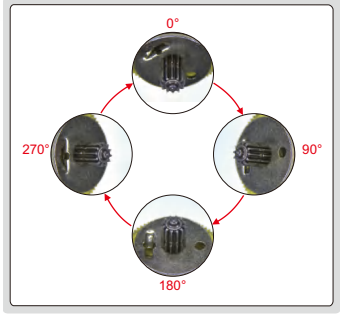
VIDEO

working principle





360° rotation observation



SPECIFICATION

Magnification	18X~120X
View field	2.4×1.5mm~16×9mm
Focus distance	20mm
View angle	45°
Sensor	1/2.8" CMOS
Pixel	2M
Resolution	1920×1080
Frame rate	60fps
Output	HDMI
Power supply	power adapter
Dimension (L×W×H)	570×300×430mm
Net weight	10kg

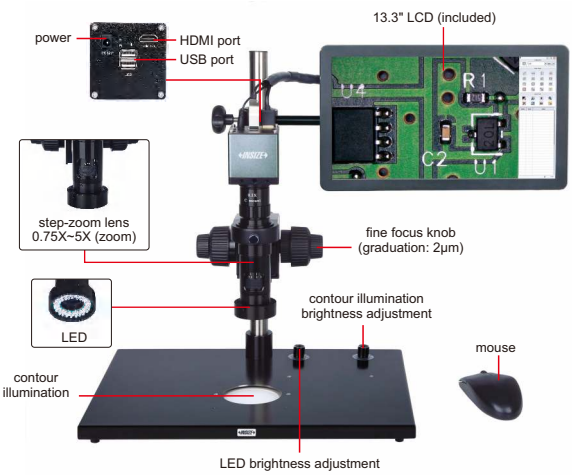
STANDARD DELIVERY

Main unit	1 pc
X-Y metal stage	1 pc
16G USB flash disk	1 pc
White/black plate	1 pc
Mouse	1 pc
Power adapter	2 pcs

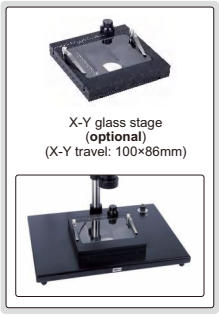
DIGITAL MEASURING MICROSCOPE
CODE ISM-DL301

TAKE PICTURES | MEASUREMENT | BUILT-IN SOFTWARE WITHOUT COMPUTER

VIDEO

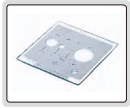


ISM-DL301



- 1080P high-definition image
- Built-in software without computer, operation by mouse
- Take pictures, saved to USB flash disk
- Measurement results can be output to Excel
- Automatic white balance and exposure
- Brightness, contrast ratio, gain are adjustable

16G USB flash disk (included)



calibration plate (included)

1X auxiliary objective (included)

0.5X camera adapter (included)

1X camera adapter (**optional**)

2X auxiliary objective (**optional**)

SPECIFICATION

Magnification	15X~100X
Sensor	1/2" CMOS
Pixel	2M
Resolution	1920×1080
Frame rate	60fps
Output	HDMI
Power supply	power adapter
Dimension (L×W×H)	570×300×430mm
Net weight	6.5kg

STANDARD DELIVERY

Main unit	1 pc
0.5X camera adapter	1 pc
1X auxiliary objective	1 pc
Calibration plate	1 pc
16G USB flash disk	1 pc
White/black plate	1 pc
Mouse	1 pc
HDMI cable	1 pc
Power adapter	2 pcs

OPTIONAL ACCESSORY

1X camera adapter	ISM-DL-CA1X
2X auxiliary objective	ISM-DL-OB2X
X-Y glass stage (travel: 74×60mm)	ISM-DL-STAGE
X-Y metal stage	ISM-DL-STAGE1
LED light	
Auxiliary objective	

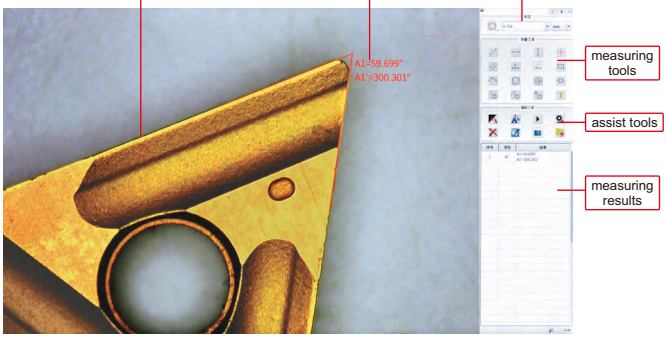
MAGNIFICATION, FOCUS DISTANCE AND VIEW FIELD

Auxiliary objective	Specification	Camera adapter	
		0.5X (included)	1X (optional)
1X (included)	magnification	15~100X	30~200X
	focus distance	70±2mm	70±2mm
	view filed	16×11~2.5×1.6mm	7.8×5.3~1.2×0.8mm
2X (optional)	magnification	30~200X	60~400X
	focus distance	29±2mm	29±2mm
	view field	7.8×5.3~1.2×0.8mm	3.8×2.7~0.6×0.4mm

MAGNIFICATION AND MEASURING ACCURACY

Objective magnification	Image magnification	Measuring accuracy
0.75X	15X	±8μm
1X	20X	±7μm
1.5X	30X	±6μm
2X	40X	±6μm
2.5X	50X	±6μm
3X	60X	±5μm
3.5X	70X	±5μm
4X	80X	±4μm
4.5X	90X	±4μm
5X	100X	±4μm

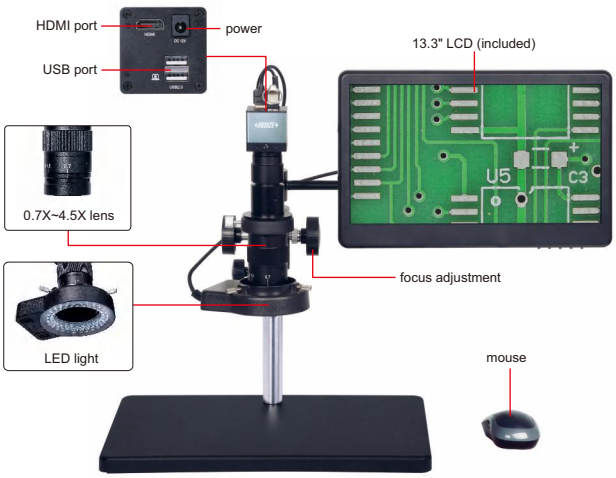
SOFTWARE (INCLUDED)



DIGITAL MEASURING MICROSCOPE (BASIC TYPE)
CODE 5318-MD60

MEASUREMENT | TAKE PICTURES | BUILT-IN SOFTWARE WITHOUT COMPUTER | VIDEO

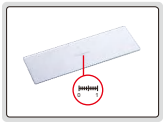
POPULAR MODEL



5318-MD60 (without stage)

- 1080P high-definition image
- Built-in software without computer, operated by mouse
- Take pictures, save to USB flash disk
- Measurement results can be sent to Excel
- Brightness, contrast ratio, gain are adjustable

white/black plate (included)



glass calibration ruler (graduation 0.1mm, included)

16G USB flash disk (included)

SPECIFICATION

Magnification	12.5X~80X
Sensor	1/2.8" CMOS
Pixel	2M
Resolution	1920×1080
Frame rate	60fps
Measuring accuracy	±0.02mm
Lines	cross lines, scale lines (number, color and position of lines are adjustable)
Output	HDMI
Power supply	power adapter
Dimension (L×W×H)	380×260×350mm
Net weight	4.5kg

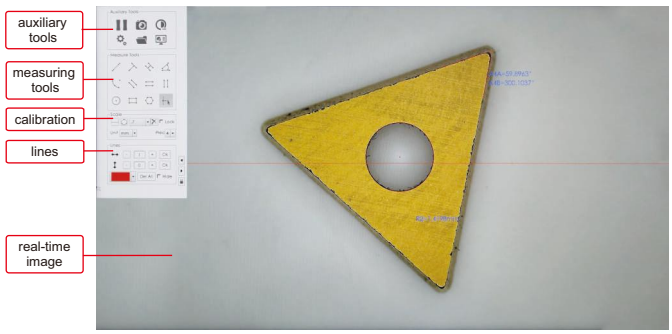
MAGNIFICATION AND VIEW FIELD

Auxiliary objective	Specification	Camera adapter 0.5X (included)
0.5X (optional)	magnification	6.2~40X
	view field	47×26~7.4×4mm
1X (included)	magnification	12.5~80X
	view field	23.5×13~3.7×2mm
2X (optional)	magnification	25~160X
	view field	11.8×6.5~1.8×1mm

STANDARD DELIVERY

Main unit	1 pc
0.5X camera adapter	1 pc
1X auxiliary objective	1 pc
White/black plate	1 pc
Glass calibration ruler	1 pc
16G USB flash disk	1 pc
Mouse	1 pc
HDMI cable	1 pc
Power adapter	3 pcs

MEASURING SOFTWARE (INCLUDED)



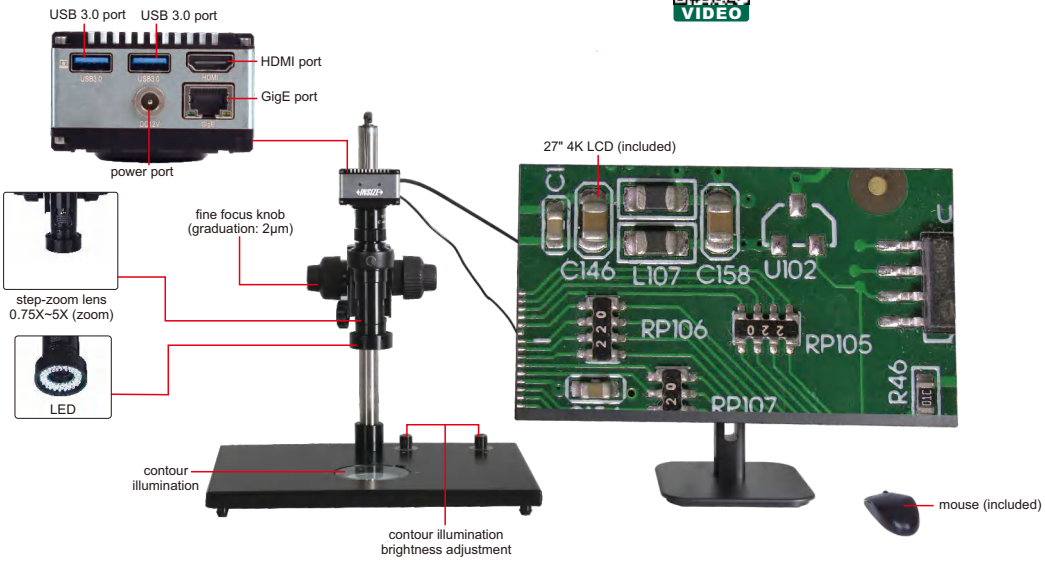
OPTIONAL ACCESSORY

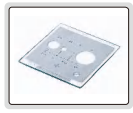
0.5X auxiliary objective	5318-OB05X
2X auxiliary objective	5318-OB2X

4K DIGITAL MEASURING MICROSCOPE
CODE 5310-DL401

VIDEO

BUILT-IN SOFTWARE WITHOUT COMPUTER | TAKE PICTURES | MEASUREMENT




calibration plate
(included)

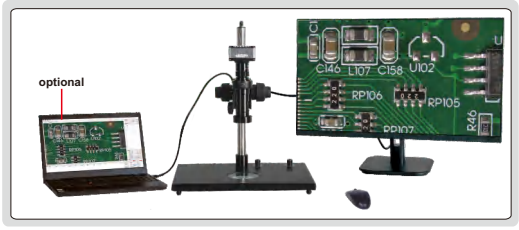
1X auxiliary objective
(included)

2X auxiliary objective
(**optional**)

1X camera adapter
(**optional**)

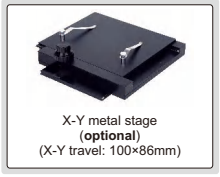
0.5X camera adapter
(included)

- 4K high-definition image
- Built-in software without computer, operated by mouse
- Take pictures, save to USB flash disk
- Measurement results can be sent to Excel
- Automatic white balance and exposure
- Brightness, contrast ratio, gain are adjustable



send measurement data and photos to computer,
and also take photos, make measurement via computer software

X-Y glass stage
(**optional**)
(X-Y travel: 100×86mm)


X-Y metal stage
(**optional**)
(X-Y travel: 100×86mm)

SPECIFICATION

Magnification	32X~210X (on 27" LCD)
Sensor	1/2.3" CMOS
Pixel	8M
Resolution	3840×2160
Frame rate	4K: 30fps, 1080P: 60fps
Output	HDMI
Power supply	power adapter
Dimension (L×W×H)	570×300×430mm
Net weight	6.5kg

STANDARD DELIVERY

Main unit	1 pc
LCD	1 pc
0.5X camera adapter	1 pc
1X auxiliary objective	1 pc
Calibration plate	1 pc
16G USB flash disk	1 pc
White/black plate	1 pc
Mouse	1 pc
HDMI cable	1 pc
Power adapter	3 pcs

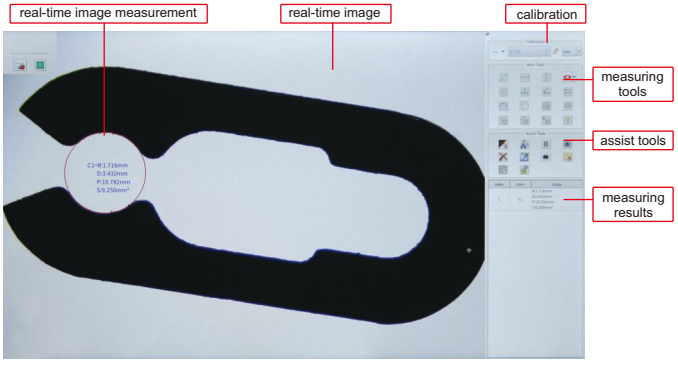
OPTIONAL ACCESSORY

1X camera adapter	**ISM-DL-CA1X**
2X auxiliary objective	**ISM-DL-OB2X**
X-Y glass stage (travel: 100×86mm)	**ISM-DL-STAGE**
X-Y metal stage (travel: 100×86mm)	**ISM-DL-STAGE1**
LED light	
Auxiliary objective	

MAGNIFICATION, VIEW FIELD AND MEASURING ACCURACY

Objective magnification	Image magnification	View field	Measuring accuracy
0.75X	32X	15×10.5mm	±5μm
1X	42X	11.5×8.0mm	±5μm
1.5X	63X	8.0×5.1mm	±5μm
2X	84X	6.0×4.0mm	±5μm
2.5X	105X	4.8×3.0mm	±4μm
3X	126X	3.8×2.8mm	±4μm
3.5X	147X	3.2×2.2mm	±4μm
4X	168X	3.0×2.0mm	±3μm
4.5X	189X	2.8×1.8mm	±3μm
5X	210X	2.2×1.6mm	±3μm

SOFTWARE (INCLUDED)

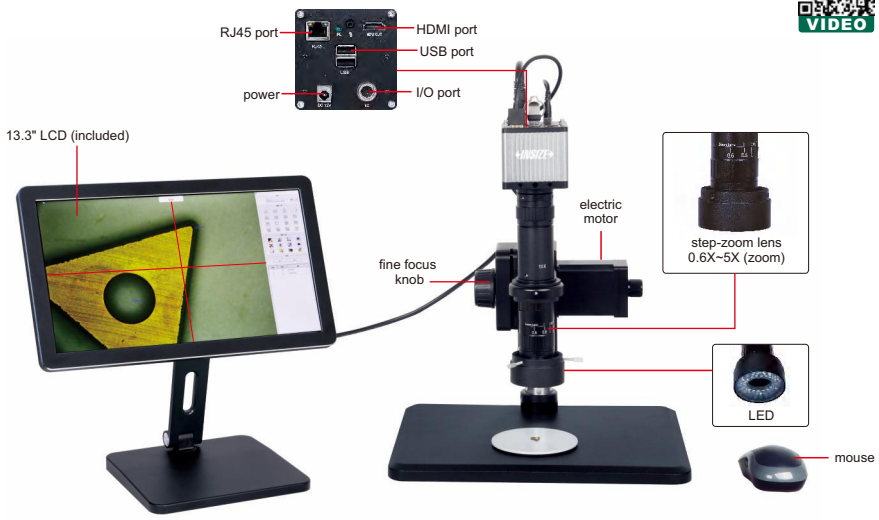


MOTORIZED FOCUS STACKING MICROSCOPE (WITH DISPLAY)
CODE ISM-DL520

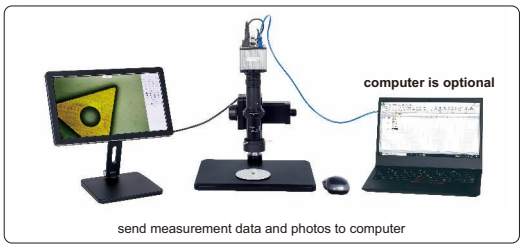
VIDEO

MOTORIZED FOCUS STACKING

BUILT-IN SOFTWARE WITHOUT COMPUTER

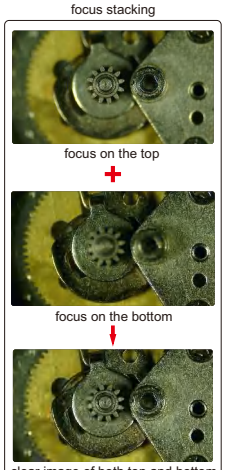


- 1080P high-definition image
- Built-in software without computer, operated by mouse
- Take pictures, save to USB flash disk
- Measurement results can be sent to Excel
- Automatic white balance and exposure
- Motorized focus stacking
- Send photos and measurement data via ethernet (TCP/IP)
- Name photos and measurement data files with serial number of workpieces read by scanner



send measurement data and photos to computer

focus stacking



focus on the top

focus on the bottom

clear image of both top and bottom

SPECIFICATION

Magnification	14.7X~122.7X
View field	2.3×1.2~19.5×11mm
Focus distance	65mm
Sensor	1/1.2" CMOS
Pixel	2M
Resolution	1920×1080
Frame rate	30fps
Output	RJ45
Power supply	power adapter
Dimension (L×W×H)	320×260×500mm
Net weight	7kg

MAGNIFICATION AND MEASURING ACCURACY

Objective magnification	Image magnification	Measuring accuracy
0.6X	14.7X	±8μm
0.8X	19.6X	±7μm
1X	24.5X	±6μm
1.5X	36.8X	±6μm
2X	49.1X	±6μm
2.5X	61.3X	±5μm
3X	73.6X	±5μm
3.5X	85.9X	±4μm
4X	98.2X	±4μm
4.5X	110.4X	±4μm
5X	122.7X	±4μm

X-Y metal stage
(optional)
(X-Y travel: 100×86mm)

calibration plate (included)

16G USB flash disk (included)

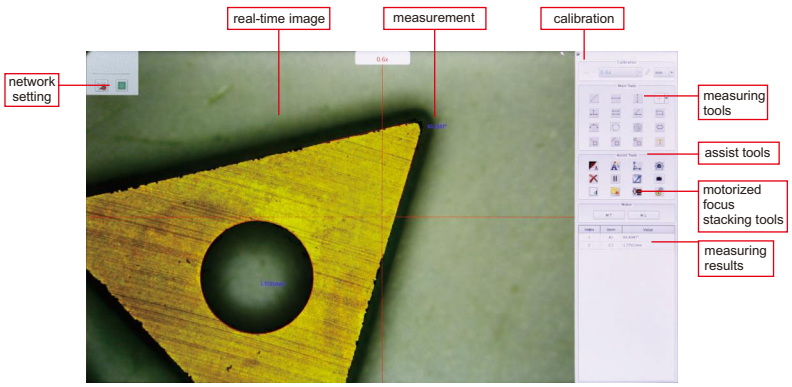
STANDARD DELIVERY

Main unit	1 pc
1X camera adapter	1 pc
1X auxiliary objective	1 pc
Calibration plate	1 pc
16G USB flash disk	1 pc
Mouse	1 pc
LED ring light	1 pc
White/black plate	1 pc
Power adapter	3 pcs

OPTIONAL ACCESSORY

X-Y metal stage (travel: 100×86mm)	ISM-DL-STAGE1

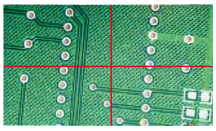
SOFTWARE (INCLUDED)



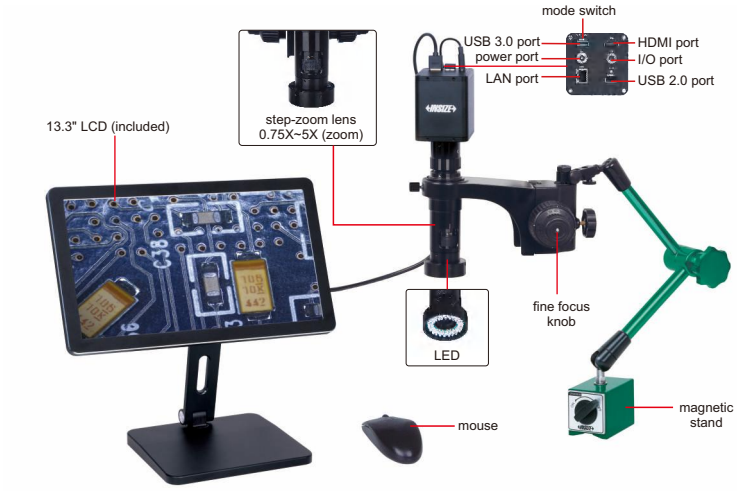
FLEXIBLE ARM AUTO FOCUS DIGITAL MICROSCOPES

IMAGE TRANSMISSION | FOCUS STACKING | AUTO FOCUS | IMAGE STICHING

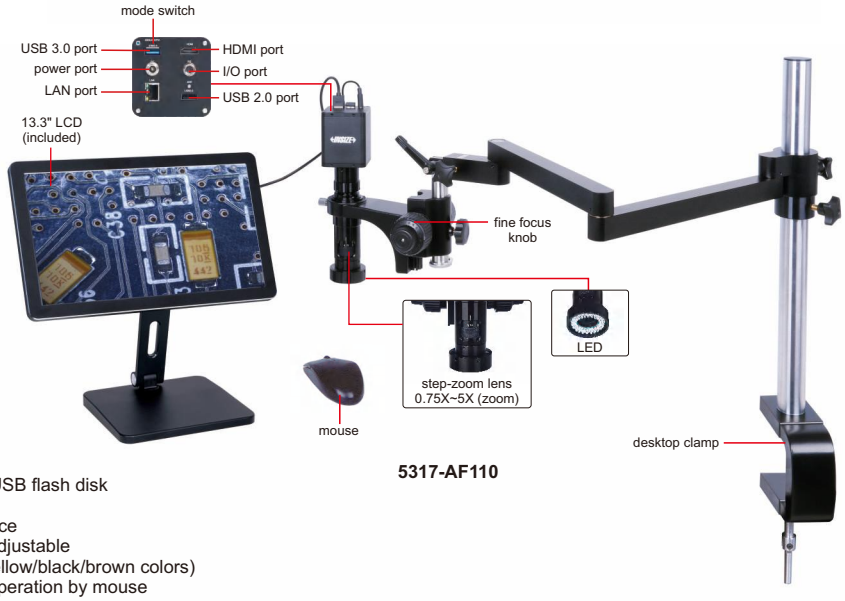
VIDEO



display cross hair (blue/green/red /yellow/black/brown colors)



5317-AF109



5317-AF110

16G USB flash disk (included)

0.5X camera adapter (included)

1X auxiliary objective

1X auxiliary objective (included)

calibration plate (included)

- 1080P high-definition image
- Auto focus camera
- Take pictures and videos, saved to USB flash disk
- Picture review, picture compare
- Automatic exposure and white balance
- Brightness, contrast ratio, gain are adjustable
- Display cross hair (blue/green/red/yellow/black/brown colors)
- Built-in software without computer, operation by mouse
- Flexible arm
- Can switch between monitor mode and computer mode

SPECIFICATION

Code	5317-AF109 (with magnetic stand)	5317-AF110 (with desktop clamp)
Magnification	20X~123X	
Sensor	1/2.8" CMOS	
Pixel	2M	
Resolution	1920×1080	
Frame rate	60fps	
Power supply	power adapter	
Dimension (height)	480mm	600mm
Net weight	5.6kg	8.5kg

MAGNIFICATION, FOCUS DISTANCE AND VIEW FIELD

Auxiliary objective	Specification	Camera adapter	
		0.5X (included)	1X (optional)
1X (included)	magnification	20~123X	40~246X
	focus distance	48~84mm	48~84mm
	view field	13×7~2.2×1mm	6.3×3.5~1.1×0.5mm
	measuring accuracy	±0.02mm	±0.02mm
2X (optional)	magnification	40~246X	80~492X
	focus distance	24~42mm	24~42mm
	view field	6.5×3.5~1.1×0.5mm	3.3×1.8~0.6×0.3mm
	measuring accuracy	±0.02mm	±0.02mm

STANDARD DELIVERY

Main unit	1 pc
LCD	1 pc
0.5X camera adapter	1 pc
1X auxiliary objective	1 pc
Calibration plate	1 pc
16G USB flash disk	1 pc
White/black plate	1 pc
Mouse	1 pc
HDMI cable	1 pc
Power adapter	2 pcs

AUTO FOCUS DISTANCE

Zoom objective scale	0.75X	1X	1.5X	2X	2.5X
Auto focus distance	48~84mm	50~78mm	55~73mm	62~71mm	65~70mm

Zoom objective scale	3X	3.5X	4X	4.5X	5X
Auto focus distance	66~70mm	67~70mm	68~70mm	68~70mm	68~70mm

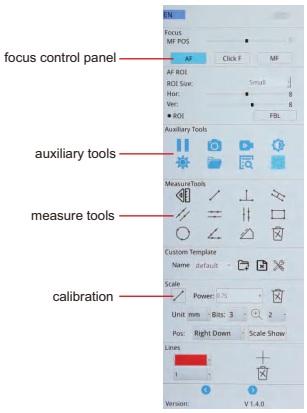
OPTIONAL ACCESSORY

1X camera adapter	ISM-DL-CA1X
2X auxiliary objective	ISM-DL-OB2X
Auxiliary objective	

To be continued

Continued from previous page

SOFTWARE FOR LCD (INCLUDED)



MEASURING SOFTWARE (INCLUDED)

HORIZONTAL MICROSCOPE
CODE 5316-HM810

VIDEO

TAKE PICTURES

BUILT-IN SOFTWARE WITHOUT COMPUTER

- 1080P high-definition image
- Built-in software without computer, operated by mouse
- Take pictures, save to USB flash disk
- Automatic white balance and exposure
- Brightness, contrast ratio, gain are adjustable
- Display cross hair (blue/green/red/yellow/black/brown colors)

SPECIFICATION

Magnification	10.5X~62.5X
View field	4.5×2.5~28×12.3mm
Focus distance	115mm
Measuring accuracy	±0.02mm
Sensor	1/2.8" CMOS
Pixel	2M
Resolution	1920×1080
Frame rate	1080P: 60fps/50fps
Output	HDMI
Power supply	220V, 50/60Hz
Dimension (L×W×H)	500×200×200mm
Net weight	7kg

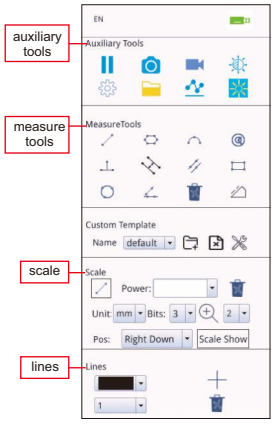
STANDARD DELIVERY

Main unit	1 pc
1X camera adapter	1 pc
1X auxiliary adapter	1 pc
Plastic calibration ruler	1 pc
16G USB flash disk	1 pc
Mouse	1 pc
LED ring light	1 pc

16G USB flash disk (included)

plastic calibration ruler (included, graduation 1mm)

SOFTWARE (INCLUDED)



MOTORIZED ZOOM MICROSCOPE (BASIC TYPE)
CODE 5325-VM100

DISPLAY ACTUAL MAGNIFICATION

PROGRAMMABLE SEGMENTED RING LIGHT

VIDEO

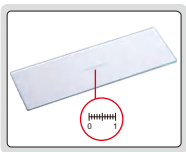
POPULAR MODEL

- Built-in software without computer
- Can be connected to display and computer at the same time
- Motorized zoom objective
- Display actual magnification
- Programmable segmented ring light
- Take pictures and videos

focus stacking

16G USB flash disk (included)

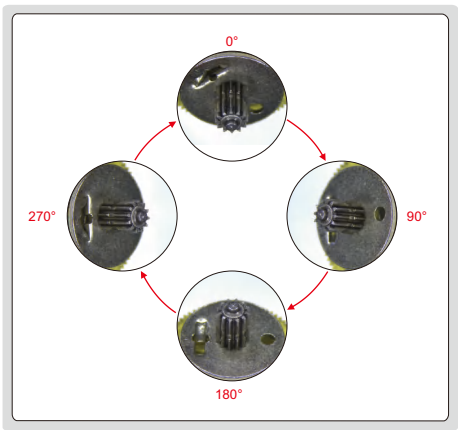
white/black plate (included)



glass calibration ruler (graduation 0.1mm, included)

SPECIFICATION

Sensor	1/2" CMOS
Pixel	2M
Resolution	1920×1080
Magnification	10~68.5X
Measuring accuracy	±0.02mm
Max. workpiece height	245mm
Frame rate	60fps
Output	USB/LAN/HDMI
Power supply	power adapter
Dimension (L×W×H)	261×320×480mm
Net weight	5.1kg



360° rotation observation (3D lens is needed)

To be continued

Continued from previous page

MAGNIFICATION, FOCUS DISTANCE AND VIEW FIELD (on 11.6" LCD)

Specification	Objective	
	0.5X (optional)	1X (included)
Magnification	5~34.2X	10~68.5X
Focus distance	185mm	95mm
View filed	7.4×4.2~53×31.2mm	3.7×2.1~26.5×15.6mm

OPTIONAL ACCESSORY

0.5X auxiliary objective*	5325-VM100-OB05X
3D lens	5325-VM100-3D

* Measurement is not recommended with 0.5X auxiliary objective

STANDARD DELIVERY

Main unit	1 pc
Glass calibration ruler	1 pc
Power adapter	1 pc
Mouse	1 pc
16G USB flash disk	1 pc
White/black plate	1 pc
Network cable	1 pc
Shortcut keyboard	1 pc

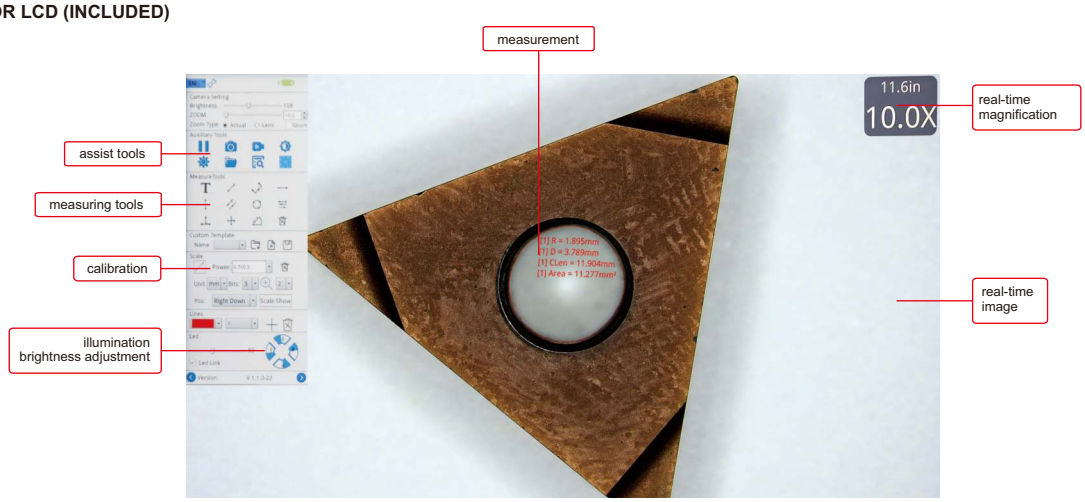
shortcut keyboard
(included)

Shortcut Keyboard Fuction

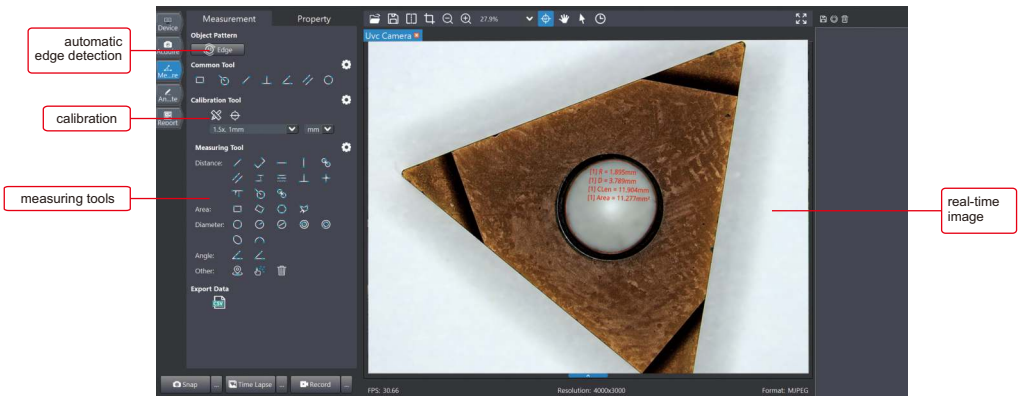
- Take picture: take a picture and save it
- Video: record a video
- Freeze: the image can be frozen
- Zoom+: increase the magnification
- Zoom-: reduce the magnification
- Mirror: image horizontal flip over
- Flip: image vertical flip over
- Zoom 1, 2, 3, 4: save the current magnification
- Brightness+: increase the brightness of the light
- Brightness-: reduce the brightness of the light

can be connected to display and
computer at the same time

SOFTWARE FOR LCD (INCLUDED)



SOFTWARE FOR COMPUTER (INCLUDED)



LARGE DEPTH OF VIEW DIGITAL MEASURING MICROSCOPES (ADVANCED TYPE)

VIDEO

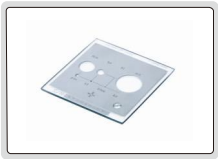
DUAL SCREEN OPERATION

FOCUS STACKING

ELECTRONIC MAGNIFICATION FEEDBACK LENS

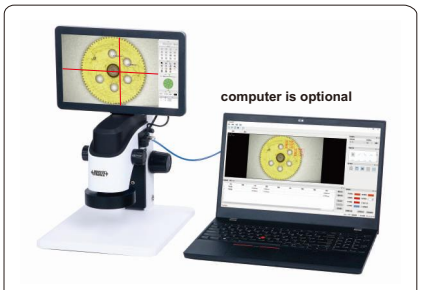
PROGRAMMABLE SEGMENTED RING LIGHT

16G USB flash disk (included)



calibration plate (included)

5322-ID250A



send measurement data and photos to computer, and also take photos, make measurement via computer software

5322-ID300A

- Electronic magnification feedback lens: when the objective lens magnification is changed manually, the software automatically selects the corresponding pre-calibration data and calibration is not needed
- Send photos and measurement data via ethernet (TCP/IP)
- Digital magnification
- Can be connected to display and computer at the same time
- Take pictures, save to USB flash disk
- Measuring results can be sent to Excel

STANDARD DELIVERY

Main unit	1 pc
1X auxiliary objective (included in 5322-ID250A)	1 pc
0.5X auxiliary objective (included in 5322-ID300A)	1 pc
Calibration plate	1 pc
Power adapter	1 pc
Mouse	1 pc
16G USB flash disk	1 pc

OPTIONAL ACCESSORY

0.75X auxiliary objective	5307-ID100A-OB075X
2X auxiliary objective	5307-ID100A-OB2X

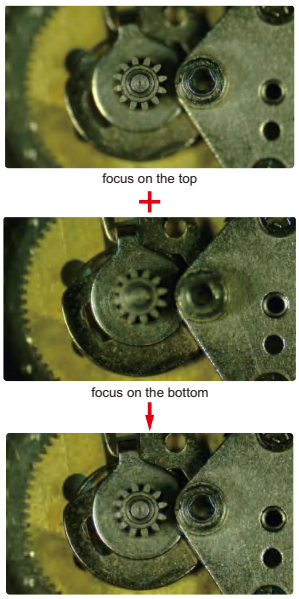
To be continued

Continued from previous page

SPECIFICATION

Code	5322-ID250A (high magnification)	5322-ID300A (large view field)
Sensor	1/2" CMOS	
Pixel	2M	
Resolution	1920×1080	
Magnification	12~77X	6~38X
Focus distance	60mm	120mm
View field	3.2×1.8~20.9×11.7mm	6.4×3.6~41.8×23.4mm
Max. workpiece height	53mm	205mm
Frame rate	60fps	
Output	USB/HDMI/LAN	
Power supply	power adapter	
Dimension (L×W×H)	260×320×500mm	305×405×530mm
Net weight	5.2kg	7.6kg

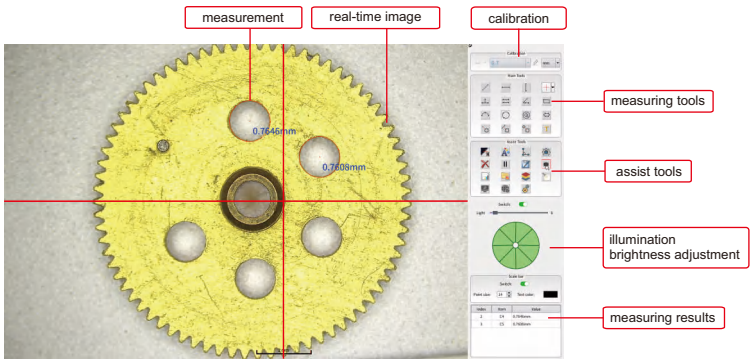
focus stacking



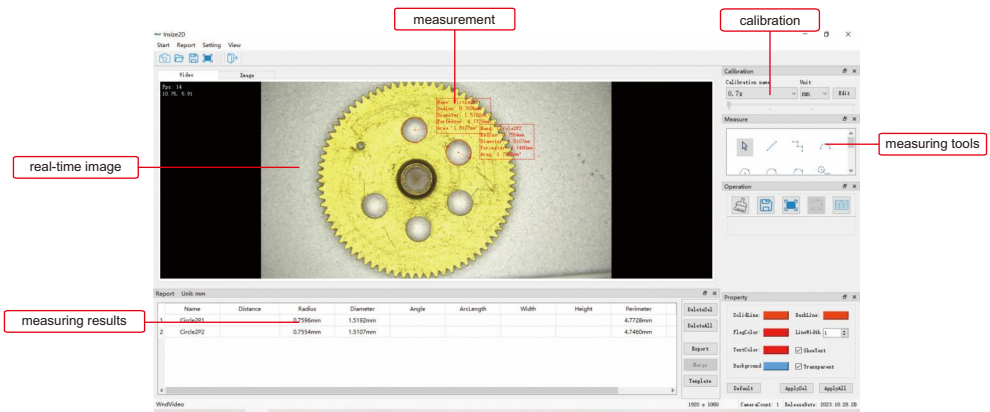
MAGNIFICATION AND MEASURING ACCURACY

Objective magnification	5322-ID250A		5322-ID300A	
	Magnification	Measuring accuracy	Magnification	Measuring accuracy
0.7X	12X	±9μm	6X	±15μm
1X	17X	±9μm	8X	±15μm
1.5X	26X	±8μm	13X	±9μm
2X	35X	±7μm	17X	±9μm
2.5X	43X	±7μm	21X	±9μm
3X	51X	±7μm	25X	±9μm
3.5X	60X	±6μm	30X	±8μm
4X	68X	±6μm	34X	±8μm
4.5X	77X	±5μm	38X	±7μm

SOFTWARE FOR LCD (INCLUDED)



SOFTWARE FOR COMPUTER (INCLUDED)



DIGITAL MEASURING MICROSCOPES (STANDARD TYPE)

BUILT-IN SOFTWARE WITHOUT COMPUTER

ELECTRONIC MAGNIFICATION FEEDBACK LENS

VIDEO

5307-ID100A

5307-ID200A

- Electronic magnification feedback lens: when the objective lens magnification is changed manually, the software automatically selects the corresponding pre-calibration data and calibration is not needed
- Two methods of LED brightness adjustment, knob adjustment and software adjustment
- Built-in software without computer, operated by mouse
- Take pictures, save to USB flash disk
- Measuring results can be sent to Excel

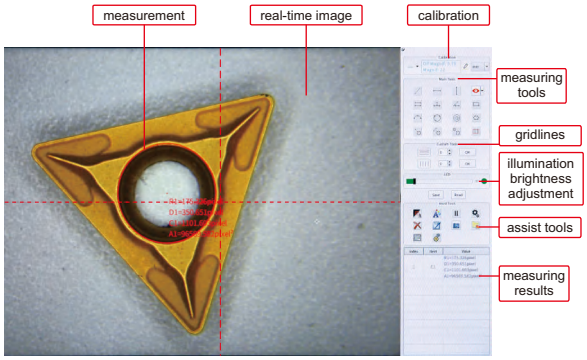
16G USB flash disk (included)

calibration plate (included)

SPECIFICATION

Code	5307-ID100A (high magnification)	5307-ID200A (large view field)
Sensor	1/2" CMOS	
Pixel	2M	
Resolution	1920×1080	
Magnification	12~77X	6~38X
Focus distance	65mm	130mm
View field	3.2×1.8~20.9×11.7mm	6.4×3.6~41.8×23.4mm
Max. workpiece height	60mm	210mm
Frame rate	60fps	
Output	USB/HDMI	
Power supply	power adapter	
Dimension (L×W×H)	260×320×500mm	305×405×530mm
Net weight	5.2kg	7.6kg

SOFTWARE (INCLUDED)



STANDARD DELIVERY

Main unit	1 pc
1X auxiliary objective (included in 5307-ID100A)	1 pc
0.5X auxiliary objective (included in 5307-ID200A)	1 pc
Calibration plate	1 pc
Power adapter	1 pc
Mouse	1 pc
16G USB flash disk	1 pc

OPTIONAL ACCESSORY

0.75X auxiliary objective	5307-ID100A-OB075X
2X auxiliary objective	5307-ID100A-OB2X

MAGNIFICATION AND MEASURING ACCURACY

Objective magnification	5307-ID100A		5307-ID200A	
	Magnification	Measuring accuracy	Magnification	Measuring accuracy
0.7X	12X	±9μm	6X	±15μm
1X	17X	±9μm	8X	±15μm
1.5X	26X	±8μm	13X	±9μm
2X	35X	±7μm	17X	±9μm
2.5X	43X	±7μm	21X	±9μm
3X	51X	±7μm	25X	±9μm
3.5X	60X	±6μm	30X	±8μm
4X	68X	±6μm	34X	±8μm
4.5X	77X	±5μm	38X	±7μm

AUTO FOCUS DIGITAL MICROSCOPE (ADVANCED TYPE)
CODE 5319-AF290

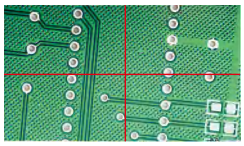
MOTORIZED ZOOM | MOTORIZED LIGHT CONTROL | NO CALIBRATION AFTER ZOOM | AUTO FOCUS | TAKE PICTURES AND VIDEOS | MEASUREMENT

VIDEO

16G USB flash disk (included)

calibration plate (included)

- Auto focus camera
- Take pictures and videos
- Built-in measuring software
- Automatic exposure and white balance
- Brightness, contrast ratio, gain are adjustable
- Display actual magnification
- Digital magnification
- Shortcut keyboard operation
- Display cross hair and gridline (blue/green/red/yellow/black/white colors)



display cross hair and gridline (blue/green/red/yellow/black/white colors)

Shortcut keyboard fuction

- Take picture: take a picture and save it
- Video: record a video
- Freeze: the image can be frozen
- Manual focus-: reduce the manual focus value
- Manual focus+: increase the manual focus value
- Zoom+: increase the magnification
- Zoom-: reduce the magnification
- AF/MF: switch to auto focus or manual focus
- FBL: center the camera motor
- Mirror: image horizontal flipover
- Flip: image vertical flipover
- Focus: achieve one-key focus
- Zoom 1, 2, 3, 4: save the current magnification
- Brightness+: increase the brightness of the light
- Brightness-: reduce the brightness of the light

shortcut keyboard (included)

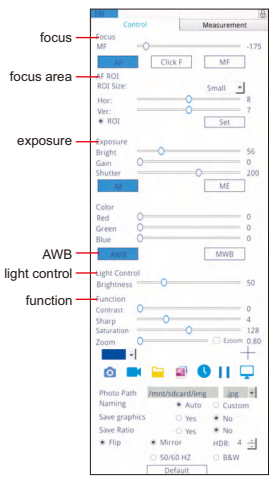
SPECIFICATION

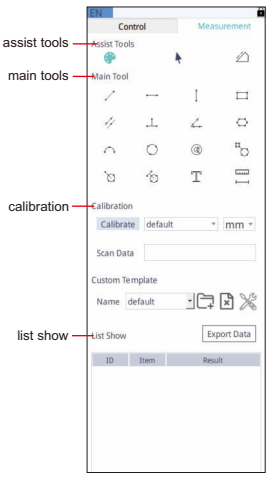
Magnification	27.4X~163X
Sensor	1/2.8" CMOS
Pixel	2M
Measuring accuracy	±0.02mm
Resolution	1920×1080
Frame rate	50/60fps
Output	HDMI
Power supply	power adapter
Dimension (L×W×H)	600×280×390mm
Net weight	6.5kg

STANDARD DELIVERY

Main unit (with stand)	1 pc
21.5" LCD	1 pc
16G USB flash disk	1 pc
Mouse	1 pc
HDMI cable	1 pc
Calibration plate	1 pc
White/black plate	1 pc
Shortcut keyboard	1 pc
Power adapter	2 pcs

SOFTWARE (INCLUDED)





FOCUS DISTANCE AND VIEW FIELD

Optical magnification *	0.8X	1X	2X	3X	4X	4.76X
Focus distance	88~133mm	88~133mm	98~123mm	103~115mm	108~111mm	108~111mm
View field (mm)	19.4×11~15.8×8.8	15×8.3~12.7×7.2	7.1×4~6.7×3.8	4.8×2.7~4.5×2.5	3.6×2~3.3×1.8	3×1.7~2.8×1.6

* The optical zoom lens can be arbitrarily zoomed between 0.8X and 4.76X

MINI DIGITAL MICROSCOPE (ECONOMIC TYPE)
CODE 5311-M710

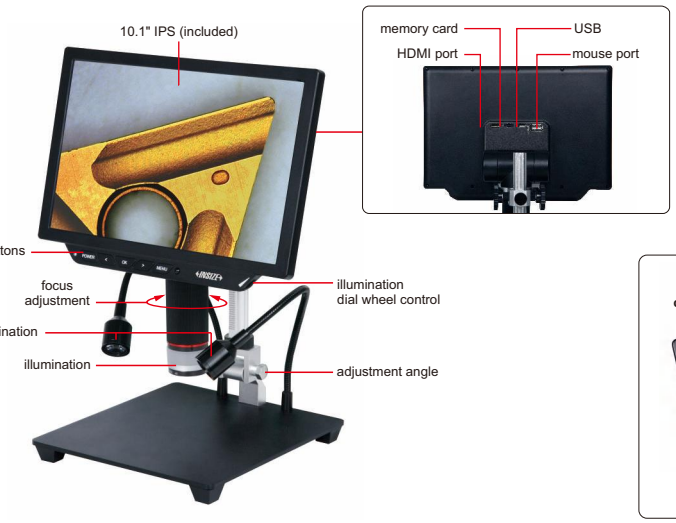
TAKE PICTURES AND VIDEOS

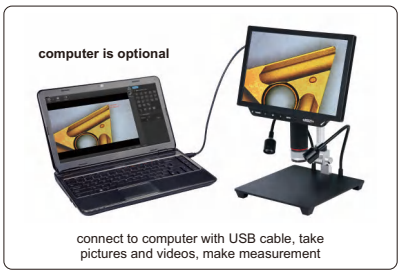
BUILT-IN LITHIUM BATTERY

VIDEO

32G memory card and holder (included)

infrared ray remote controller (included)



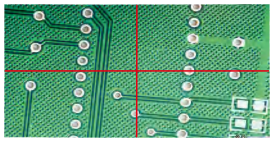


connect to computer with USB cable, take pictures and videos, make measurement

SPECIFICATION

Display resolution	1280×800
Sensor	1/3" CMOS
Pixel	13M
Single pixel size	1.12μm×1.12μm
Frame rate	60fps/30fps
Magnification	6.5X~60X
View field	3.6×2~33×18.5mm
White balance	auto/manual (10 levels RGB)/calibration
Exposure control	AE lock/exposure compensation (10 levels)
Image control	contrast/saturation/sharpness (10 levels)
Record media	memory card (128G Max)
Output	HDMI
Power supply	power adapter
Dimension (LxWxH)	180×200×360mm
Net weight	1.3kg

cross hair



grid (color, line thickness and positions are adjustable)

STANDARD DELIVERY

Main unit	1 pc
USB cable	1 pc
HDMI cable	1 pc
IR remote controller	1 pc
32G memory card and holder	1 pc
Plastic calibration ruler	1 pc
Power adapter	1 pc

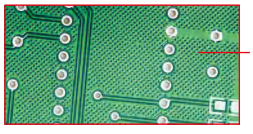
SOFTWARE FOR COMPUTER (included)

- **Language**: Chinese (Simplified), English
- **Operation system**: Windows 7/8/8.1/10 (64bit)
- **Port**: USB2.0 or above
- **Measuring accuracy**: 0.02mm

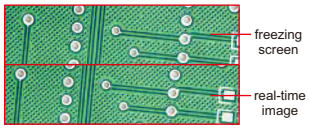
- point counting
- continuous line length
- area of a rectangle
- area of a polygon
- angle
- center distance of 2 circles
- radius of a circle
- cross line
- double cross line
- arc
- straight line length
- distance between 2 lines
- radius of a 2-point circle
- radius of a 3-point circle
- point-line distance
- distance between parallel lines
- distance between line and first parallel line
- center distance of concentric circle

- **Screen freezing:**

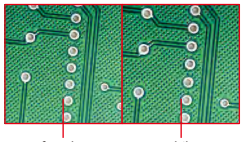
full screen



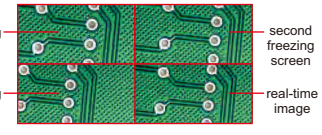
up-down split screen

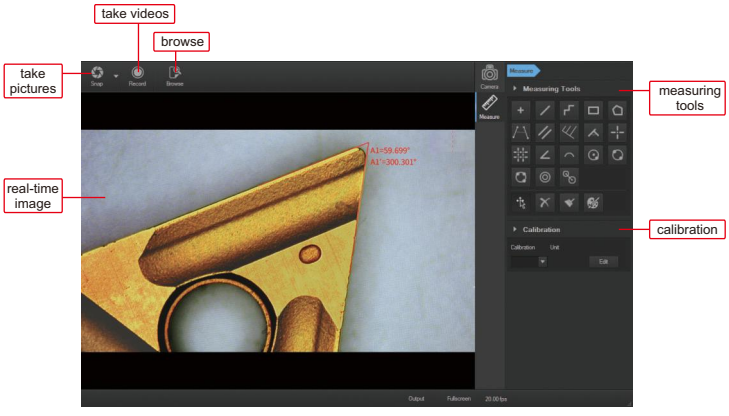


left-right split screen

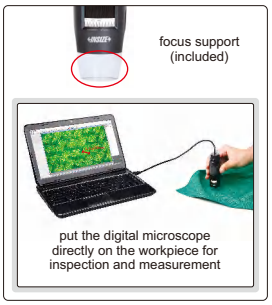


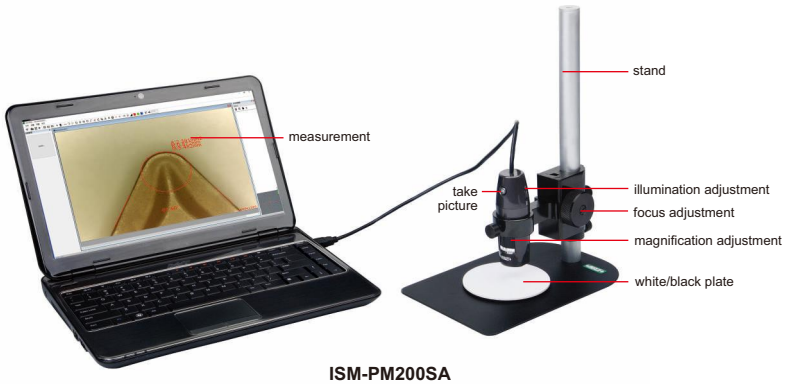
1/4 split screen





DIGITAL MEASURING MICROSCOPE (ECONOMIC TYPE)
CODE ISM-PM200SA





ISM-PM200SA
computer is optional

- Can take pictures and videos
- Supplied with software
- Calibration rulers
  (graduation 0.1 and 1mm) are included
- With focus support

SPECIFICATION

Magnification	10X~200X
Stand	standard
Pixel	2M (resolution: 1920×1080)
Illumination	built-in adjustable LED
Power supply	USB 2.0 cable (voltage required: 5±0.1V)

software flash disk
(included)

filter (**optional**)

MAGNIFICATION ACCURACY

Magnification	Accuracy
50X	30μm
100X	15μm
150X	10μm
200X	8μm

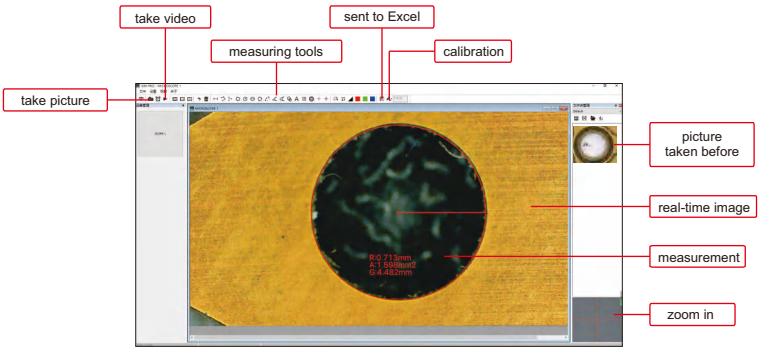
universal stand (included in **ISM-PM200SB**)

STANDARD DELIVERY

Main unit	1 pc
USB flash disk	1 pc

OPTIONAL ACCESSORY

Green filter	**ISM-PM-GREEN**
Yellow filter	**ISM-PM-YELLOW**
Blue filter	**ISM-PM-BLUE**



SOFTWARE

- **Language:** English, Japanese, Ukrainian, German, French, Italian, Spanish, Chinese
- **Operation system:** Windows 7/8/XP/Vista

- **Measuring tools:**

measure radius, diameter, girth and area of circle with two points

measure area of polygon

measure distance between two circles

measure distance between two parallel lines

measure angle with two lines

measure distance between point and line

measure radius of arc

measure radius of circle

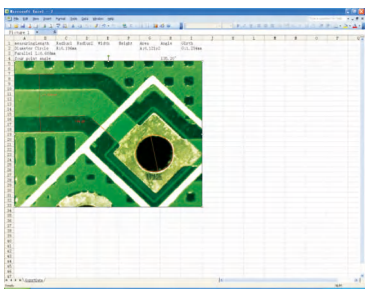
measure length of continuous line

measure angle with three points

measure radius, girth and area of circle

add text

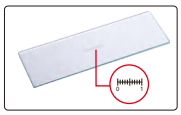
- **Data is sent to Excel:**



WIFI DIGITAL MEASURING MICROSCOPE (ECONOMIC TYPE)
CODE ISM-WF200

VIDEO

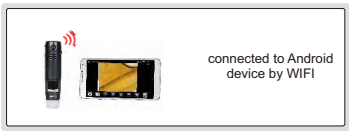
plastic calibration ruler
(graduation 1mm, included)


glass calibration ruler
(graduation 0.1mm, included)

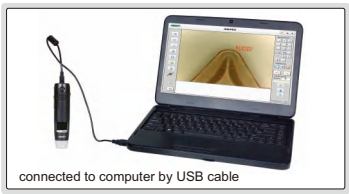
software flash disk
(included)

- Maximum working distance is 5m under WIFI mode
- Can be connected to multiple iPads, Android devices or computers at the same time under WIFI mode
- Take pictures and videos
- Supplied with software

connected to iPad by WIFI

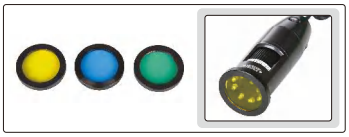

connected to Android device by WIFI

connected to computer by WIFI


connected to computer by USB cable

stand (code **ISM-PM-STAND, optional**)

filter (**optional**)



SPECIFICATION

Magnification	10X~200X
Pixel	1.3M (resolution: 1280x1024)
Illumination	built-in adjustable LED
Power supply	built-in rechargeable battery

STANDARD DELIVERY

Microscope	1 pc
Focus support ring for 80X/150X	1 pc
Focus support ring for 60X/200X	1 pc
Glass calibration ruler (graduation 0.1mm)	1 pc
Plastic calibration ruler (graduation 1mm)	1 pc
Software and USB cable	1 pc
AC/DC adapter	1 pc

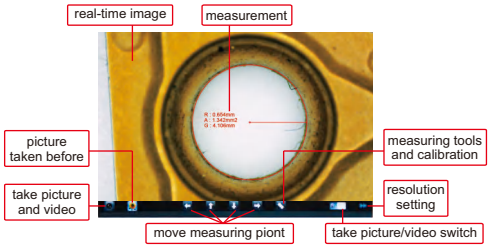
OPTIONAL ACCESSORY

Stand	**ISM-PM-STAND**
Green filter	**ISM-PM-GREEN**
Yellow filter	**ISM-PM-YELLOW**
Blue filter	**ISM-PM-BLUE**

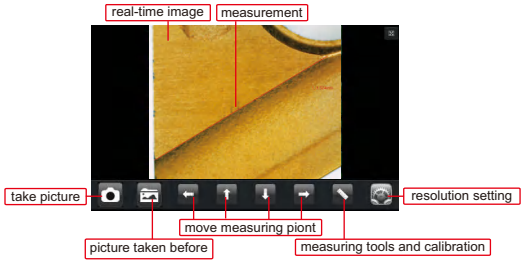
MAGNIFICATION, FOCUS DISTANCE, VIEW FIELD AND ACCURACY

Magnification	Focus distance	View field	Accuracy
50X	21mm	8.1×6.4mm	30μm
100X	13mm	3.9×3.1mm	15μm
150X	16mm	2.6×2.1mm	10μm
200X	19mm	1.8×1.5mm	8μm

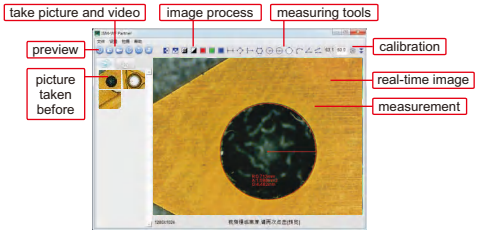
❶ Software ISM-WF200 (for iPad by WIFI)



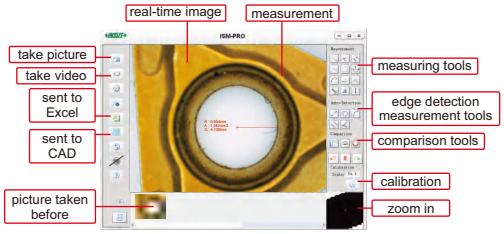
❷ Software ISM-APK (for Android devices by WIFI)



❸ Software ISM-WF Partner (for computer by WIFI)



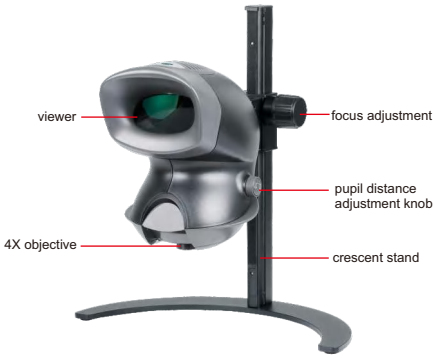
❹ Software ISM-PRO (for computer by USB cable)



LOW-MAGNIFICATION HIGH-DEFINITION STEREO MICROSCOPES

INSIZE PLUS

VIDEO



ISM-VR200

ISM-VR300

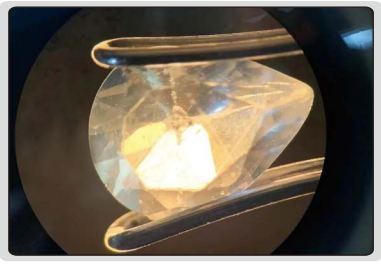
ISM-VR400

universal stand can rotate up and down and left and right

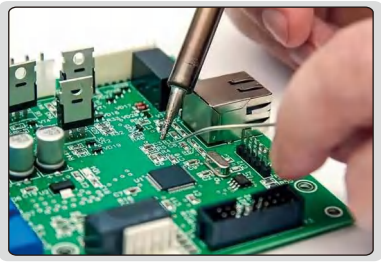
- Eyepiece-less design is ergonomic and reduces eye and body fatigue
- 3D stereoscopic imaging effect, enhanced hand-eye coordination, true depth of field

application

dentistry



jewelry and jade



electronic components

SPECIFICATION

Code	ISM-VR200	ISM-VR300	ISM-VR400
Stand type	crescent stand	square stand	universal stand
Objective	4X	4X	4X
Focus distance	96mm	96mm	96mm
View filed	Ø27.5mm	Ø27.5mm	Ø27.5mm
Dimension (L×W×H)	500×406×533mm	250×406×533mm	240×454×605mm
Net weight	5.8kg	6.9kg	5.3kg

STANDARD DELIVERY

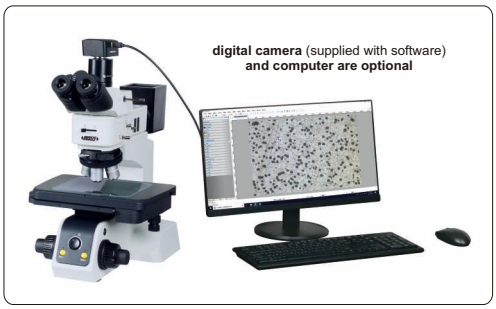
Main unit	1 pc
Objective	1 pc
Light source power adapter	1 pc
Anti-dust cover	1 pc

OPTIONAL ACCESSORY

8X objective	ISM-VR-OB8X

METALLURGICAL MICROSCOPES (ADVANCED TYPE)

VIDEO



5108-M3000

- Infinite chromatic aberration correction optical system
- Three way observation tube with infinite hinge
- Translucent and reflective frame, front low-hand position coarse and fine coaxial focus adjustment mechanism, with adjustment elastic device to prevent sliding and random upper limit device
- Bright and dark field five-hole converter with DIC slot
- Adopt digital dimming, with light intensity reset and setting function
- With polarizer insert plate and 360° rotating analyzer insert slot

SPECIFICATION

Code	5108-M3000 (standard type)				5108-M3000H (high-definition type)			
Eyepiece	high eye point large field SWH10X-H (view field: Ø23mm, adjustable visibility)							
Objective (infinite long working distance bright and dark field semi achromatic)	5X	10X	20X	50X	5X	10X	20X	50X
Working distance	14.35mm	8.5mm	3.0mm	3.0mm	20mm	11mm	3.0mm	1.0mm
Numerical aperture	0.15	0.30	0.45	0.75	0.15	0.30	0.45	0.80
Optical magnification	50X~500X (up to 1000X with optional 100X objective)							
Digital magnification	170X~1700X (on 21.5" monitor), up to 3400X with optional 100X objective							
Stage	double layer							
	size: 310×240mm							
	travel: 150×100mm							
Condenser	roll-out achromatic condenser (numerical aperture 0.9)							
Illumination	5W LED, transmitted and reflected							
Observation tube	inverse image, distance adjustment: 50~76mm, two grade spectral ratio binocular: trinocular=100:0							
Diopter adjustment	±5 diopter (two eyepieces)							
Power supply	AC 100-240V							
Dimension (L×W×H)	310×600×550mm							
Net weight	27kg							

STANDARD DELIVERY

Main unit	1 pc
Anti-dust cover	1 pc
0.65X camera adapter (adjustable focus)	1 pc
Polarizer and analyzer	1 pc of each

OPTIONAL ACCESSORY

Camera and software	ISM-CM63
Glass calibration ruler	ISM-MAS-SCALE
Computer	5108-M-COMPUTER
2.5X infinite long working distance bright field semi achromatic objective	5108-M-OB2D5X
100X infinite long working distance bright and dark field semi achromatic objective	5108-M-BD100X
50X infinite long working distance bright and dark field achromatic objective	5108-M-APO50X
100X infinite long working distance bright and dark field achromatic objective	5108-M-APO100X
Differential interference module (DIC)	5108-M-DIC

METALLURGICAL MICROSCOPE (STANDARD TYPE)
CODE 5110-M900

- Infinite chromatic aberration correction optical system
- Three way observation tube with infinite hinge
- Translucent and reflective frame, front low-hand position coarse and fine coaxial focus adjustment mechanism, with adjustment elastic device to prevent sliding and random upper limit device
- With brightness memory function

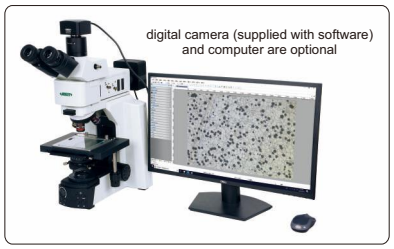
VIDEO

OPTIONAL ACCESSORY

Camera and software	ISM-CM63
Glass calibration ruler	ISM-MAS-SCALE
Computer	5110-M-COMPUTER
100X infinite long working distance bright field semi-apochromatic objective	5110-M-OB100X

SPECIFICATION

Eyepiece	high eye point large field SWH10X-H (view field: Ø23mm, adjustable visibility)			
Objective (infinite long working distance semicomplex achromatic)	bright field objectives			
	5X	10X	20X	50X
Numerical aperture	0.15	0.30	0.45	0.70
Working distance	15mm	8.4mm	3.0mm	3.0mm
Optical magnification	50X~500X (up to 1000X with optional 100X objective)			
Digital magnification	100X~1000X (on 21.5" monitor), up to 2000X with optional 100X objective			
Stage	double layer			
	glass workbench size: 101×101mm			
	travel: 75×50mm			
Condenser	roll-out achromatic condenser (numerical aperture 0.9)			
Diopter adjustment	±5 diopter (two eyepieces)			
Illumination	10W adjustable LED, transmitted and reflected			
Observation tube	inverse image, distance adjustment: 50~75mm, two grade spectral ratio binocular: trinocular=100:0			
Power supply	power adapter			
Dimension (L×W×H)	255×510×530mm			
Net weight	25kg			



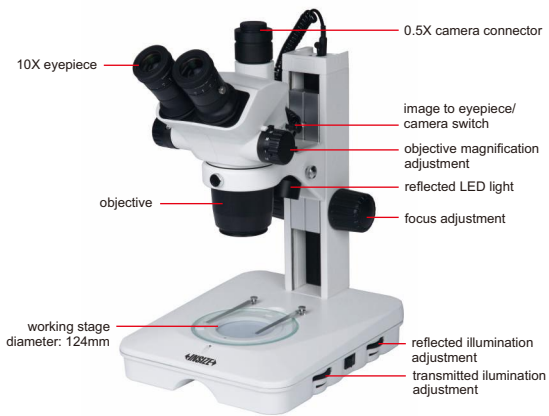
STANDARD DELIVERY

Main unit	1 pc
Anti-dust cover	1 pc
0.5X camera adapter	1 pc
Polarizer and analyzer	1 pc

ZOOM STEREO MICROSCOPE (ADVANCED TYPE)
CODE 5107-S70T

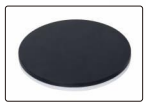
VIDEO

- Greenough optical system, clear observation, real color
- High working distance is convenient for operation
- Excellent flat image and large depth of field, make observation comfortable
- 6.7:1 large zoom ratio, allow quick observation adjustment



SPECIFICATION

Optical tube	trinocular
Eyepiece (wide field)	10X (view field: Ø22mm)
Objective	0.67X~4.5X (zoom)
Observation tube	45° trinocular tube inclination angle, built-in 0.5X adapter
Zoom ratio	6.7:1
Pupil distance	50~75mm
Diopter adjustment	-8~+5 diopter (both eyepieces)
Working distance of objective	100mm
Max. workpiece height	50mm
Illumination	adjustable reflected and transmitted LED light
Power supply	110/220V, 50/60HZ
Dimension (L×W×H)	240×290×368mm
Net weight	3.8kg


white/black plate (included)

frosted glass filter (included)

STANDARD DELIVERY

Main unit	1 pc
10X eyepiece	2 pcs
Ø124mm glass plate	1 pc
Ø124mm white/black plate	1 pc
Anti-dust cover	1 pc

OPTIONAL ACCESSORY

Auxiliary objective	0.5X	5107-S70T-OB05X
	1.5X	5107-S70T-OB15X
	2X	5107-S70T-OB20X
Eyepiece	15X (view field: Ø16mm)	5107-S70T-EP15X
	20X (view field: Ø12.5mm)	5107-S70T-EP20X
LED ring light		ISM-ZS-RL
Digital camera		ISM-CM20, ISM-CM63

LED ring light (**optional**)

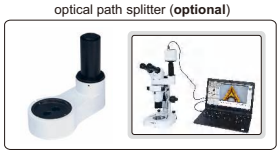
PARALLEL LIGHT STEREO MICROSCOPE
CODE ISM-ZS200

PARALLEL LIGHT PATH: REDUCE FATIGUE
ACCESSORIES CAN BE ADDED INTO LIGHT PATH

VIDEO

- Infinity parallel optical system and 20° inclined optical tube reduce fatigue
- Coaxial illumination is optional for deep holes which cannot be observed by ring light
- Aperture diaphragm is optional for large depth for field and high quality image

optical path splitter (**optional**)



iris diaphragm (**optional**)

coaxial illumination (**optional**)

SPECIFICATION

Optical tube	binocular (20° inclined)
Eyepiece (wide field)	10X (view field: Ø22mm)
Objective	0.8X~8X (zoom)
Zoom ratio	1:10
Pupil distance	55~75mm
Diopter adjustment	±5 diopter (both eyepieces)
Working distance of objective	78mm
Max. workpiece height	72mm
Illumination	adjustable reflected and transmitted LED light
Power supply	110/220V, 50/60HZ
Dimension (L×W×H)	240×280×440mm
Net weight	4.3kg

STANDARD DELIVERY

Main unit	1 pc
WF 10X eyepiece	2 pcs
Ø100mm glass plate	1 pc
Ø100mm white/black plate	1 pc
Anti-dust cover	1 pc

OPTIONAL ACCESSORY

Objective	0.5X achromatic objective (focus distance: 186mm)	ISM-ZS200-OB05X*
	2X plan achromatic objective (focus distance: 32.5mm)	ISM-ZS200-OB2X
	0.5X plan apochromatic objective (focus distance: 126mm)	ISM-ZS200-APO05X*
Eyepiece	WF15X (view field: Ø16mm)	ISM-ZS200-EP15X
	WF20X (view field: Ø12mm)	ISM-ZS200-EP20X
	WF30X (view field: Ø20mm)	ISM-ZS200-EP30X
Sleeve for auxiliary objective		ISM-ZS200-ADAPTER
Iris diaphragm		ISM-ZS200-IRD
Optical path splitter		ISM-ZS200-OBS
Coaxial illumination		ISM-ZS200-COAXIAL
Digital camera**		ISM-CM20, ISM-CM63

* 0.5X auxiliary objective must be used with **ISM-ZS200-ADAPTER**

** Digital camera must be used with optical path splitter

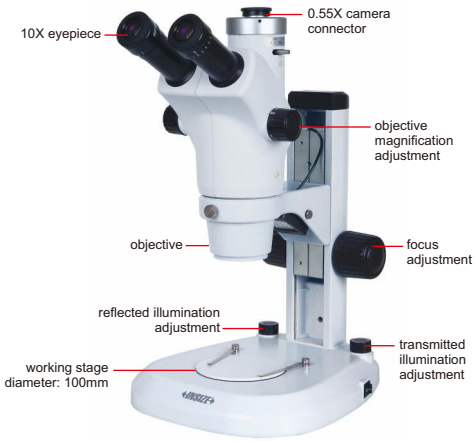
ZOOM STEREO MICROSCOPES (ADVANCED TYPE)

LARGE ZOOM RATIO

VIDEO

connect to digital camera (for **ISM-ZS100T**)

LED ring light (**optional**)



ISM-ZS100T

SPECIFICATION

Code	ISM-ZS100	ISM-ZS100T
Optical tube	binocular	trinocular
Eyepiece (wide field)	10X (view field: Ø23mm)	
Objective	0.6X~5X (zoom)	
Zoom ratio	1:8.3	
Pupil distance	55~75mm	
Diopter adjustment	±5 diopter (two eyepieces)	
Working distance of objective	115mm	
Max. workpiece height	75mm	
Illumination	adjustable reflected and transmitted LED light	
Power supply	110/220V, 50/60HZ	
Dimension (L×W×H)	260×310×490mm	
Net weight	4.9kg	

STANDARD DELIVERY

Main unit	1 pc
Camera connector 0.55X for ISM-ZS100T	1 pc
Digital camera adapter 1X for ISM-ZS100T	1 pc
WF10X eyepiece	2 pcs
Ø100mm glass plate	1 pc
Ø100mm white/black plate	1 pc
Anti-dust cover	1 pc

OPTIONAL ACCESSORY

Auxiliary objective	0.5X (focus distance: 220mm)	ISM-ZS100-OB05X*
	0.7X (focus distance: 125mm)	ISM-ZS100-OB07X
	2X (focus distance: 45mm)	ISM-ZS100-OB2X
Eyepiece	WF15X (view field: Ø16mm)	ISM-ZS100-EP15X
	WF20X (view field: Ø12mm)	ISM-ZS100-EP20X
	WF30X (view field: Ø8mm)	ISM-ZS100-EP30X
Sleeve for auxiliary objective		ISM-ZS200-ADAPTER
LED ring light		ISM-ZSRL
Digital camera for ISM-ZS100T		ISM-KM60

* 0.5X auxiliary objective must be used with **ISM-ZS200-ADAPTER**

ZOOM STEREO MICROSCOPES (STANDARD TYPE)

VIDEO

LED ring light (**optional**)

ISM-ZS50

SPECIFICATION

Code	ISM-ZS50	ISM-ZS50T
Optical tube	binocular	trinocular
Eyepiece (wide field)	10X (view field: Ø22mm)	
Objective	0.8X~5X (zoom)	
Zoom ratio	1:6.3	
Pupil distance	55-75mm (adjustable)	
Diopter adjustment	±5 diopter (two eyepieces)	
Working distance of objective	115mm	
Max. workpiece height	75mm	
Illumination	adjustable reflected and transmitted LED light	
Power supply	110/220V, 50/60Hz	
Dimension (L×W×H)	290x260x480mm	
Net weight	4.9kg	

STANDARD DELIVERY

Main unit	1 pc
WF10X eyepiece	2 pcs
Ø100mm glass plate	1 pc
Ø100mm white/black plate	1 pc
Anti-dust cover	1 pc

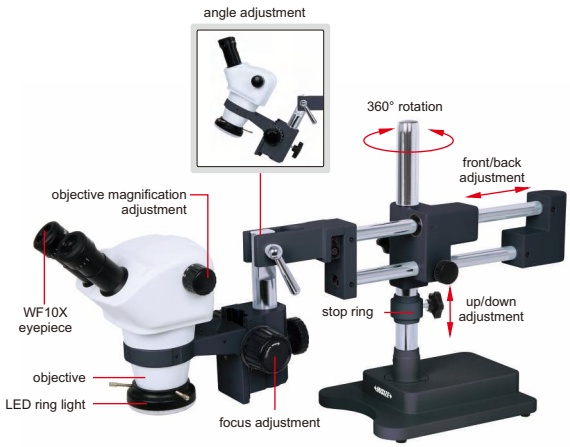
OPTIONAL ACCESSORY

Auxiliary objective	0.5X	ISM-ZS50-OB05X*
	2X	ISM-ZS50-OB2X
Eyepiece	10X dividing eyepiece (graduation 0.1mm/div.)	ISM-ZS50-EPD10X
	WF15X (view field: Ø16mm)	ISM-ZS50-EP15X
	WF20X (view field: Ø12mm)	ISM-ZS50-EP20X
LED ring light		ISM-ZS-RL
Sleeve for auxiliary objective		ISM-ZS200-ADAPTER
Digital camera for ISM-ZS50T		ISM-KM60

*0.5X auxiliary objective must be used with **ISM-ZS200-ADAPTER**

ZOOM STEREO MICROSCOPES (WITH UNIVERSAL STAND)

VIDEO



5106-M50

SPECIFICATION

Code	5106-M50	5106-M50T
Optical tube	binocular	trinocular
Eyepiece (wide field)	10X (view field: Ø22mm)	
Objective	0.8X~5X (zoom)	
Zoom ratio	1:6.3	
Pupil distance	55~75mm	
Diopter adjustment	±5 diopter (two eyepieces)	
Working distance of objective	115mm	
Max. workpiece height	300mm	
Illumination	adjustable reflected LED ring light	
Power supply	power adapter	
Dimension (L×W×H)	790×230×430mm	
Net weight	20kg	

STANDARD DELIVERY

Main unit (with stand)	1 pc
WF 10X eyepiece	2 pcs
LED ring light	1 pc
Anti-dust cover	1 pc

OPTIONAL ACCESSORY

Auxiliary objective	0.5X	ISM-ZS50-OB05X*
	2X	ISM-ZS50-OB2X
Eyepiece	10X dividing eyepiece (0.1mm/div.)	ISM-ZS50-EPD10X
	WF15X (view field: Ø16mm)	ISM-ZS50-EP15X
	WF20X (view field: Ø12mm)	ISM-ZS50-EP20X
Adapter sleeve		ISM-ZS30-ADAPTER
Digital camera (for 5106-M40T/M50T)		ISM-KM60

*0.5X auxiliary objective must be used with **ISM-ZS30-ADAPTER**

ZOOM STEREO MICROSCOPE (BASIC TYPE)
CODE ISM-ZS30

LED ring light (**optional**)

SPECIFICATION

Optical tube	binocular
Eyepiece (wide field)	10X (view field: Ø20mm)
Objective	1X~4.5X (zoom)
Zoom ratio	1:4.5
Pupil distance	55~75mm (adjustable)
Diopter adjustment	±5 diopter (two eyepieces)
Working distance of objective	97mm
Max. workpiece height	60mm
Illumination	adjustable reflected and transmitted LED light
Power supply	110/220V, 50/60Hz
Dimension (L×W×H)	260×190×400mm
Net weight	4.3kg

STANDARD DELIVERY

Main unit	1 pc
WF 10X eyepiece	2 pcs
Ø95mm glass plate	1 pc
Ø95mm white/black plate	1 pc
Anti-dust cover	1 pc

OPTIONAL ACCESSORY

Auxiliary objective	0.5X	ISM-ZS30-OB05X *
	0.63X	ISM-ZS30-OB06X *
	0.75X	ISM-ZS30-OB07X *
	2X	ISM-ZS30-OB2X
Eyepiece	10X dividing eyepiece (graduation 0.1mm/div.)	ISM-ZS30-EPD10X
	WF15X (view field: Ø16mm)	ISM-ZS50-EP15X
	WF20X (view field: Ø12mm)	ISM-ZS50-EP20X
LED ring light		ISM-ZS-RL
Sleeve for auxiliary objective		ISM-ZS30-ADAPTER
Digital camera		ISM-CM63
Camera adapter 0.75X **		ISM-AD-0D75

* 0.5X, 0.63X and 0.75X auxiliary objectives must be used with **ISM-ZS30-ADAPTER**
** Digital camera must be used with camera adapter 0.75X

LONG WORKING DISTANCE STEREO MICROSCOPE (LOW MAGNIFICATION)

5305-ZS90

LED ring light (**optional**)

SPECIFICATION

Code	**5305-ZS90** (with magnetic base)
Magnification	8X
Eyepiece (wide field)	10X (view field: Ø20mm)
Objective	0.8X
Pupil distance	55~75mm
Diopter adjustment	±5 diopter (one eyepiece)
Working distance of objective	115mm
Max. workpiece height	140mm
Dimension (L×W×H)	280x180x410mm
Net weight	2.1kg

STANDARD DELIVERY

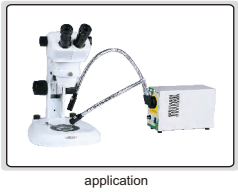
Main unit	1 pc
10X eyepieces	1 pair
0.8X objective	1 pc
Anti-dust cover	1 pc

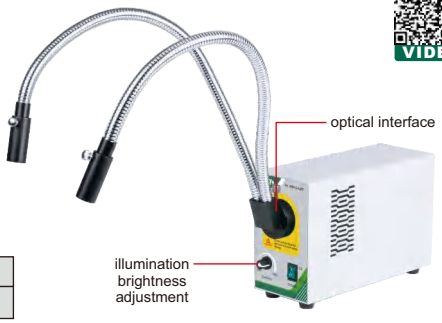
OPTIONAL ACCESSORY

Eyepiece	WF5X (view field: Ø20mm)	5305-ZS80-EP5X
	WF15X (view field: Ø15mm)	5305-ZS80-EP15X
	WF20X (view field: Ø10mm)	5305-ZS80-EP20X
LED ring light		ISM-ZS-RL

LED COLD LIGHT SOURCE
CODE ISM-CL-LED

- LED optical fiber cold light source with adjustable brightness
- For digital and stereo microscopes


application



SPECIFICATION

Fiber length	550mm
Cooling	fan cooling
Maximum power	35W
Dimension (L×W×H)	230x90x150mm
Net weight	3.5kg

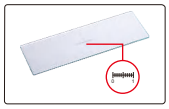
STANDARD DELIVERY

Main unit	1 pc
Double-branched hard tube fiber	1 pc

DIGITAL CAMERA FOR MICROSCOPES
CODE ISM-CM63

VIDEO

ATTENTION: ADAPTERS ARE NEEDED ACCORDING TO MICROSCOPES

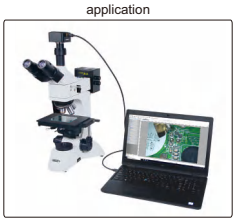


glass calibration ruler
(included, graduation 0.1mm)

C-mount port

adapter 0.75X (**optional**)

application

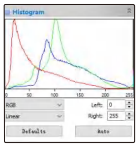


- To be used with computers
- Sony Exmor back-illuminated CMOS sensor
- USB3.0 transmission
- Automatic exposure, gain adjustment, white balance, chrominance adjustment, saturation adjustment, gamma correction, luminance adjustment, contrast adjustment

software (included)

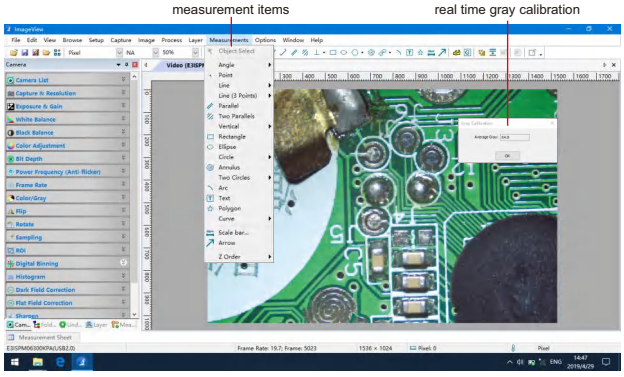
selectable resolution

histogram
(quantify the distribution of color and brightness)

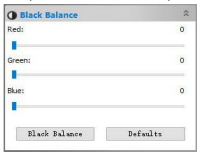


measurement items

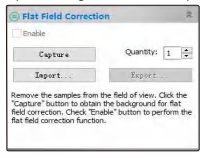
real time gray calibration



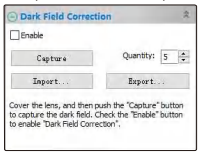
black balance
(reduce color difference)



flat field correction
(reduce brightness difference)



dark field correction
(reduce thermal noise)



the software can control image completely, including measurement, image stitch, extend focus depth, image gray processing, RGB histogram observation, image color sampling, 3D plot (3D representation of image intensity), image exposure, white balance, black balance, image bit depth, flat field correction and dark field correction, etc.

Measurement tools:

- measure length of line or distance between two points
- measure rectangle
- measure angle
- measure radius, girth and area of circle
- measure axis lengths, girth and area of ellipse
- calibration
- measure distance between two parallel lines
- measure width and diameter of ring
- measure diameter, length, perimeter angle of arc
- measure area of polygon
- measure center distance between two circles
- measure length of open curve

counting

select counting tool

automatic counting

extend focus depth

focus on the top

focus on the bottom

clear image of both top and bottom

SPECIFICATION

Sensor (back-up)	1/1.8" CMOS
Resolution	3072×2048
Pixel	6.3M
Single pixel size	2.4×2.4μm
Spectral range	380-650nm (with infrared cut filter)
Frame rate	30fps
Sampling average	1×1
Exposure time	0.1ms~15s
Power supply	USB port
Net weight	400g

COMPUTER REQUIREMENT

Operation system	Windows 7/8/10
CPU	Intel Core 2 2.8Hz or above
Memery	2GB or above
USB port	USB3.0 (recommand) or USB2.0
Display	17" or above

STANDAER DELIVERY

Camera (USB cable included)	1 pc
Glass calibration ruler (graduation 0.1mm)	1 pc
Software	1 pc

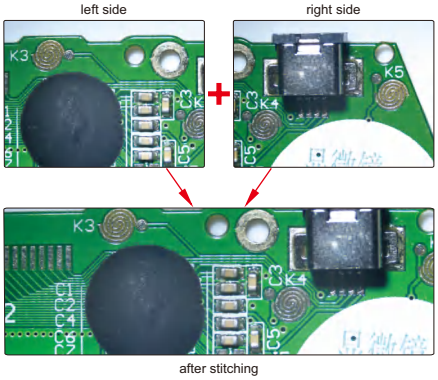
OPTIONAL ACCESSORY

Adapter 0.75X	**ISM-AD-0D75**

automatic image stitching (expand field of view)

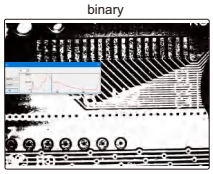
left side

right side



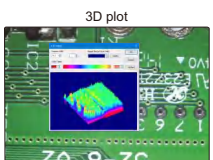
after stitching

binary



separate target and background

3D plot



visualize the distribution of image brightness and color

METALLURGICAL ANALYSIS SOFTWARE AND CAMERA
CODE ISM-MAS100

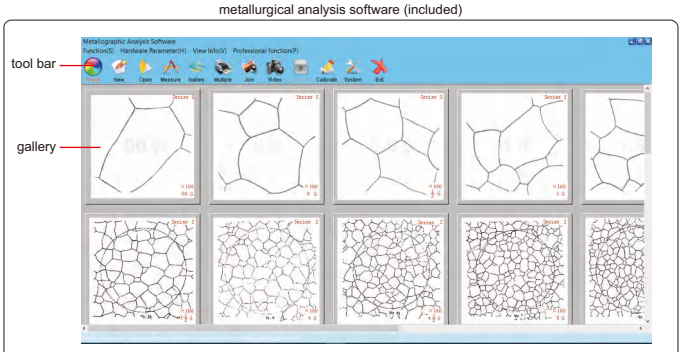
VIDEO

- More than 100 standards (ISO, ASTM, JIS, etc.)
- For metallurgical microscopes
- The camera can be inserted into the eyepiece tube or camera connector of microscopes
- Metallurgical analysis software is included, which can make comparative analysis, measurement and evaluation of various materials

software flash disk (included)

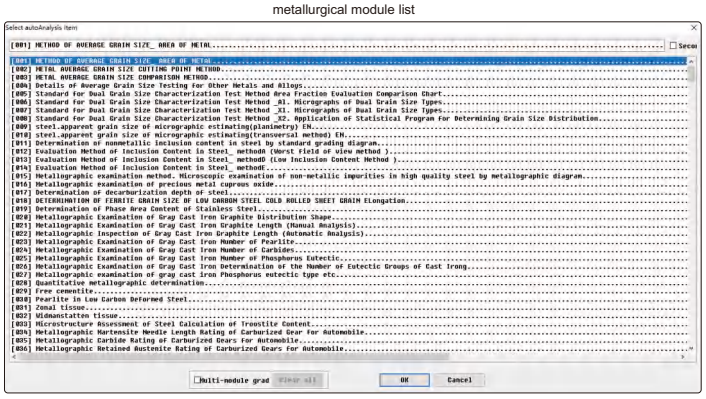
glass calibration ruler (included)

metallurgical analysis software (included)



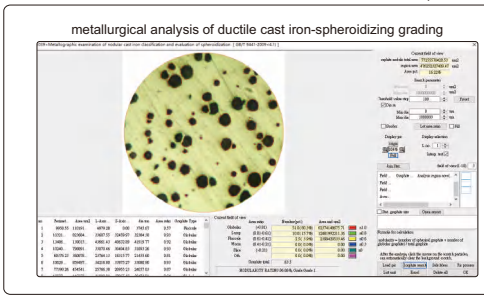
this software can be used with variety of metallographic microscopes for acquisition, processing, analysis, report generation of metallurgical images

metallurgical module list

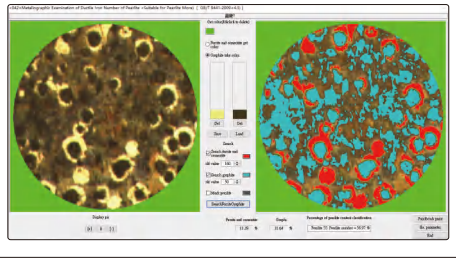


examples of metallurgical analysis

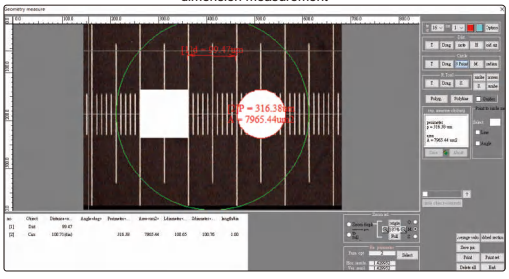
metallurgical analysis of ductile cast iron-spheroidizing grading



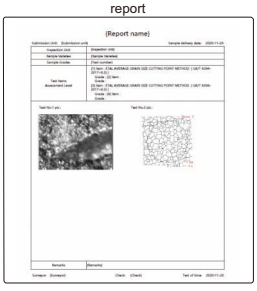
metallurgical analysis of ductile cast iron-pearlite quantity



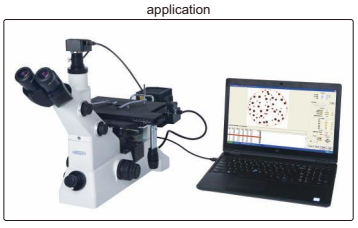
dimension measurement



report



application



focus stacking

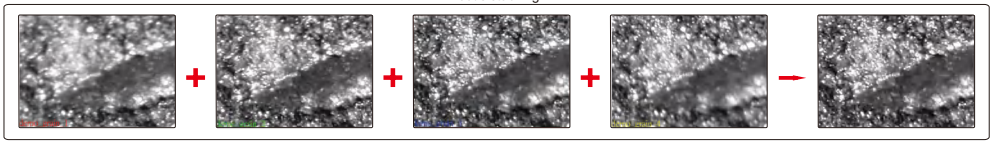
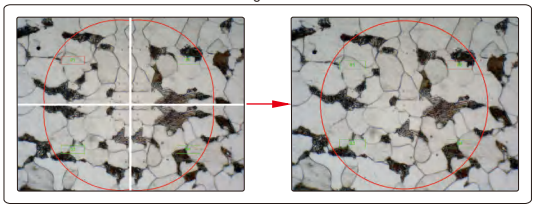
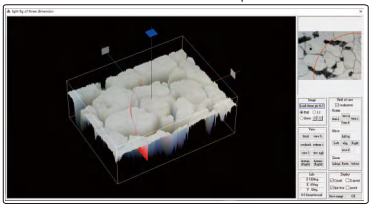


image stitch



three dimension map



SPECIFICATION

Sensor	1/1.8" CMOS
Pixel	6.3M
Resolution	3072×2048
Frame rate	30fps
Exposure time	0.1ms~15s
Power supply	USB port
Net weight	400g

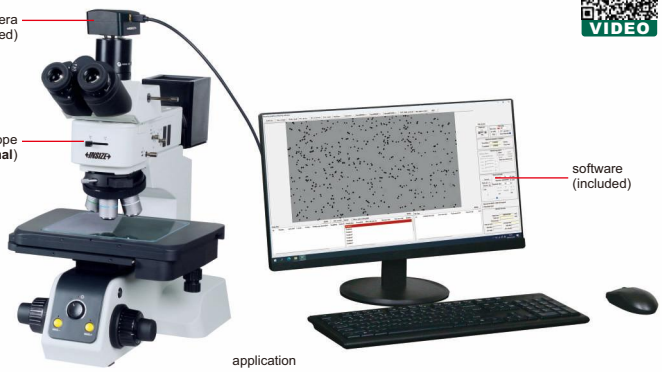
STANDARD DELIVERY

Camera (USB cable included)	1 pc
Software	1 pc
Glass calibration ruler	1 pc

POROSITY MEASUREMENT SOFTWARE AND CAMERA
CODE ISM-MAS200

VIDEO

- Using advanced image processing algorithms, can accurately identify the boundaries between pores and solid parts
- One click measurement, simple and user friendly operation interface for quick operation mastery
- Clearly present porosity data and its distribution, conduct in depth analysis of measurement data
- Wide range of applications, compatible with multiple microscopes and cameras



porosity measurement software (included)

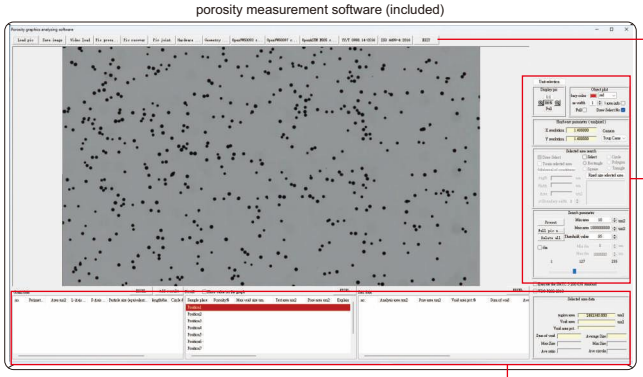
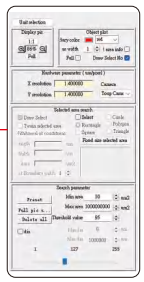


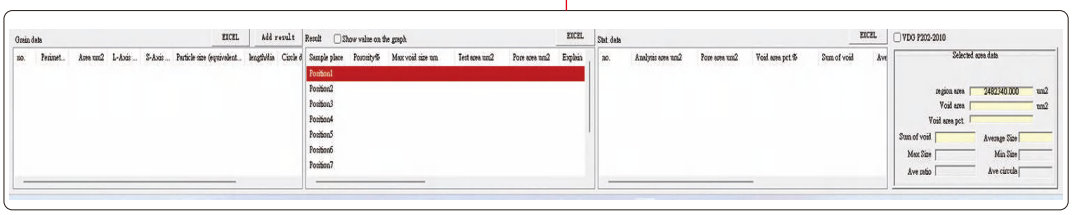
image processing



Measuring tools:

- Select image resolution parameters
- Freely choose the measurement area
- Preset search parameters to search for various types of pores accurately

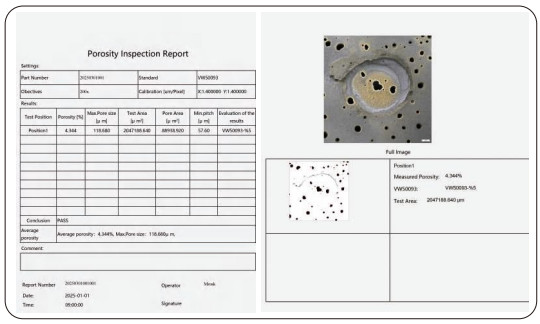
camera (included)



measurement results: statistics on data such as the perimeter and area of each pore are carried out, and the local or overall porosity is automatically calculated

microscope (**optional**)

pore statistics table



porosity inspection report

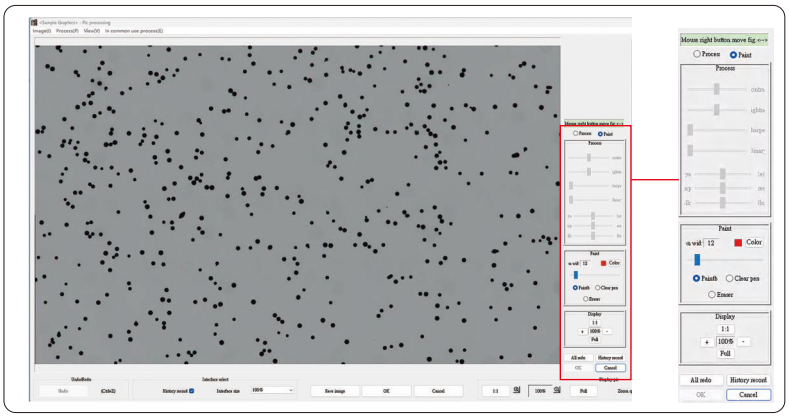


image processing: adjustment of image contrast, brightness, sharpening, binarization, RGB values, etc.
highlighting the contrast between pores and the base material to improve recognition accuracy

SPECIFICATION

Sensor	1/1.8" CMOS
Pixel	6.3M
Resolution	3072×2048
Frame rate	30fps
Exposure time	0.1ms~15s
Power supply	USB port
Net weight	400g

STANDARD DELIVERY

Camera	1 pc
Software	1 pc
Glass calibration ruler	1 pc

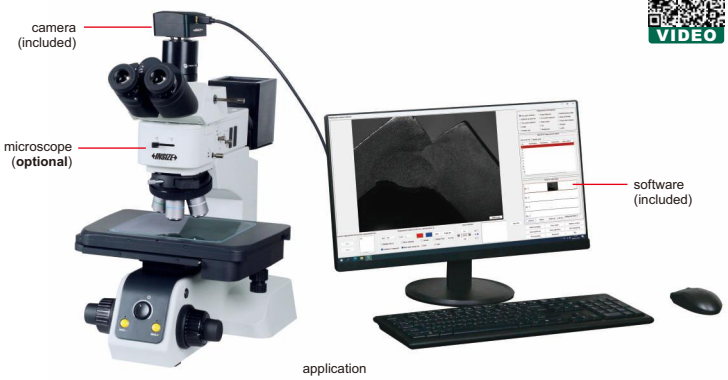
OPTIONAL

Microscope	5110-M900, 5108

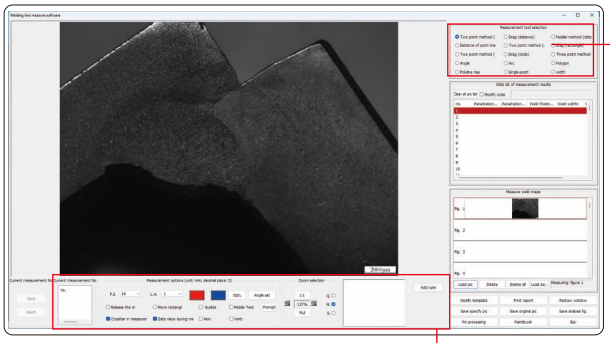
WELD SEAM MEASUREMENT SOFTWARE AND CAMERA
CODE ISM-MAS300

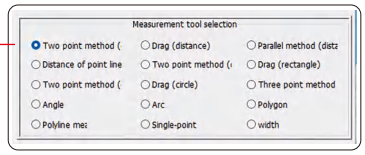
VIDEO

- Microscopic photographing and measurement of the weld penetration depth generated by various welding processes
- Measurement and analysis of penetration depth, penetration width, penetration height, overlap amount, cut, etc.
- Two report templates are provided and customized report templates can also be provided
- Wide range of applications, compatible with multiple microscopes and cameras



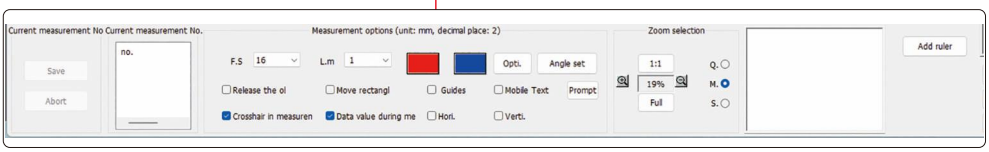
weld seam measurement software (included)



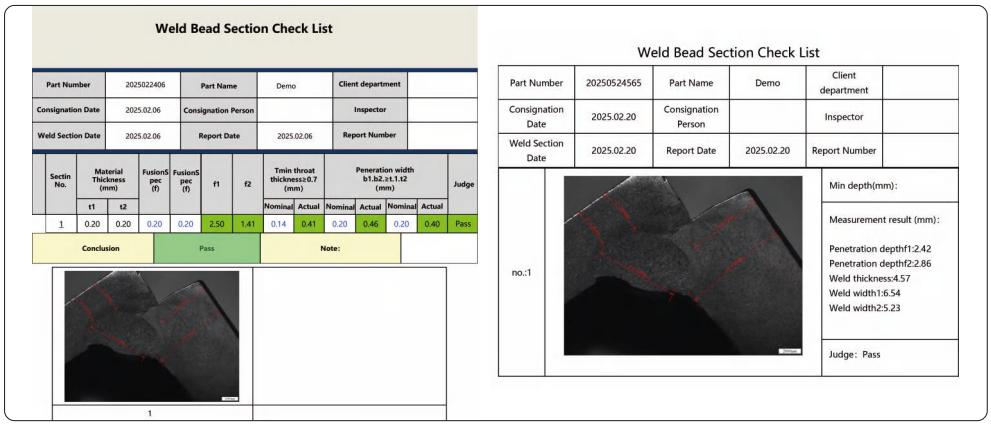


Measuring tools:

- Provides a variety of measurement tools and methods, including points, straight lines, rectangles, circles, polygons, angles, etc.
- Automatically judge the qualification after the measurement is finished
- After the measurement is completed, a report containing the measurement images can be generated



measurement options: auxiliary lines, horizontal lines and vertical lines can be added. The measured data can be modified or deleted. Text, scales can be noted on the measurement graph, and a fixed multiple can be set, etc.



Weld Bead Section Check List

Part Number	2025022406	Part Name	Demo	Client department	
Consignation Date	2025.02.06	Consignation Person		Inspector	
Weld Section Date	2025.02.06	Report Date	2025.02.06	Report Number	

Sectin No.	Material Thickness (mm)		FusionSpec (f)	FusionSpec (f)	f1	f2	Tmin throat thickness≥0.7 (mm)		Peneration width b1.b2.≥t.1.t2 (mm)				Judge
	t1	t2					Nominal	Actual	Nominal	Actual	Nominal	Actual	
1	0.20	0.20	0.20	0.20	2.50	1.41	0.14	0.41	0.20	0.46	0.20	0.40	Pass
Conclusion			Pass				Note:						

1

Weld Bead Section Check List

Part Number	20250524565	Part Name	Demo	Client department	
Consignation Date	2025.02.20	Consignation Person		Inspector	
Weld Section Date	2025.02.20	Report Date	2025.02.20	Report Number	

no.:1

Min depth(mm):

Measurement result (mm):

Penetration depthf1:2.42
Penetration depthf2:2.86
Weld thickness:4.57
Weld width1:6.54
Weld width2:5.23

Judge: Pass

report: provide two types of weld inspection report templates, and customized report templates can also be provided

image processing: provide a large number of image processing methods, which can be used to process brightness, contrast, color, grayscale levels and binarization, and can complete image processing operations like removing noise points, connecting broken lines, sharpening, softening, and edge enhancement

camera (included)

SPECIFICATION

Sensor	1/1.8" CMOS
Pixel	6.3M
Resolution	3072×2048
Frame rate	30fps
Exposure time	0.1ms~15s
Power supply	USB port
Net weight	400g

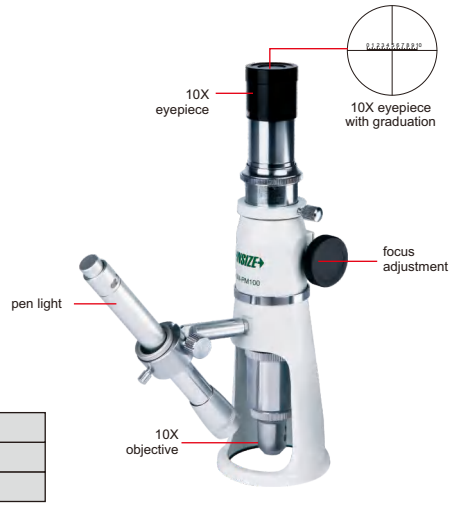
STANDARD DELIVERY

Camera	1pc
Software	1pc
Glass calibration ruler	1pc

OPTIONAL

Microscope	5110-M900, 5108

PORTABLE MEASURING MICROSCOPE
CODE ISM-PM100



SPECIFICATION

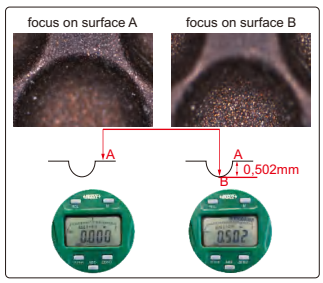
Total magnification	100X
Eyepiece	10X with graduation
Objective (achromatic)	10X (numerical aperture: 0.25)
Working distance	7mm
Graduation	0.01mm
Viewing field	Ø1.8mm
Focus range	30mm
Illumination	LED light
Diameter of base	Ø63mm
Height	210mm
Net weight	650g

STANDARD DELIVERY

Main unit	1 pc
Pen light	1 pc
Battery (AAA)	2 pcs

DIGITAL DEPTH MEASURING MICROSCOPE
CODE ISM-PM110

- Measuring the depth of scratches, chips, burrs, pitting, chattering, scribe lines, engraving, markings, etc.
- Built-in light source for on-the-spot detection
- Equipped with a display indicator that clearly shows the data



depth measurement

SPECIFICATION

Total magnification	100X
Eyepiece	10X with graduation
Objective (achromatic)	10X (numerical aperture 0.25)
Working distance	7mm
Accuracy	±0.02mm
Viewing field	Ø1.8mm
Focus range	30mm
Depth measurement distance	7mm
Illumination	LED light
Diameter of base	Ø63mm
Height	210mm
Net weight	850g

STANDARD DELIVERY

Main unit	1 pc
Pen light	1 pc
Battery (AAA)	2 pcs
Digital indicator	1 pc

TABLE MAGNIFIER WITH ILLUMINATION
CODE 7517-3D

- Four steps brightness adjustment
- LED illumination, working life 20000h
- Resin lens

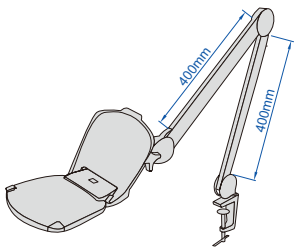
SPECIFICATION

Magnification	1.75X
Diopter	3D
Lens diameter	Ø125mm
Illumination	power: 3W, illuminance: 260lm
Power supply	power adapter 12V, 1A

3 pcs LED

TABLE MAGNIFIERS WITH ILLUMINATION

- LED illumination, working life 20000h
- Resin lens



7520-320D

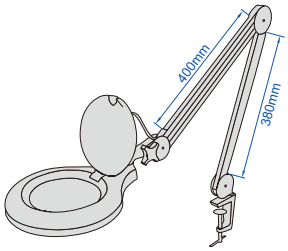
7521-3D

SPECIFICATION

Code	7520-320D	7521-3D
Magnification	two magnifications 1.75X/6X	1.75X
Diopter	3D/20D	3D
Lens diameter	160×127mm	Ø126mm
Illumination	power: 6W, illumination: 550lm	
Power supply	power adapter 12V, 1A	

TABLE MAGNIFIER WITH ILLUMINATION CODE 7516-5D

- LED illumination, working life 20000h



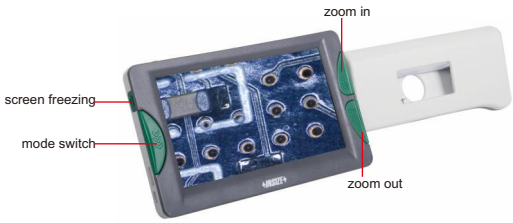
SPECIFICATION

Magnification	2.25X
Diopter	5D
Lens diameter	Ø122mm
Illumination	power: 7W, illuminance: 420lm
Power supply	100~240V, 50~60Hz

DIGITAL MAGNIFIER CODE 7525-D4

VIDEO

after the handle is folded, the magnifier can be directly placed on the object for observation



SPECIFICATION

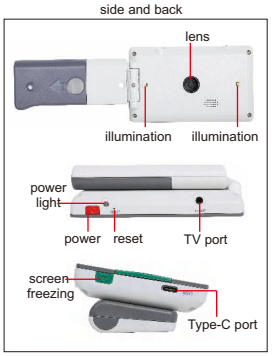
Screen size	4.3 inch
Screen resolution	480×272
Magnification	2X-32X
Pixel	8M
Focus	manual/automatic
Color mode (26 modes)	color mode, color enhancement mode, negative mode, monochrome mode, black on white, white on black, blue on white, white on blue, yellow on black, black on yellow, yellow on blue, blue on yellow, green on white, white on green, orange on white, white on orange, red on black, black on red, orange on black, black on orange, yellow on green, green on yellow, red on white, white on red yellow on white, white on yellow
Output	TV
Charging port	Type-C
Lithium battery	1600mAH (for 4 hours working)
Dimension (L×W×H)	123×39×76mm (when the handle is folded)
Net weight	210g

- 720P60 camera
- Auto focus
- With screen freezing function
- 26 color modes can be switched to meet the needs of different people
- Port to TV
- Automatic shutdown after 3 minutes

STANDARD DELIVERY

Main unit	1 pc
Video output cable	1 pc
USB charging cable	1 pc
Power adapter	1 pc

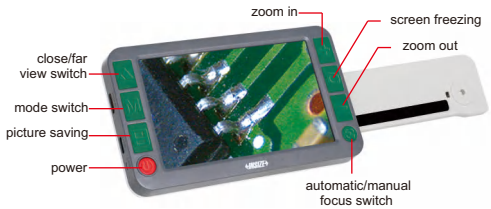
side and back



DIGITAL MAGNIFIER
CODE 7526-D5

VIDEO

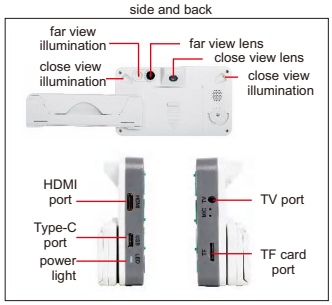
- 720P60 (close view) and 1080P30 (far view) cameras
- Double autofocus
- 26 color modes can be switched to meet the needs of different people
- Adopt folding bracket
- Detachable handle design, suitable for left-handed or right-handed use
- TV and HDMI ports to TV and display
- Automatic shutdown after 3 minutes



SPECIFICATION

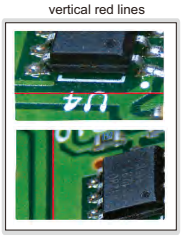
Screen size	5 inch
Screen resolution	800x480
Magnification	2X-32X
Close view pixel	8M
Far view pixel	8M
Focus	manual/automatic
Color mode (26 modes)	color mode, color enhancement mode, negative mode, monochrome mode, black on white, white on black, blue on white, white on blue, yellow on black, black on yellow, yellow on blue, blue on yellow, green on white, white on green, orange on white, white on orange, red on black, black on red, orange on black, black on orange, yellow on green, green on yellow, red on white, white on red, yellow on white, white on yellow
Line	horizontal and vertical red lines
Function	screen freezing, image moving, photo playback, and high definition storage
Output	TV and HDMI
storage	supports up to 32G TF card
Charging port	Type-C
Lithium battery	2500mAH (for 4 hours working)
Dimension (L×W×H)	145×30×85mm (when the handle is folded)
Net weight	275g

side and back



after the handle is folded, the magnifier can be directly placed on the object for observation

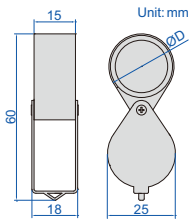
horizontal and vertical red lines



STANDARD DELIVERY

Main unit	1 pc
HDMI cable	1 pc
Video output cable	1 pc
USB charging cable	1 pc
Power adapter	1 pc

FOLDING MAGNIFIER



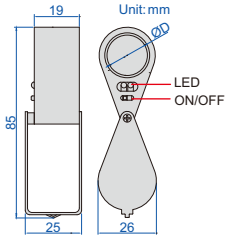
7511-8

- Glass lens

closed

Code	Magnification	Lens diameter (ØD)
7511-8	10X	Ø21mm

FOLDING MAGNIFIER WITH ILLUMINATION



7515-10

- Resin lens
- Powered by 3×LR927 batteries (included)

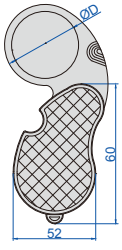
closed

Code	Magnification	Lens diameter (ØD)
7515-10	10X	Ø21mm

FOLDING MAGNIFIER WITH ILLUMINATION

- Resin lens
- Powered by 2×CR1620 batteries (included)
- LED lights up automatically when opened

7514-1



MAGNIFIER WITH ILLUMINATION

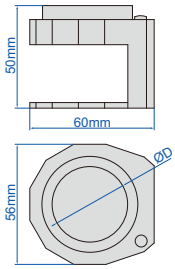
- Glass lens
- Powered by 3xAG7 batteries
- 3 pcs LED and 3 pcs UV
- Base with scale, graduation: 0.5mm, 1/16"

Code	Magnification	Lens diameter (ØD)
7524-10	10X	Ø30mm

base with scale

rotate lens to adjust focus

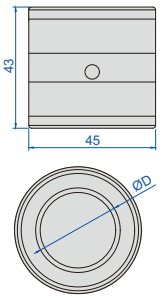
7524-10



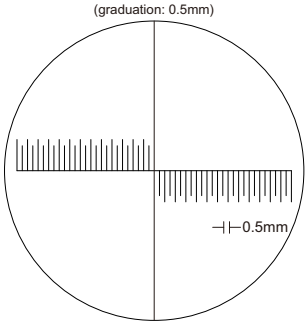
MEASURING MAGNIFIERS (WITH ILLUMINATION)

7527-D1

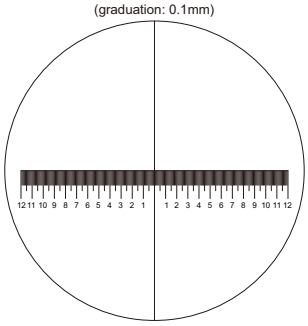
Unit: mm



scale of **7527-D1**
(graduation: 0.5mm)



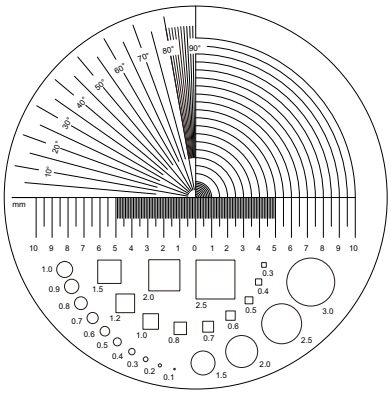
scale of **7527-D1B**
(graduation: 0.1mm)



- Base with scale
- With 5 white LED and 5 UV LED
- Charging port: Type-C
- Work for 30min after fully charged

base with scale

scale of **7527-D2**
(0-5mm graduation: 0.1mm, 5-10mm graduation: 0.5mm)

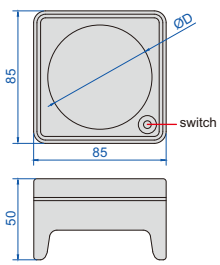


Code	Magnification	Lens diameter (ØD)
7527-D1	10X	Ø30mm
7527-D2	10X	Ø30mm
7527-D1B	10X	Ø30mm

MAGNIFIER WITH ILLUMINATION

7528-3

Unit: mm



- Glass lens
- With 4 white LED, three levels brightness adjustment
- Charging port: Type-C

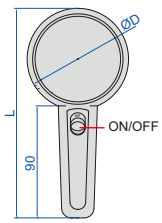
Code	Magnification	Lens diameter (ØD)
7528-3	3X	Ø70mm

MAGNIFIERS WITH ILLUMINATION

7513-2

7513-4

Unit: mm



- Glass lens
- Powered by 3xAAA batteries (included)

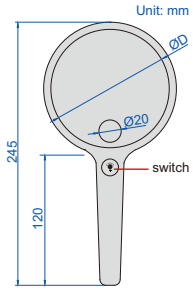
Code	Magnification	Lens diameter (ØD)	L
7513-2	2X	Ø75mm	170mm
7513-4	4X	Ø50mm	145mm

MAGNIFIER WITH ILLUMINATION

- Resin lens
- With 20 white LED, three levels brightness adjustment
- Charging port: Type-C

Code	Magnification	Lens diameter (ØD)
7529-24	2X/4X	Ø105mm

7529-24

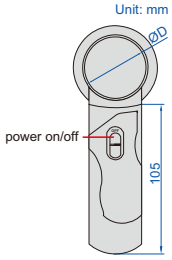


MAGNIFIER WITH TWO LENSES

- Resin lens
- Interchangeable lenses
- Powered by 3 pcs AAA batteries (included)

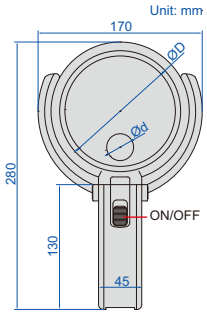
Code	Lens number	Magnification	Lens diameter (ØD)
7522-610	2 pcs	6X	50mm
		10X	37mm

7522-610



2 pcs LED

THREE WAYS MAGNIFIER WITH ILLUMINATION

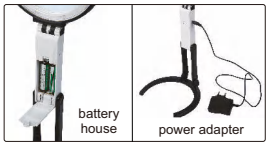


7512-1

three ways use

- Resin lens
- Powered by 2xAA batteries (included) or power adapter (110~240V, 50~60Hz)

Code	Magnification	Lens diameter (ØD/Ød)
7512-1	2X/4X	Ø120mm/Ø28mm



MAGNIFICATION GLASS

- Resin lens
- Interchangeable lenses
- Powered by 3 pcs AAA batteries (included)

Code	Lens number	Magnification
7523-3D5	5 pcs	1X
		1.5X
		2X
		2.5X
		3.5X

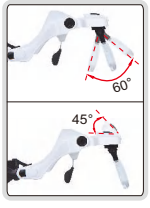
7523-3D5

head band (included)

interchangeable lenses

2 pcs LED

adjustable lens and LED angle



adjustable holder angle

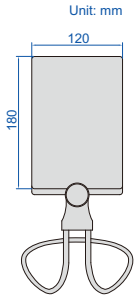
moveable lens for focus

MAGNIFIER

- Resin lens
- Silicone hose can be shaped according to needs
- Can be used on table or hanging around neck

Code	Magnification	Lens size
7530-1D8	1.8X	180x120mm

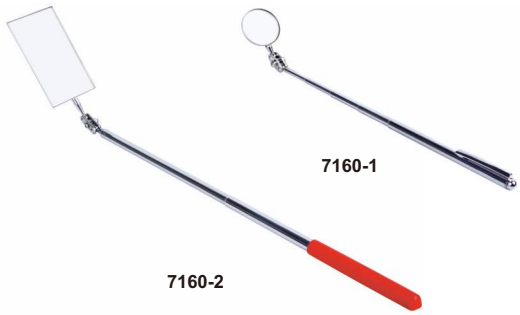
7530-1D8

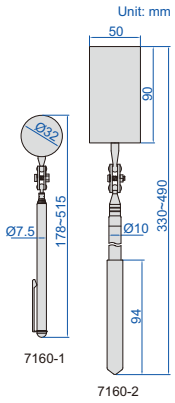


TELESCOPING INSPECTION MIRRORS

- Inspect hidden areas
- Rotation of the mirror: 360°
- Length of handle is adjustable, handle is made of stainless steel

Code	Size of mirror	Length
7160-1	Ø32mm	178~515mm
7160-2	50x90mm	330~490mm



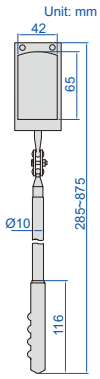


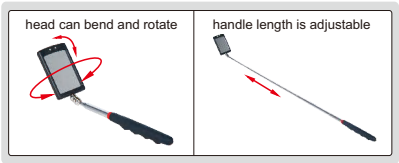
TELESCOPING INSPECTION MIRROR (WITH ILLUMINATION)

- Inspect hidden areas
- Head can bend and rotate
- Telescoping handle, made of stainless steel
- With two CR2032 batteries

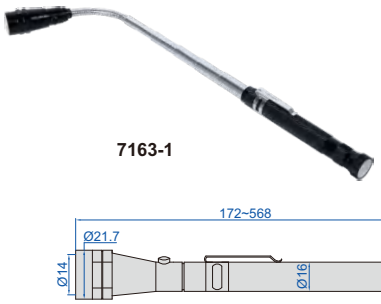
Code	Size of mirror	Length
7162-1	65x42mm	285~875mm

7162-1

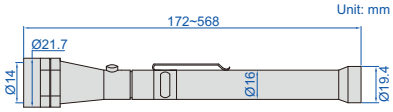




TELESCOPING MAGNETIC PICK-UP AND FLASHLIGHT



7163-1



- Magnetic force of the head: 2kgf
- Magnetic force of the end: 4kgf
- For illumination and pick up steel parts in hidden areas
- Head can bend
- Telescoping handle, made of stainless steel
- Magnetic head and end
- With four LR44 batteries

magnetic head

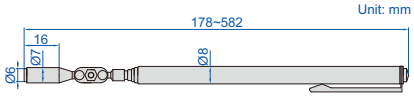
magnetic end to attach on steel surfaces

Code	Flashlight range	Battery life	Length
7163-1	3m	8h	172~568mm

TELESCOPING MAGNETIC PICK-UP

7161-1

- Pick up metal parts from hidden areas
- Rotation of the magnetic head: 360°
- Length of handle is adjustable, handle is made of stainless steel

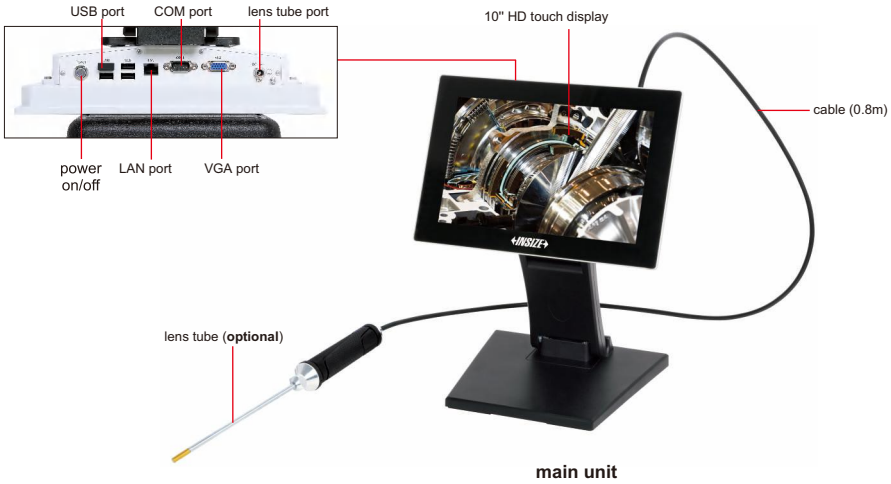


Code	Size of magnetic tip	Magnetic force	Length
7161-1	Ø6mm	0.45kgf	178~582mm

VIDEOSCOPE (DESK TYPE)

REAR FIBER ILLUMINATION

VIDEO



main unit

MAIN UNIT (WITHOUT LENS TUBE)

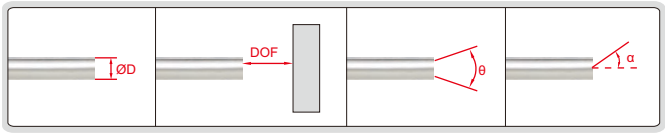
Code	ISV-Y
Display	10" HD touch display
Function	take picture, take video
File format	picture: JPG, video: Mp4
Memory	built-in hard disk or USB flash disk
Image process	image zoom (1X, 2X, 3X)
Image control	noise reduction, negative film, flip over, freeze, on-line edit
Illumination	stepless adjustment
Additional function	real-time dynamic annotation, real-time watermark, rapid defect mark
Output	USB
Power supply	AC/DC adapter (for continuous working)
Net weight	1000g

STANDARD DELIVERY

Main unit	1 pc
USB disk	1 pc
Mouse	1 pc
AC/DC adapter	1 pc

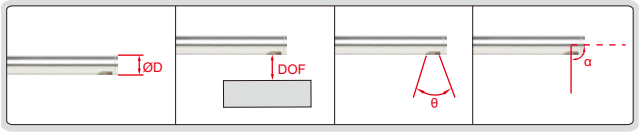
OPTIONAL ACCESSORY

Lens tube	refer to below details
Software for automatic defect identification	can be customized



RIGID STRAIGHT LENS TUBE, FRONT VIEW

Code	Lens tube		Lens					
	diameter (ØD)	length (L)	pixel	illumination	angle of view (θ)	depth of field (DOF)	view direction (α)	dust/ waterproof
ISV-Y6010	6.0mm	300mm (**optional** 90-1000mm)	1M	rear optical fiber	120°	12~200mm	0°(**optional** 30° , 70°)	IP67



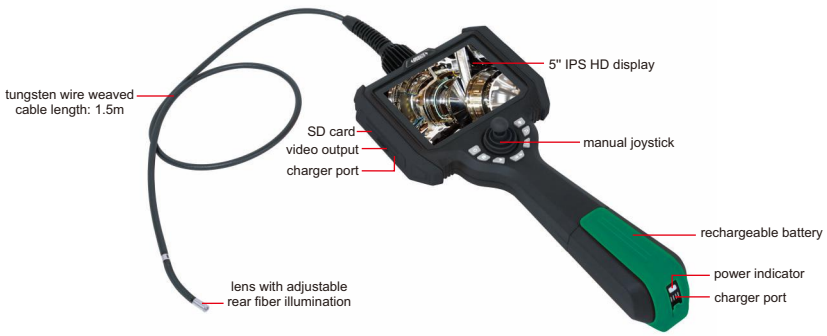
RIGID STRAIGHT LENS TUBE, SIDE VIEW

Code	Lens tube		Lens					
	diameter (ØD)	length (L)	pixel	illumination	angle of view (θ)	depth of field (DOF)	view direction (α)	dust/ waterproof
ISV-Y3910C	3.9mm	200mm (**optional** 90-500mm)	1M	rear optical fiber	120°	8~150mm	90°	IP67

VIDEOSCOPES (WITH CABLE)

VIDEO

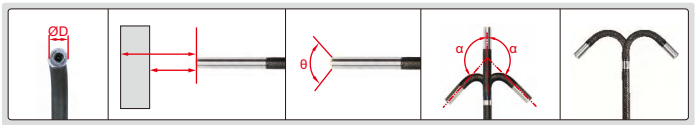
REAR FIBER ILLUMINATION



ISV-K6015

ISV-K-MAGNET (optional)

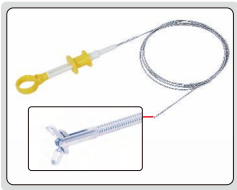
ISV-K-HOOK (optional)



diameter (ØD) depth of field (DOF) angle of view (θ) bend range (α) bend

WIFI real-time image transmission

changeable lens cable



ISV-K-CLAMP (optional)

SPECIFICATION

Code		ISV-K3915	ISV-K6015
Lens	diameter (ØD)	3.9mm	6.0mm
	pixel	0.92M	
	resolution	1280×720	
	depth of field	8-150mm	12-200mm
	bending direction	four directions	
	bending range (α)	±160°	
	angle of view (θ)	120°	
	illumination	rear fiber	
	lens	sapphire glass lens	
	dust/waterproof	IP67	
	bend control	manual joystick	
Cable	length	1.5m	
	type	tungsten wire weaved cable	
Main unit	display	5" high definition LCD	
	function	take pictures, take videos	
	file format	picture: JPG, video: MP4	
	image process	image zoom (1X, 2X, 3X, 4X)	
	image control	freeze, flip over, playback and analog ruler	
	memory	memory card	
	output	WIFI (only for Android OS), USB, HDMI	
	power supply	rechargeable lithium battery (working time ≥ 4hours), AC/DC adapter (for continuous working)	
Net weight		1000g	

OPERATION ENVIRONMENT

Main unit (with cable)	-10~50°C, no preheat
Operation temperature	-20~70°C
Storage temperature	-20~60°C
Relative humidity	maximum 90%, no condensation

STANDARD DELIVERY

Main unit (with cable)	1 pc
32G SD card	1 pc
Card reader	1 pc
USB cable	1 pc
Tripod	1 pc
AC/DC adapter	1 pc

OPTIONAL ACCESSORY

Temperature alarm	**ISV-K-HTALARM** (must be installed in factory, for **ISV-K3915** and **ISV-K6015**)
Hook	**ISV-K-HOOK** (must be installed in factory, for **ISV-K3915** and **ISV-K6015**)
Magnet	**ISV-K-MAGNET** (must be installed in factory, for **ISV-K3915** and **ISV-K6015**)
Clamp	**ISV-K-CLAMP**

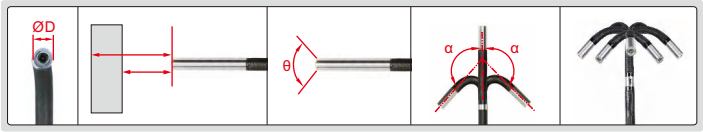
VIDEOSCOPES (BASIC TYPE)

IP67 WATERPROOF

TUNGSTEN WIRE WEAVED CABLE BREAK AND WEAR RESISTANCE

POPULAR MODEL

VIDEO



diameter (ØD) | depth of field (DOF) | angle of view (θ) | bend range (α) | bend in 4 directions

ISV-J6010

SPECIFICATION

Code		ISV-J2810	ISV-J2815	ISV-J4010	ISV-J4030	ISV-J6010	ISV-J6030
Lens	diameter (ØD)	2.8mm	2.8mm	4.0mm	4.0mm	6.0mm	6.0mm
	pixel	0.16M		1M			
	resolution	400×400		1280×720			
	depth of field	10~∞mm					
	bending direction	four directions					
	bending range (α)	±160°					
	angle of view (θ)	120°					
	illumination	front LED					
	lens	sapphire glass lens					
	dust/waterproof	IP67					
	bend control	manual joystick					
Cable	length	1m	1.5m	1m	3m	1m	3m
	type	wire weaved cable					
Main unit	display	5" HD screen (resolution: 1920x1080)					
	function	take pictures, take videos					
	file format	picture: JPG, video: MOV					
	image process	image zoom (1X, 2X, 3X, 4X, 5X)					
	image control	freeze, flip over, playback, analog ruler					
	memory	32G memory card					
	output	WIFI (only for Android OS), USB, HDMI					
	power supply	rechargeable lithium battery (working time ≥ 4 hours), AC/DC adapter (for continuous working)					
Net weight		1000g					

WIFI real-time image transmission

STANDARD DELIVERY

Main unit (with cable)	1 pc
32G SD card	1 pc
Card reader	1 pc
USB cable	1 pc
AC/DC adapter	1 pc

OPERATION ENVIRONMENT

Main unit	-10~50°C, no preheat
Operation temperature	-20~70°C
Storage temperature	-20~60°C
Relative humidity	maximum 90%, no condensation

MOBILE PHONE VIDEOSCOPE CODE ISV-P6

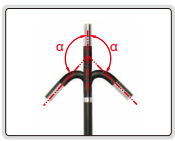
VIDEO

- For Android and IOS mobile phones

SPECIFICATION

Diameter of lens (ØD)	6±0.2mm
Length of cable	1m
Resolution	960×720, 1280×720 (switchable)
Depth of field	20mm~∞
Angle of view (θ)	100°
Bending range (α)	0~180°
Illumination	LED with 3 levels control
Cable type	wear resistant
Interface	USB, type-C
Mobile phone system	Android, iOS
Power supply	rechargeable battery (for 2 hours working)
Dimension (L×W×H)	195×57×105mm
Net weight	450g

the clamping range of mobile phone bracket L=56-95mm



bending of lens up to 180°

angle of view

lens with LED

bend in any direction

STANDARD DELIVERY

Main unit (with cable)	1 pc
Type-C cable	1 pc
Micro USB cable	1 pc
Iphone cable	1 pc
Charging cable	1 pc

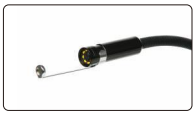
VIDEOSCOPE (BASIC TYPE)
CODE ISV-E40

MEMORY CABLE CAN BE FIXED AT ANY SHAPE

IP67 WATERPROOF

VIDEO

hook (included)


magnet pick up (included)

45° mirror (included)

SPECIFICATION

Lens	diameter (ØD)	8mm
	pixel	0.92M
	resolution	1280x720
	depth of field	30~80mm
	angle of view	77°
	illumination	3 levels
	dust/waterproof	IP67
Cable	length	1180mm
	type	memory (can be set at any shape)
Main unit	display	5" IPS LCD
	function	take picture, take video
	file format	picture: JPG, video: MOV
	image process	image zoom (1.5X, 2X, 3X, 4X)
	memory	memory card (**optional**)
	output	type-C
	power supply	rechargeable lithium battery (for 5 hours working)
	dimension	217×155×131mm
Net weight		506g

STANDARD DELIVERY

Main unit	1 pc
45° mirror	1 pc
Hook	1 pc
Magnet pick up	1 pc

OPTIONAL ACCESSORY

32G memory card	ISV-E40-CARD
Card reader	ISV-E40-READER

OPERATION ENVIRONMENT

Operation temperature	-10~50°C
Storage temperature	-20~60°C
Operation humidity	15%~85%

VIDEOSCOPE (ECONOMIC TYPE)
CODE ISV-E30

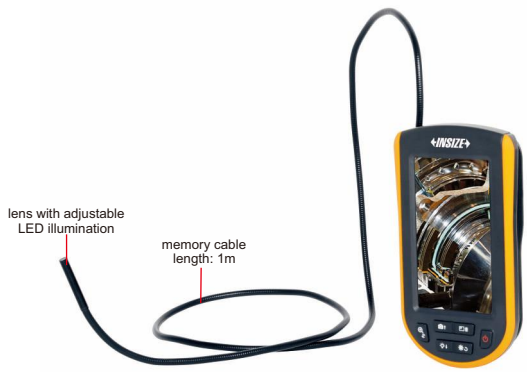
VIDEO

IP67 WATERPROOF

MEMORY CABLE CAN BE FIXED AT ANY SHAPE

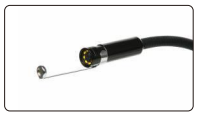
SPECIFICATION

Lens	diameter	5.2mm
	pixel	0.4M
	depth of field	30~80mm
	angle of view	72°
	illumination	8 levels
	dust/waterproof	IP67
Cable	length	1m
	type	memory (can be set at any shape)
Main unit	display	4.3" LCD
	function	take picture, take video
	file format	picture: JPG, video: AVI
	image zoom	2X
	memory card	memory card (**optional**)
	output	micro USB
	power supply	AA battery
	dimension	154×32.5×87.5mm
Net weight		280g



cable can be wrapped around the main unit

hook (included)


magnet pick up (included)

STANDARD DELIVERY

Main unit	1 pc
Hook	1 pc
Magnet pick up	1 pc
AA battery	4 pcs

OPTIONAL ACCESSORY

32G memory card	ISV-E40-CARD
Card reader	ISV-E40-READER

OPERATION ENVIRONMENT

Operation temperature	-10~50°C
Storage temperature	-20~60°C
Operation humidity	15%~85%

4K CARBON FIBER TELESCOPIC POLE VIDEOSCOPE
CODE ISV-CF5

IP65 WATERPROOF

VIDEO

WIFI real-time image transmission

built-in infrared and white light
for night and day use

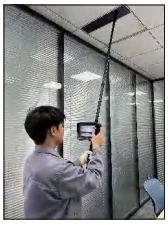
dual motorized control of lens view,
300° horizontal and vertical 360° rotation

- Dual motorized control of lens view, 300° horizontal and vertical 360° rotation
- 4K HD true color camera
- Built-in infrared and white light for night and day use
- Insert SD card and export photos, videos

application scenario

underbody inspection

constructure inspection
(WIFI real-time image transmission)



ceiling duct inspection

roof inspection

car roof inspection

SPECIFICATION

Display	7" color touch LCD
Function	take photos and videos
Resolution	3840×2160
Image process	image mirror or flipping, real-time image magnification (1X, 2X, 3X, 4X)
Lens diameter (ØD)	40mm
Display image ratio	16:9, 4:3, 1:1
Memory	SD card (128G Max)
Illumination	infrared and white light LED, manual 5-level brightness adjustment
Output	HDMI
Wireless transmission	WIFI real-time image transmission
Pole	carbon fiber, can be fixed between 1~5 meters
Environmental requirement	temperature: -20°C~60°C, relative humidity: 10%~85%
Power supply	rechargeable battery (18650 lithium battery), power adapter (for continuous working)
Dust/waterproof	IP65
Net weight	2kg

STANDARD DELIVERY

Main unit	1 pc
32G SD card	1 pc
Card reader	1 pc

Carbon fiber telescopic pole	1 pc
HDMI cable	1 pc
Power adapter	1 pc

PEN TYPE ELECTROMAGNETIC ULTRASONIC THICKNESS GAUGES

VIDEO

WORK AT MAXIMUM 600°C

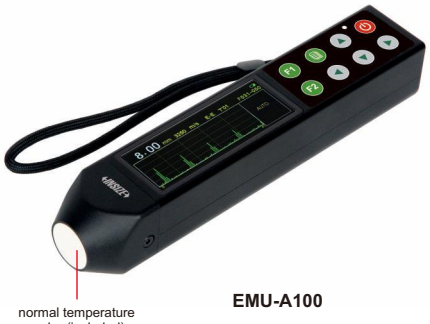
WITH A AND B SCAN

COUPLING AGENT IS NOT REQUIRED

MEASUREMENT THROUGH COATING AND RUST LAYER

high temperature probe (**optional**)

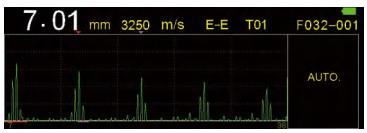
calibration block (included)



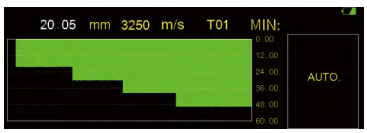
normal temperature probe (included)

EMU-A100

- Measurement without ultrasonic coupling agent, for workpieces with surface temperatures less than 600°C (depending on the probes)
- Compact size, easy to carry, comes with waveform display and full-function keyboard, easy to adjust the measurement parameters
- Non-contact measurement of rough, corroded surfaces without sanding
- Storage of 10000 data and 100 files
- Highly intelligent functions such as alarm for exceeding upper and lower limits, automatic zero calibration, automatic identification of probes, etc.
- Automatic power off
- Suitable for inspection of workpieces of various shapes, such as pipes, small tubes, elbows, etc.



A-Scan



B-Scan

SPECIFICATION

Code	EMU-A100	EMU-B100
Data output	USB	USB, Bluetooth
Measuring range	refer to the specification of probes	
Resolution	0.01mm	
Accuracy	±0.04mm (H≤10mm) ±(0.04+H/1000)mm (10≤H<100mm) ±H/333mm (H≥100mm) H is measuring thickness in mm	
Working gap (the distance between the probe and the measured object)	≤1mm	
Gain	automatic and manual gain	
Material velocity	1000~9999 m/s	
Measurement frequency	2 times/second 10 times/second fast measurement mode	
Measuring mode	auto mode, manual mode	
Display	LED, 800×268	
Storage	10000 data stored in 100 files	
Power supply	5V rechargeable lithium battery, 6 hours working time	
Operation temperature	-10°C~350°C	
Dimension	180×35×34mm	
Net weight	300g	

STANDARD DELIVERY

Main unit	1 pc
Normal temperature probe	1 pc
Calibration block (8mm)	1 pc
USB cable	1 pc

OPTIONAL ACCESSORY

High temperature probe	EMU-B100-T02

SPECIFICATON OF PROBES

Code	Magnet	Measuring range	Diameter (Ød)	Working temperature	Applications
EMU-B100-T01 (included)	permanent magnet	1.5~150mm	Ø20mm	-10~120°C	general use, mainly used for fine crystal materials, such as mild steel, aluminum
EMU-B100-T02 (optional)	permanent magnet	1.5~300mm	Ø25mm	-10~600°C	high temperature environment, mainly used for ferromagnetic fine crystal materials, such as mild steel

ULTRASONIC THICKNESS GAUGE (ADVANCED TYPE)
CODE ISU-800D

VIDEO

PENETRATE COATING AND MEASURE THE THICKNESS OF SUBSTRATE

BLUETOOTH

REAL-TIME TEMPERATURE COMPENSATION

DATA OUTPUT

- Real-time temperature compensation eliminates the error caused by temperature variation
- Support both single element transducers and dual element transducers
- Measure the thickness of substrate through coating
- Measuring mode: standard mode (dual element transducer: P-E mode, single element transducer: I-E mode), penetrate coating mode (dual element transducer: I-E mode, single element transducer: E-E mode or auto mode)
- Measure method: single point, scanning, deviation
- Set upper and lower limits for alarm when out-of-tolerance
- Single point and 2 points calibration
- Keyboard lock function avoids parameter setting change caused by unintended press during measurement
- Memory 1000 measurement values
- Data can be transmitted to PC by Bluetooth connection or Mini-USB cable

transducer **ISU-S15-P06** (included)

transducer **ISU-S2M-P14** (optional)

transducer **ISU-G5M-P10** (optional)

transducer **ISU-G5M-P08** (optional)

transducer **ISU-G7M-P06** (optional)

transducer **ISU-G2M-P12** (optional)

transducer **ISU-H3M-P12** (optional)

delay block **ISU-S15-P06-CB** (optional)

delay block **ISU-S15-P06-CB1** (optional)

SPECIFICATION

Measuring range	refer to the specification of transducers
Resolution	0.01mm/0.001mm
Accuracy	refer to the specification of transducers
Data output	bluetooth and USB
Velocity	1~19999m/s
Power supply	3.7V rechargeable lithium battery
Dimension	157×78×37mm
Net weight	260g

STANDARD DELIVERY

Main unit	1 pc
Transducer ISU-S15-P06	1 pc
Power adaptor	1 pc
USB cable	1 pc
Couplant	1 bottle

OPTIONAL ACCESSORY

Transducer	refer to the specification of transducers
Couplant (for ISU-H3M-P12)	**ISU-HT5-COUPLANT**
Thermal printer (with cable)	**ISU-800D-PRINTER**

SPECIFICATION OF TRANSDUCERS (ON STEEL)

Code	Type	Freq	Diameter (Ød)	Measuring range	Min. size of pipes (diameter x wall thickness)	Accuracy	Applicable temperature	Application
ISU-S15-P06 (included)	single element	15Mhz	8mm	I-E: 0.9~28mm E-E: 0.15~14mm	Ø10x1.5mm Ø15x0.35mm	±0.02mm/0.3%H* (take the larger one)	-10~60°C	high precision or thin workpieces
ISU-S15-P06-CB (optional) **	–	–	5mm	I-E: 0.9~10mm E-E: 0.15~5mm	Ø10x1.2mm Ø15x0.35mm			high precision or irregular surface
ISU-S15-P06-CB1 (optional) **	–	–	8mm	I-E: 0.9~38mm E-E: 0.3~19mm	–			high precision or thick workpieces
ISU-S2M-P14 (optional)	single element	2Mhz	19mm	I-E: 30~2000mm E-E: 30~1000mm	–	±0.5%H*	-10~310°C	ultra-thick workpieces
ISU-G5M-P10 (optional)	dual element	5Mhz	13mm	0.8~300mm	Ø25x3mm	±0.04mm (range: <10mm) ±H/333mm* (range: ≥10mm)	-10~60°C	normal workpieces
ISU-G5M-P08 (optional)	dual element	5Mhz	11mm	0.8~225mm	Ø20x1.2mm			curved surface and normal workpieces
ISU-G7M-P06 (optional)	dual element	7.5Mhz	9mm	0.8~50mm	Ø15x1.2mm			curved surface and small workpieces
ISU-G2M-P12 (optional)	dual element	2Mhz	17mm	3~700mm	Ø30x4mm	±0.05mm/0.5%H* (take the larger one)		castings and thick workpieces
ISU-H3M-P12 (optional)	dual element	3Mhz	15mm	2~200mm	Ø25x3mm	±0.05mm/0.5%H* (take the larger one)	-10~310°C	workpieces with high temperature

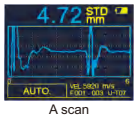
* H is the measured thickness in mm
** Delay blockers, suitable for transducer **ISU-S15-P06**

ULTRASONIC THICKNESS GAUGE
CODE ISU-720D

VIDEO

DATA OUTPUT | WITH A AND B SCAN | PENETRATE NON-METALLIC COATING AND MEASURE THE THICKNESS OF METAL SUBSTRATES

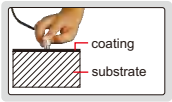
- Two measuring modes, Echo-Echo (E-E) and Transmit-Echo (T-E):
  – E-E is applicable for non-metallic coating (such as paint, plastic resin, etc.) on metal substrates, can penetrate coating and measure the thickness of substrates
  – T-E is to measure the thickness of material without coating, such as metal, plastic, glass, nylon, resin, ceramics, ice, etc.
- A scan, through the waveform, judges whether there are impurities, pores, cracks and so on inside, in order to avoid wrong measurement
- B scan, measures continuously, displays the thickness change on the screen
- Transducers can be automatically identified and zeroed
- Memory 10000 measurement values
- Data can be input to Excel and Word as keyboard signal
- Automatic or manual measurement
- When transducers are removed from workpieces, the measurement data are held on screen for easy viewing
- Set upper and lower limits for alarm when out-of-tolerance
- Automatic power off


A scan

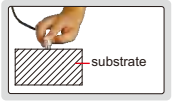
B scan

SPECIFICATION (ON STEEL)

Measuring range	refer to specification of transducers
Resolution	0.1/0.01mm
Accuracy	±0.04mm (H<10mm) ±(0.04+H/1000)mm (10≤H<100mm) ±H/333mm (H≥100mm) H is the thickness to be measured in mm
Frequency	refer to specification of transducers
Display	320×240, color screen display
Velocity	1000~9999m/s
Measuring frequency	2 times/second and 10 times/second
Operation temperature of main unit	-20~50°C
Output	USB
Measuring unit	mm/inch
Power supply	2×1.5V AA batteries
Dimension	133×75×29mm
Net weight	260g (including batteries)



Echo-Echo mode (E-E)



Transmit-Echo mode (T-E)

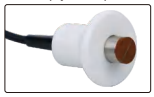
transducer **ISU-T04** (optional)

transducer **ISU-T06** (optional)

transducer **ISU-T08** (optional)

transducer **ISU-T12** (optional)

transducer **ISU-T13** (optional)



transducer **ISU-T25** (optional)

STANDARD DELIVERY

Main unit	1 pc
Bicrystal transducer ISU-T07	1 pc
Battery (AA)	2 pcs
Couplant	1 bottle
USB cable	1 pc

OPTIONAL ACCESSORY

Transducer	ISU-T04, ISU-T06, ISU-T08, ISU-T12, ISU-T13, ISU-T25
Couplant (for ISU-T13)	ISU-HT5-COUPLANT

SPECIFICATION OF TRANSDUCERS (ON STEEL)

Code	Mode	Frenquency	Diameter (Ød)	Measuring range	Minimum size of pipes for measurement (diameter × wall thickness)	Applicable temperature	Application
ISU-T07 (included)	T-E E-E	5.0MHz	13.2mm	T-E mode: 1.5~200mm E-E mode: 3~25mm	T-E mode: Ø25×3mm	-20~60°C	general use
ISU-T04 (optional)	T-E	10.0MHz	6mm	0.7~20mm	Ø15×1mm	-20~60°C	for small tubes
ISU-T06 (optional)	T-E	7.5MHz	9mm	0.7~50mm	Ø15×1.2mm	-20~60°C	for thin workpieces
ISU-T08 (optional)	T-E	5.0MHz	11mm	0.8~300mm	Ø25×1.2mm	-20~60°C	general use
ISU-T12 (optional)	T-E	2.0MHz	17mm	2~400mm	Ø40×3mm	-20~60°C	for casting iron
ISU-T13 (optional)	T-E	5.0MHz	15mm	3~100mm	Ø25×2mm	0~350°C	for high temperature
ISU-T25 (optional)	T-E	1.0MHz	26mm	3~200mm	–	-20~60°C	for fiberglass and organic material

ULTRASONIC THICKNESS GAUGE
CODE ISU-250C

INSPECTION CERTIFICATE

DATA OUTPUT

VIDEO

- Measure the thickness from one side of objects, suitable for pipes, tanks, etc.
- Applicable material: metal, plastic, glass, nylon, resin, ceramic, ice
- Tolerance measurement
- Average calculation of maximum 9 readings
- Data can be input to Excel and Word as keyboard signal

transducer **ISU-T12** (**optional**)

transducer **ISU-T06** (**optional**)

transducer **ISU-T04** (**optional**)

transducer **ISU-T13** (**optional**)

SPECIFICATION (ON STEEL)

Measuring range	refer to specification of transducers
Resolution	0.1/0.01mm
Accuracy	±0.04mm (H<10mm) ±(0.04+H/1000)mm (10≤H<100mm) ±H/333mm (H≥100mm) H is the thickness to be measured in mm
Velocity	1000-9999m/s
Operation temperature of main unit	-20~50°C
Output	USB
Measuring unit	mm/inch
Power supply	2×1.5V AAA batteries
Dimension	64×116×27mm
Net weight	220g

STANDARD DELIVERY

Main unit	1 pc
Transducer ISU-T08	1 pc
Battery (AAA)	2 pcs
Couplant (for ISU-T04, ISU-T06, ISU-T08, ISU-T12)	1 bottle
USB cable	1 pc

OPTIONAL ACCESSORY

Transducer	**ISU-T04, ISU-T06, ISU-T12, ISU-T13**
Couplant (for ISU-T13)	**ISU-HT5-COUPLANT**

SPECIFICATION OF TRANSDUCERS (ON STEEL)

Code	Frequency	Diameter (Ød)	Measuring range	Minimum size of pipes for measurement (diameter × wall thickness)	Applicable temperature	Application
ISU-T08 (included)	5.0MHz	11mm	0.8~300mm	Ø25×1.2mm	-20~60°C	general use
ISU-T04 (optional)	10.0MHz	6mm	0.7~20mm	Ø15×1mm	-20~60°C	for small tubes
ISU-T06 (optional)	7.5MHz	9mm	0.7~50mm	Ø15×1.2mm	-20~60°C	for thin workpieces
ISU-T12 (optional)	2.0MHz	17mm	2~400mm	Ø40×3mm	-20~60°C	for casting iron
ISU-T13 (optional)	5.0MHz	15mm	3~100mm	Ø25×2mm	0~350°C	for high temperature

ULTRASONIC THICKNESS GAGE (BASIC TYPE)
CODE ISU-100D

ATTENTION: NOT SUITABLE FOR CASTINGS AND ALUMINUM WORKPIECES

INSPECTION CERTIFICATE

POPULAR MODEL

- Measure the thickness from one side of objects, suitable for pipes, tanks, etc.
- Applicable material: steel, stainless steel, glass, copper, brass, polystyrene, titanium, etc.

STANDARD DELIVERY

Main unit	1 pc
Transducer	1 pc
Couplant	1 bottle
Battery (AAA)	2 pcs

SPECIFICATION (ON STEEL)

Measuring range		0.8~300mm
Resolution		0.1/0.01mm
Accuracy		±0.05mm (H<10mm) ±(0.05+H/1000)mm (10≤H<100mm) ±H/333mm (H≥100mm) H is the thickness to be measured in mm
Transducer	**frequency**	5MHz
	diameter (Ød)	10.8mm
Minimum size of pipes		20×1.2mm (diameter×wall thickness)
Velocity		1000-9999m/s
Operation temperature		main unit: -20~50°C transducer: -20~60°C
Measuring unit		mm/inch
Power supply		2×AAA batteries
Dimension		114×64×28mm
Net weight		200g

DIGITAL GLASS THICKNESS METER
CODE 5805-GT22

VIDEO

- Laser reflection principle to measure the thickness of glass and internal air layer. Especially suitable for building laminated glasses, hollow glass windows, etc.
- To test the thickness of single layer glasses, multi-layer glasses, two glasses with one cavity, three glasses with two cavities, laminated glasses, laminated insulating glasses, etc.

SPECIFICATION

Measuring range	glass thickness (0~70mm), air layer (0~45mm)
Accuracy	±0.1mm (measuring range≤63mm), ±0.2mm (measuring range>63mm)
Resolution	0.01mm
Display	LCD
Power supply	4×1.5V AAA batteries
Dimension	130×72×33mm
Net weight	330g

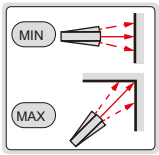
STANDARD DELIVERY

Main unit	1 pc
Cross screwdriver	1 pc
1.5V AAA battery	4 pcs

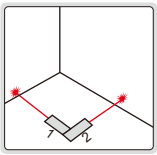
BUILT-IN BLUETOOTH LASER DISTANCE METERS

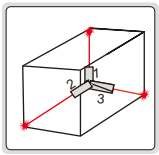
BUILT-IN BLUETOOTH

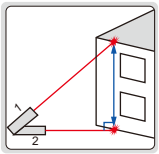
- Built-in bluetooth, transmission distance is 10 meters (no obstacles, no electromagnetic interference)
- Built-in angle sensor
- Display with backlight
- Distance, area, volume and height measurement
- Continuos measuring mode to track maximum and minimum value
- Unit: m, ft, in, ft+in
- Memory of 20 measurement values
- Automatic power off: laser 30s, main unit 180s

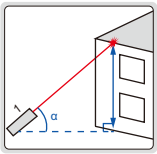


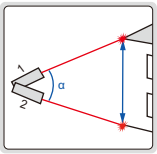
continuos measurement


area measurement


volume measurement

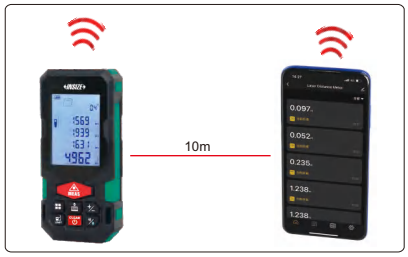

height measurement (1)


height measurement (2)


height measurement (3)

9564-D50

bluetooth connect to phone (APP)



SPECIFICATION

Code	9564-D50	9564-D60
Measuring range	0.2~100m	0.2~120m
Resolution	0.001m	<100m: 0.001m 100~120m: 0.01m
Accuracy	±(2+D/20)mm D: measured distance, unit: m	<100m: ±(2+D/20)mm 100~120m: ±10mm D: measured distance, unit: m
Laser type	490~670nm, class II, <1mW	
Accuracy of tilt angle*	±(0.4°+0.01°×T) T: operation temperature, unit: °C	
Power supply	3×rechargeable batteries	
Operation temperature	0~40°C	
Dimension (L×W×H)	120×57×28mm	
Net weight	125g	

* Angle between the laser beam and the horizontal line

STANDARD DELIVERY

Main unit	1 pc
Battery (AAA)	3 pcs

OPTIONAL ACCESSORY

Tripod	0701-TR175

LASER DISTANCE METERS

POPULAR MODEL

- High accuracy
- Large display with backlight
- Unit: m, ft, in, ft+in
- Distance, area, volume and height measurement
- Continuos measuring mode to track maximum and minimum value
- Memory of 30 measurement values
- Automatic power off: laser 30s, main unit 180s

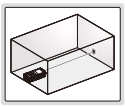
STANDARD DELIVERY

Main unit	1 pc
Battery (AAA)	2 pcs

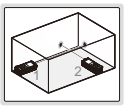
9561-50B

SPECIFICATION

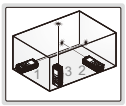
Code	9561-50B	9561-70B
Measuring range	0.2~50m	0.2~70m
Resolution	0.001m, 0.001ft, 1/16"	
Accuracy	±(3+D/20)mm D: measured distance, unit: m	
Laser type	red laser, 630~670nm, class II, <1mW	
Power supply	2×AAA batteries	
Dimension (L×W×H)	115×50×28mm	
Net weight	95g	



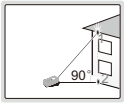
distance measurement



area measurement



volume measurement



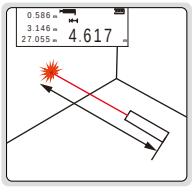
height measurement

MINI LASER DISTANCE METER CODE 9565-E40

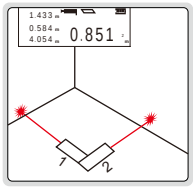
BUILT-IN BLUETOOTH

VIDEO

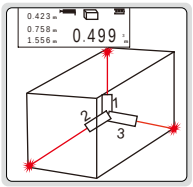
- Built-in bluetooth, transmission distance is 10 meters (no obstacles, no electromagnetic interference)
- Display with backlight
- Unit: m, ft, in, ft+in
- Distance, area, volume and height measurement
- Automatic power off: laser 30s, main unit 180s



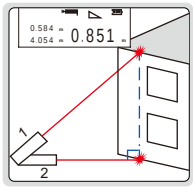
distance measurement



area measurement



volume measurement

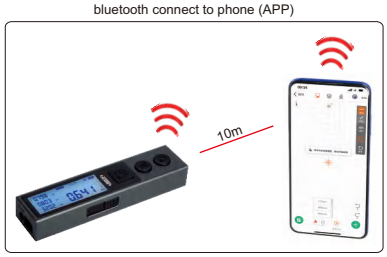


height measurement

SPECIFICATION

Measuring range	0.2~40m
Resolution	0.001m, 0.001ft, 1/16"
Accuracy	±(3+D/20)mm, D: measured distance, unit: m
Laser type	red laser, 630~670nm, class II, <1mW
Charging interface	USB (type-C)
Dimension	180×28×40mm
Net weight	53g

bluetooth connect to phone (APP)



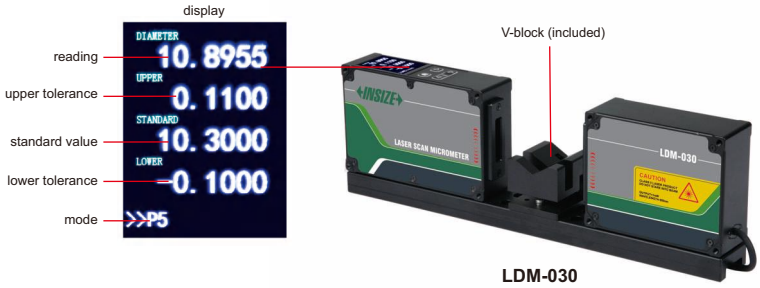
STANDARD DELIVERY

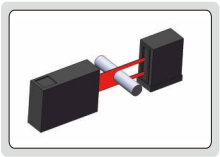
Main unit	1 pc
USB charging cable	1 pc

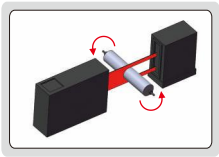
LASER SCAN MICROMETERS (ADVANCED TYPE)

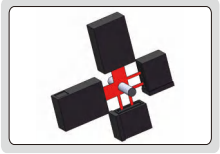
VIDEO

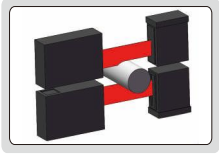
- Measure outer diameter, ellipticity, run-out, maximum diameter of tools, etc.
- Can be used for transparent or non transparent workpieces
- Simultaneous measurement of 4 outer diameters
- Tolerance measurement
- Online or offline measurement
- Connected with computer, PLC, control box




measure external diameter

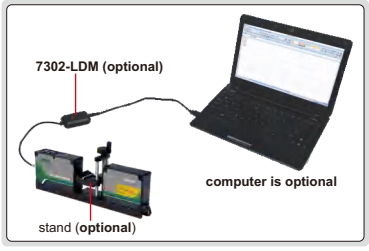

measure ellipticity and run-out


two-axis measurement


large size measurement

calibration gauge (**optional**)

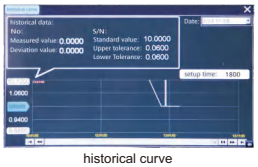
stand (**optional**)

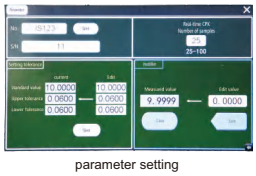


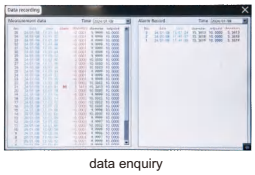
keyboard signal, can be transmitted to Excel

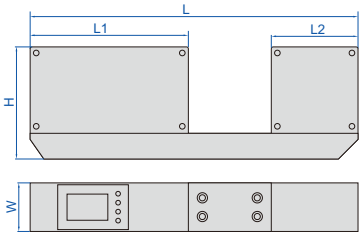
connect to control box (**optional**)

main interface


historical curve


parameter setting


data enquiry



SPECIFICATION

Code	LDM-030	LDM-065
Measuring range	0.1~30mm	0.5~65mm
Accuracy (at 25ºC)	±(0.5+10%D)μm, D is measuring diameter in mm	
Small-range accuracy (calibration position ±4mm, at 25ºC)*	±1μm	
Repeatability (at 25ºC)	±(0.3+5%D)μm, D is measuring diameter in mm	
Resolution	0.01/0.1/1/10/100μm selectable	
Laser wave length	650nm	
Measuring speed	800 times/s	
Operation temperature	0~50°C	
Operation humidity	35~85% without condensation	
Output	dual channel RS485, network port	
Alarm output	24V, 1A	
Power supply	DC24V, 2A	
Dimension (L×W×H)	375×46×120mm	495×46×156mm
Net weight	5kg	8kg

* The calibration position is set according to the customer's requirements before pre-factory

Dimension (mm)

Code	LDM-030	LDM-065
L	375	495
W	46	46
H	120	156
L1	150	180
L2	115	152

STANDARD DELIVERY

Main unit	1 pc
V-block	1 pc
AC/DC adapter	1 pc
RS485 cable	1 pc

OPTIONAL ACCESSORY

Data output cable (keyboard format)	7302-LDM
Stand	LDM-V1
Calibration gauge	custom made
Control box	custom made
Computer software	custom made

AUTOMATIC LASER SCAN MICROMETER
CODE LDM-AT01

CUSTOMIZED ACCORDING TO WORKPIECES

VIDEO

- Motorised rotation with adjustable speed
- Auto-moving laser scan micrometer
- Measure the outer diameter, roundness and runout of workpieces at multiple sections

center-type bench center (included)

V-type bench center (included)

clamping workpieces by V-type bench center

clamping workpieces by center-type bench center

SPECIFICATION

Workpiece clamping mode		center-type bench center (with centre holes at the end)	V-type bench center (without centre holes at the end)
Measuring range of workpieces	length	5~300mm	10~230mm
	diameter	3~60mm	10~60mm
	max. weight	20kg	1.5kg
Accuracy at 25°C		±(0.5+10%D)μm, D is measuring diameter in mm	
Repeatability at 25°C		(0.3+5%D)μm, D is measuring diameter in mm	
Runout accuracy at 25°C		≤5μm	
Size of working table		400×200mm	
Driving method		motor drive	
Power supply		220V, 50/60Hz	
Dimension		750×600×900mm	
Net weight		50kg	

STANDARD DELIVERY

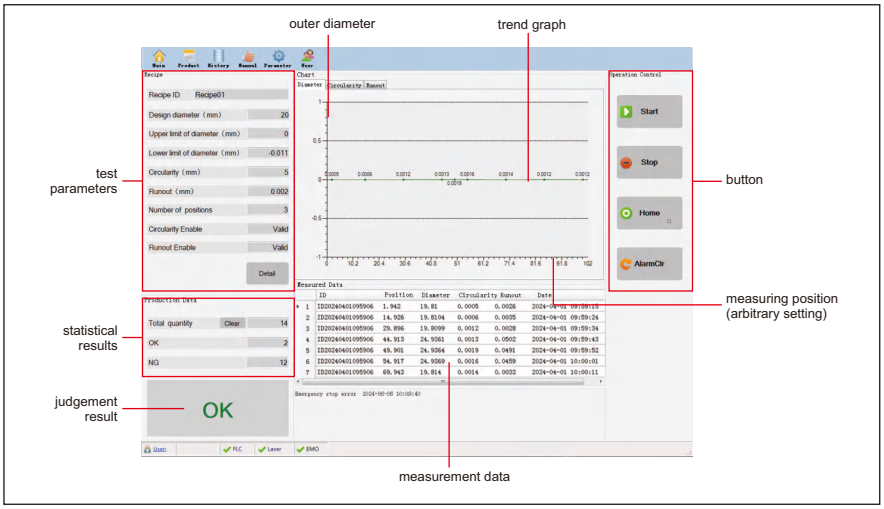
Main unit	1 pc
Center-type bench center	1 pc
V-type bench center	1 pc

To be continued

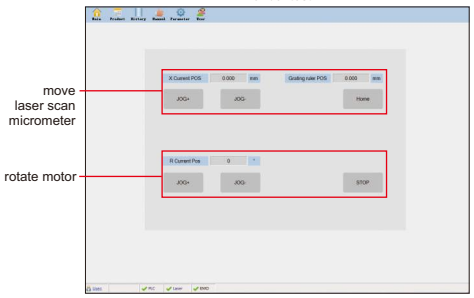
Continued from previous page

MEASURING SOFTWARE (INCLUDED)

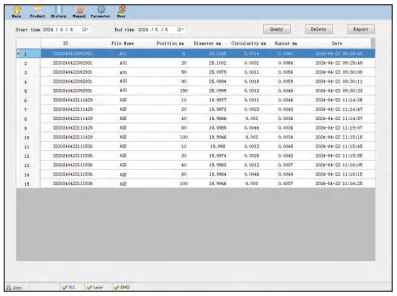
- Language: English and Chinese
- Operation system: Windows 7
- Measure the outer diameter, roundness and runout of workpieces automatically, then the data, trend graphs and judgement results can be displayed in real time
- Auto-saving measurement data, query and export to EXCEL at any time
- Switch to manual test to move the laser scan micrometer and rotate the motor by hand



manual test

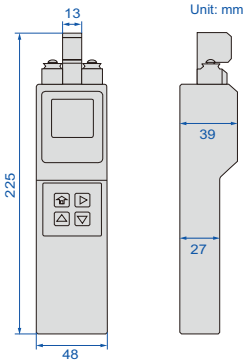


history data



HANDHOLD LASER SCAN MICROMETER CODE LDM-H02

VIDEO



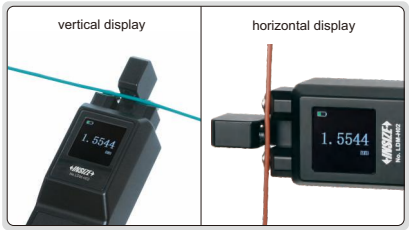
- Measure the outside diameter of cables, pipes and wires
- For transparent or non transparent workpieces
- Unit: mm, inch, mil, μm
- Compact and portable, the reading can be displayed vertically or horizontally

SPECIFICATION

Measuring range	0.02~2mm
Resolution	0.001mm/0.0001mm/0.00001mm adjustable
Accuracy (at 25°C)	±0.5μm
Repeatability (at 25°C)	0.3μm
Laser wave length	650nm
Measuring speed	800 times/s
Operation temperature	0~50°C
Operation humidity	35~85%RH without condensation
Power supply	built-in 7.4V rechargeable battery
Net weight	495g

calibration gauge (included)

application



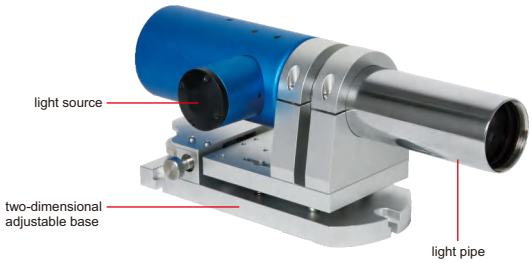
STANDARD DELIVERY

Main unit	1 pc
Calibration gauge	3 pcs (0.10±0.001mm, 0.30±0.001mm, 0.80±0.001mm)
AC/DC adapter	1 pc

DUAL AXIS PHOTOELECTRIC AUTOCOLLIMATOR
CODE CMS-L401

VIDEO

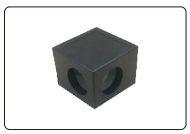
- Dual axis simultaneous measurement, convenient and efficient
- Electronic eyepiece, low aiming error
- High resolution photodetector, high measurement accuracy
- Semiconductor LED light source, long service life of the light source
- Automatic curve plotting, automatic error calculation
- Multiple data processing methods, can generate standard Excel reports
- Selection of different accessories and measurement software modules, for different measurement needs

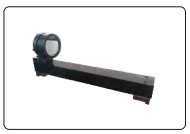


reflector and magnetic base (included)

tripod (**optional**)

prism adjustment platform (**optional**)

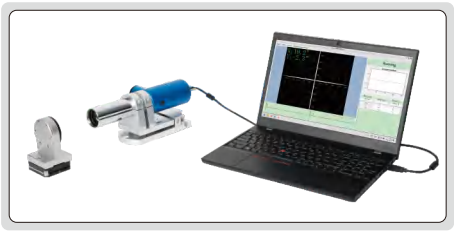

optical right angle (**optional**)


adjustable bridge plate (**optional**)

assisted laser image finder (**optional**)

wireless collector (**optional**)

lifting platform (**optional**)


software (included)

SPECIFICATION

Working distance	0-10m
Focal length of objective lens	200mm
Caliber of light	38mm
Light source	semiconductor LED
Field of view range	3200×2400"
Accuracy	±1000" within ±1"
Resolution	0.1"
Data transmission	USB2.0
Dimension (L×W×H)	288×130×115mm
Net weight	3.5kg

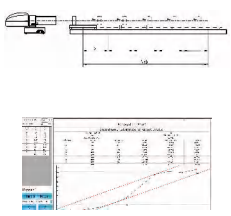
STANDARD DELIVERY

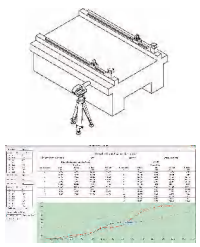
Main unit	1 pc
Reflector	1 pc
Magnetic base	1 pc
Software (including straightness measurement)	1 set
Data cable	1 pc

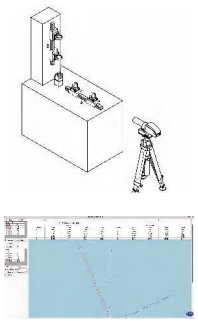
OPTIONAL ACCESSORY

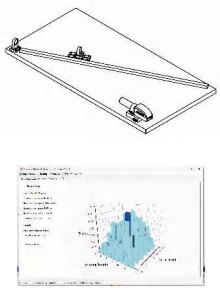
Tripod	CMS-L-TR
Adjustable bridge plate	CMS-L-BR
Assisted laser image finder	CMS-L-FD
Prism adjustment platform	CMS-L-PL
Optical right angle	CMS-L-SQ
Wireless collector	CMS-L-CL
Lifting platform	CMS-L-ST
Parallelism and perpendicularity software module	CMS-L-PA
Flatness software module	CMS-L-FL
Turntable software module	CMS-L-AG

application


straightness measurement (software is included)


parallelism measurement (software is **optional**)


perpendicularity measurement (software is **optional**)


flatness measurement (software is **optional**)

turntable measurement (software is **optional**)

AIR GAUGES
CODE 9401

CUSTOMIZED ACCORDING TO WORKPIECES

air plug gauges and standard setting rings

air snap gauges and standard gauges

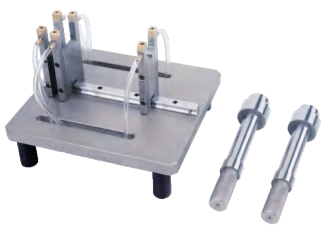
air ring gauges and standard plain plug gauges

single-section air inside diameter measuring stages and standard setting rings

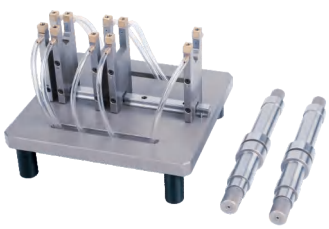
tow-section air inside diameter measuring stages and standard setting rings

air inside diameter measuring stages and standard setting rings

three-section air outside diameter measuring stages and standard gauges



five-section air outside diameter measuring stages and standard gauges



air outside diameter measuring stages and standard gauges

single-section air ring outside diameter measuring stages and standard gauges

air angle gauges and standard gauges

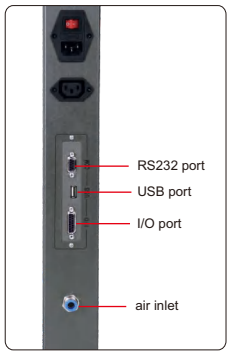
air taper gauges and standard gauges

AIR GAUGE DISPLAY
CODE 9408-QD100

DATA OUTPUT

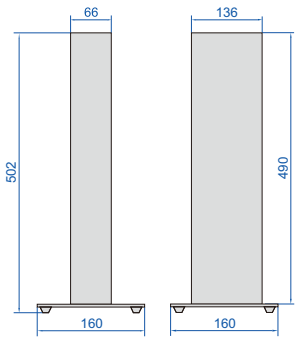
VIDEO

9408-QD100



- Can store 10 measuring programs, and the programs can be switched quickly
- Data storage and query function

Unit: mm



SPECIFICATION

LED quantity		101 pcs		
LED color		red, orange, green		
LED height		254mm		
Range, resolution and accuracy		range (μm)	resolution (μm)		accuracy (μm)
			LED	display	
		10	0.1	0.1	0.2
		20	0.2	0.1	0.4
		50	0.5	0.1	1
		100	1	0.2	3
Unit		mm, inch			
Air supply		dry and clean, 0.4~0.7MPa			
Data interface		RS232, USB			
Operation temperature	temperature	0~45°C			
	humidity	≤85%			
Power supply		AC185~265V, 50/60Hz			
Dimension (L×W×H)		160×160×490mm			
Net weight		2.8kg			

foot switch (**optional**)

RS232 cable (**optional**)

pressure regulating valve (**optional**)

air filter (**optional**)

STANDARD DELIVERY

Main unit	1 pc

OPTIONAL ACCESSORY

RS232 cable	**9408-CB**
Foot switch	**9408-FS** (must be installed in factory)
Data output cable (keyboard format)	**7302-9408**
Wireless transmitter (receiver is needed)	**7315-9408**
Air filter	**9401-FILTER-A**
Pressure regulating valve	**9404-PRV**

MULTI CHANNEL AIR GAUGE DISPLAYS

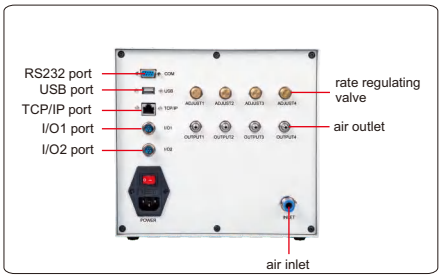
DATA TRANSMISSION CAN BE CUSTOMIZED

TOUCH SCREEN

VIDEO

- Data storage function, 2 million groups data can be stored
- Can store 10 groups measuring programs, and the program can be switched quickly
- Insert USB flash disk to output storage data, update program
- Data can be shared or networked via TCP/IP
- Product codes can be entered by scanning gun or manually (customized)
- With data statistics and analysis functions, can display graphs and Xbar-R control charts

9440-DP4



back of display

air filter (**optional**)

RS232 cable (**optional**)

foot switch (**optional**)

scanning gun input product code function (customized)

SPECIFICATION

Code	9440-DP1	9440-DP2	9440-DP3	9440-DP4	9440-DP5	9440-DP6	9440-DP7	9440-DP8
Number of channels	1	2	3	4	5	6	7	8
Display screen	7" TFT LCD touch screen display				10" TFT LCD touch screen display			
Display mode	graphic display, digital display							
Range	10μm, 20μm, 50μm, 100μm (adjustable)							
Accuracy	0.2μm (range 10μm)							
	0.4μm (range 20μm)							
	1μm (range 50μm)							
	3μm (range 100μm)							
Resolution	0.1μm							
Unit	mm							
Air supply	dry and clean, 0.4~0.7MPa							
Data interface	RS232, USB, TCP/IP, I/O*							
Operation temperature	-10~55°C							
Power supply	220V±10%, 50/60Hz							
Dimension (L×W×H)	240×230×230mm				320×145×325mm			
Net weight	5.6kg				11.2kg			

* RS485 port, I/O port can be communication according to customer requirements

OPTIONAL ACCESSORY

Air filter	9401-FILTER-A
Foot switch	9440-FS
RS232 cable	9440-CB
Measurement data management and analysis software	7317
Data output cable (keyboard format)	7302-9440-8 (for 9440-DP8)
Wireless transmitter (receiver is needed)	7315-9440-8 (for 9440-DP8)**

** receiver code **9440-RECEIVER**

STANDARD DELIVERY

Main unit	1 pc

DIGITAL GAP GAUGES

INSIZE PLUS

DATA OUTPUT

TITANIUM AND SYNTHETIC DIAMOND COATING PROBES ARE OPTIONAL

CUSTOMIZABLE PROBES
MEASURING RANGE: (0.35~6)mm
MEASURING DEPTH: (2~500)mm

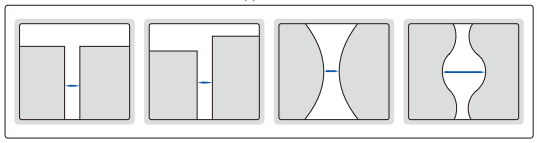
VIDEO

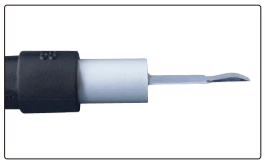
ISE-DF11

ISE-DF10

- Real-time measurement: display maximum value, minimum value current measurement value and measurement curve
- Group measurement: target value and upper and lower tolerance can be set, automatic judgement of OK and NG
- The measurement results can be exported as XML or CSV

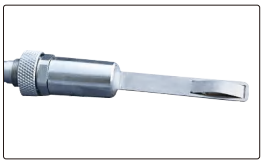
application



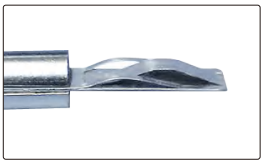


single-side probe (**optional**)

bilateral probe (**optional**)



bilateral probe (**optional**)



single-side probe (**optional**)

measuring car body seam

bilateral probe (**optional**)

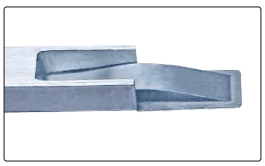
bilateral long depth probe (**optional**)

single-side probe (**optional**)

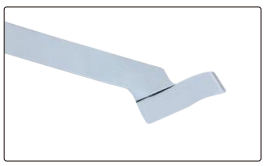
single-side hockey stick shaped probe (**optional**)

measuring gaps on the car dashboard

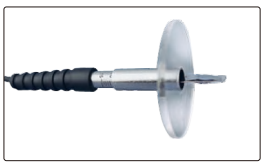
90° probe (**optional**)



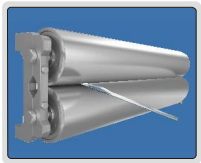
single-side positioning probe (**optional**)



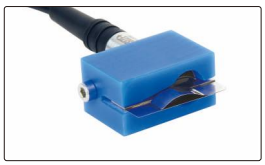
single-side hockey stick shaped probe (**optional**)



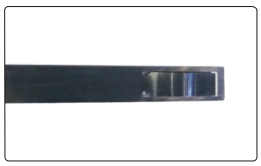
depth positioning probe (**optional**)



measuring roll gap



single-side positioning probe (**optional**)



synthetic diamond coated probe (**optional**)

titanium plated probe (**optional**)

measuring blade to sidewall gap

To be continued

Continued from previous page

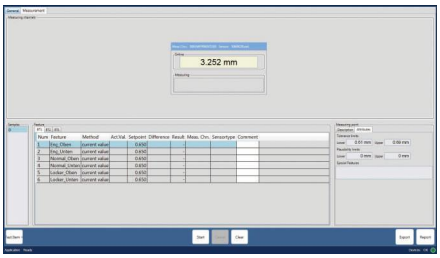
SPECIFICATION OF MAIN UNIT

Code	ISE-DF11	ISE-DF10
Resolution	0.1/0.01/0.001mm	0.1/0.01/0.001mm
System	Windows	Android
Output	USB	USB, WIFI
Output format	XML, CSV, PDF	XML, CSV

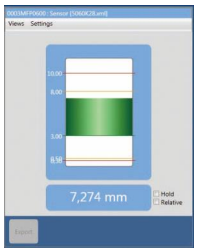
SPECIFICATION OF PROBES (OPTIONAL)

Customizable measuring range	(0.35-6)mm
Effective range	±0.5mm
Accuracy	range: (0.35~2.0)mm, accuracy: ±0.03mm range: (0.35~6.0)mm, accuracy: ±0.04mm
Max. customizable length	500mm
Repeatability	0.02mm
Measuring force	<3.5N
Measuring time	<1s

ISE-DF11 software (included)

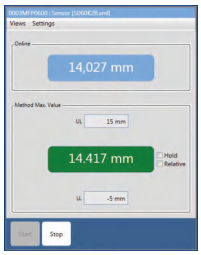


scheduled measurement mode,
set the tolerance and judge OK or NG



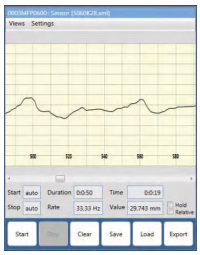
real-time
measurement mode

average value
measurement mode



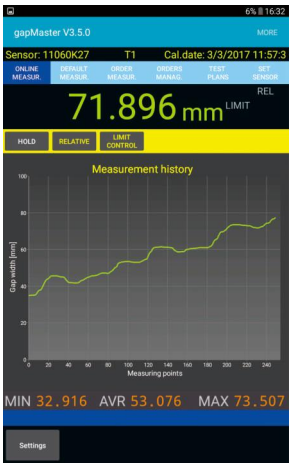
maximum
measurement mode

minimum
measurement mode

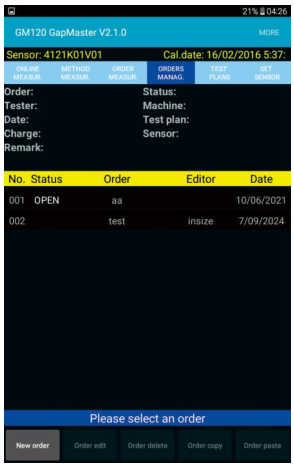


display of
measurement curve

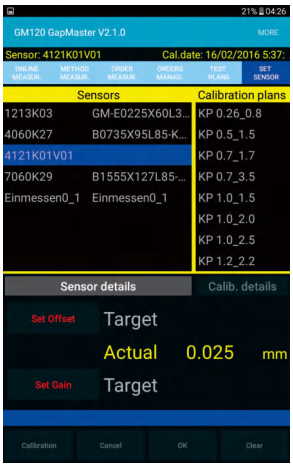
ISE-DF10 software (included)



real-time
measurement mode



view
measurement data



sensor
calibration information

AUTOMATIC VISION INSPECTION MACHINE CODE AVIM

VIDEO

AUTOMATIC INSPECTION OF LARGE QUANTITIES OF WORKPIECES

AUTOMATIC SORTING

SIZES MEASUREMENT AND DETECTION OF SURFACE DEFECTS

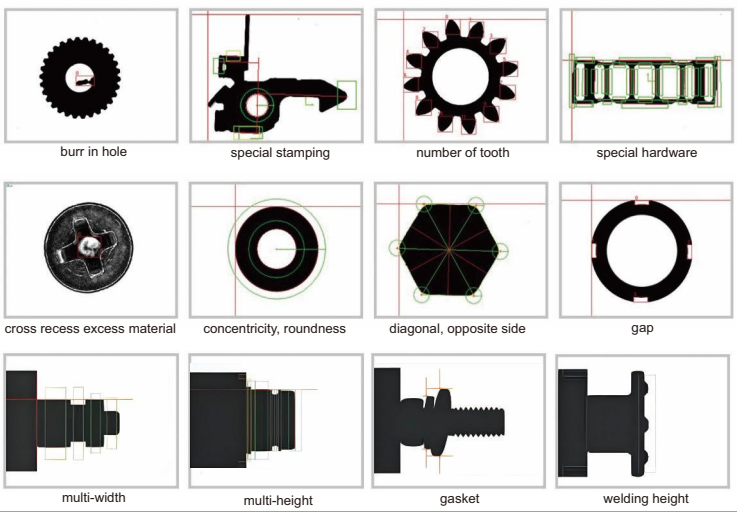
CUSTOM-MADE

- For testing fasteners, mobile phone parts, plastical products, electronic components and special-shaped hardware, etc.
- Can be equipped with laser, marking, automatic counting and packing, automatic feeding, eddy probe (detecting heat treatment)

SPECIFICATION

Diameter of workpiece	1-25mm
Height of workpiece	1-40mm
Sorting accuracy	±0.005~±0.02mm
Air pressure	5kg/cm²
PC mainframe	industrial computer
Digital camera	8 sets of industrial cameras (to be determined according to the actual situation)
Net weight	800kg
Dimension (L×W×H)	1500×1100×1800mm

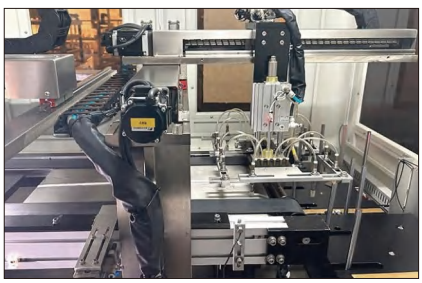
PARTS EXAMPLE

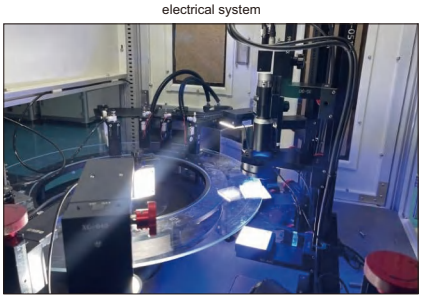

burr in hole
special stamping
number of tooth
special hardware
cross recess excess material
concentricity, roundness
diagonal, opposite side
gap
multi-width
multi-height
gasket
welding height

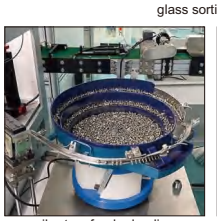
PRODUCT EXAMPLES

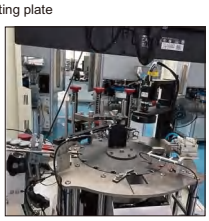
precision screws
nuts
automative fasteners
powder metallurgy
new energy parts
electronic products
plastic or rubber parts
capacitance resistances
semiconductor workpieces
magnetic products
connectors
electronic cigarettes

INTERNAL STRUCTURE


electrical system


glass sorting plate


vibratory feeder loading


turntable structure

multiple cameras detection

SPC MEASUREMENT STATION
CODE CMW-□□□

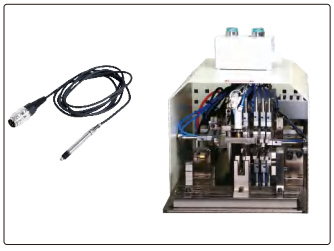
CUSTOMIZED ACCORDING TO WORK PIECES

VIDEO

- Different measuring tools and instruments can be selected based on measurement requirements, such as air gauges, inductance probes, measuring tools, and plain plug gauges
- The hardware is equipped with standard measurement guidance indicator lights, and the software has a built-in graphic-guided measurement function, making the operation process intuitive and clear

Optional measuring tools and instruments

air gauges

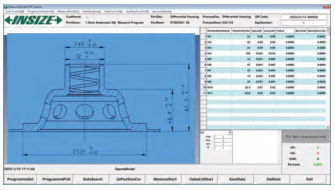

inspect device with inductance probes

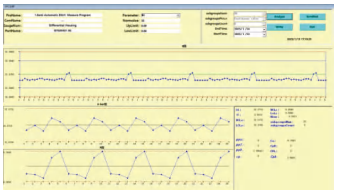
measuring tools

plain plug gauges

SPC measurement software system (customizable)

- Visual measurement process management with configurable measurement steps
- The software integrates professional analysis tools, featuring built-in MAS, CG, CGK, GRR analysis, and SPC process analysis
- Comprehensive data processing capabilities for statistical analysis, charting, measurement data storage, export, and backup
- System provides pass/fail feedback via software-simulated light columns with color indicators based on preset dimensional tolerances
- It supports exporting data to Excel and enables seamless integration with the Q-DAS database
- Station control permissions ensure the authenticity and reliability of data


measurement main interface


SPC analysis

CG analysis

GRR analysis

TOTAL STATION (BASIC TYPE)
CODE TSA-B33

VIDEO

IP55 WATERPROOF

DATA OUTPUT

- With rear intersection, setting out, overhang measurement, eccentricity measurement and other functions
- Widely used in surveying and mapping engineering, construction engineering and many other precise measurement fields
- Safe class 3R laser rangefinder with prism-free range up to 1500m
- Absolute coded goniometric technology, horizontal and vertical discs are easy to measure with a counterpoise probe
- Biaxial liquid photoelectric electronic compensator automatically corrects instrument leveling errors
- Built-in temperature and air pressure sensor automatically corrects distance measurement errors
- Can revise prism constant

measuring tape (included)

USB flash drive (included)

SPECIFICATION

Distance measurement (With cooperation target)	measuring range	prism: 5000m
		reflective patch (60mm×60mm): 1000m
	accuracy	±(2+D/500)mm, D: measured distance, unit: m
	measuring time	continuous measurement: 0.25s, tracking measurement: 0.1s, single measurement: <1.0s
Prism-free distance measurement (Without cooperation target)	measuring range	1500m (Kodak Grey, 90% reflectivity) *
	accuracy	0-300m: ±(3+D/500)mm 300-600m: ±(5+D/500)mm >600m: ±(10+D/500)mm, D: measured distance, unit: m
	measuring time	continuous measurement: 0.25s tracking measurement: 0.1s single measurement: <1.0s
Angle accuracy		±2"
Minimum angular reading		0.1"/1" (selectable)
Telescope barrel length		152mm
Telescope magnification		30X
Field of view		1°30"
Frame rate		3"
Minimum focus distance		1.5m
Compensator		range: ±6', accuracy: ±1"
Tube level bubble		30"/2mm
Round level bubble		8'/2mm
Display	screen type	240×160 dot matrix high definition high brightness display
	screen size	3.1 inch
	digital display	maximum: 99999999.9999m minimum: 0.1mm
Data transmission		USB flash drive, bluetooth
Power supply		7.4V replaceable battery for 8 hours of continuous operation
Dimension (L×W×H)		206×180×353mm
Net weight		5.4kg

* Good weather: overcast sky, light wind, no fog, visibility about 40km

STANDARD DELIVERY

Main unit	1 pc
Tripod	1 pc
Power adapter and charging cable	1 set
Li-ion battery	2 pcs
USB flash drive	1 pc
Measuring tape	1 pc

OPTIONAL ACCESSORY

Single prism	TSA-B33-PR
Prism tripod	TSA-B33-PRT

tripod (included)

single prism (**optional**)

prism tripod (**optional**)

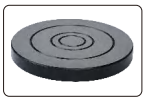
MOTORIZED DIGITAL ROCKWELL HARDNESS TESTER (DOLPHIN-NOSE TYPE) CODE HDT-DM290

INSPECTION CERTIFICATE | FORCE LOADING BY ELECTRIC MOTOR (WITHOUT WEIGHTS) | TOUCH SCREEN

VIDEO

- Full closed-loop precise control, real-time monitoring of test force, greatly increase the accuracy
- Dolphin-nose structure indenter, more measuring space
- Measurements on 30 Rockwell and Superficial Rockwell scales
- Convertible to various hardness standards such as HB, HV, HLD, HK and tensile strength
- 250 sets of data are stored independently in the mainframe, which can be accessed at any time
- Mean, variance, maximum and minimum statistics are available
- USB communication port, can be connected to an external computer, measurement data Excel output
- Correction function automatically corrects the measurement results of curved parts
- Conforms to ASTM E-18, ISO 6508

HDT-DM290



Ø150mm flat anvil (included)

14mm high Rockwell indenter (included)

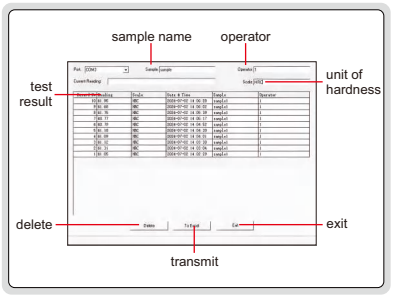
V-type anvil (included)

4mm high Rockwell indenter (**optional**)

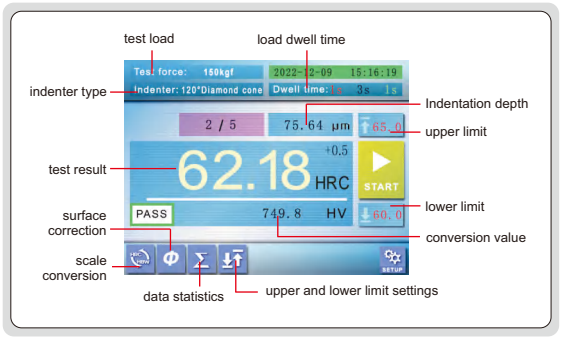
workpiece demonstration

can test rings, tubes, internal surfaces of frame parts, etc.

computer software (included)



test interface



integrated printer (**optional**)

STANDARD DELIVERY

Main unit	1 pc
14mm high diamond Rockwell indenter (HDT-DM-14MM)	1 pc
Ø1.5875mm carbide ball indenter (HDT-DM-BALL)	1 pc
Ø150mm flat anvil	1 pc
V-type anvil	1 pc
Hardness test block HRC20~30	1 pc
Hardness test block HRC35~55	1 pc
Hardness test block HRC60~70	1 pc
Hardness test block HRB85~100	1 pc
Hardness test block HRA80~88	1 pc
Computer software and USB cable	1 pc
Anti-dust cover	1 pc

SPECIFICATION

Hardness scale	with indenter included	HRA, HRB, HRC, HRD, HRF, HRG
	with optional indenter	HRE, HRH, HRK, HRL, HRM, HRP, HRR, HRS, HRV
Preliminary test force		98N/10kgf for Rockwell
Test force		588N (60kg), 980N (100kg), 1471N (150kg)
Stage elevation		manual
Load control		automatic (load/dwell/unload)
Load dwell time		2~250 seconds, can be set
Resolution		0.01HR
Max. workpiece height		290mm
Max. testing width		220mm
Max. bore depth		130mm
Min. testing inner diameter		35mm
Power supply		220V, 50/60Hz
Dimension		700×290×880mm
Net weight		85kg

OPTIONAL ACCESSORY

Hardness test block HRC20~30	HDT-B-HRC1
Hardness test block HRC35~55	HDT-B-HRC2
Hardness test block HRC60~70	HDT-B-HRC3
Hardness test block HRB88~100	HDT-B-HRB
Hardness test block HRA80~84	HDT-B-HRA
Hardness test block HR15N78~88	HDT-B-HR15N2
Hardness test block HR15T88~93	HDT-B-HR15T
Hardness test block HR30N55~73	HDT-B-HR30N2
Hardness test block HR30T73~82	HDT-B-HR30T
4mm high diamond Rockwell indenter*	HDT-DM-4MM
Ø90mm flat anvil	HDT-DM290-FA
Ø230mm flat anvil	HDT-DM290-FB
Integrated printer (require pre-installation)	HDT-DM290-PT

* The minimum testing inner diameter is 25mm

MOTORIZED DIGITAL ROCKWELL HARDNESS TESTER
CODE HDT-RT151

INSPECTION CERTIFICATE | TOUCH SCREEN | FORCE LOADING BY ELECTRIC MOTOR (WITHOUT WEIGHTS)

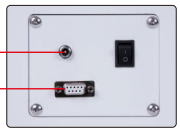
VIDEO

POPULAR MODEL

8" touch screen

HDT-RT151

the back



test interface

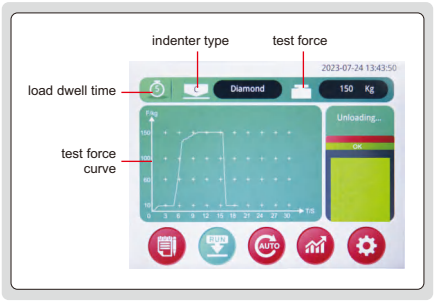
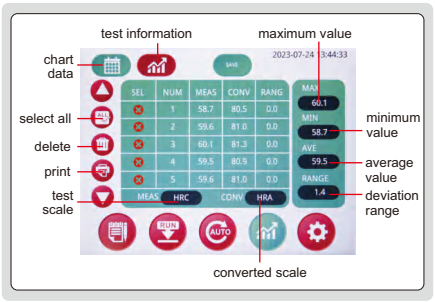


chart interface



- Comply with test standards ISO 6508, ASTM E18, JIS Z 2245
- Implement ISO, ASTM, GB scale conversion standards
- Electronic loading test force, with high accuracy and stable measurement values
- 8-inch touch screen for operation and display
- Capable of testing 15 Rockwell hardness scales and optional Superficial Rockwell scales
- Main unit stores 500 data groups independently; data retained after power failure
- Hardness correction function available based on cylinder size
- Wireless data transmission system is optional

Ø58mm flat anvil (included)

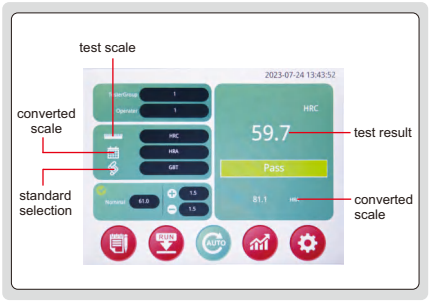
V-type anvil (included)

Ø150mm flat anvil (included)

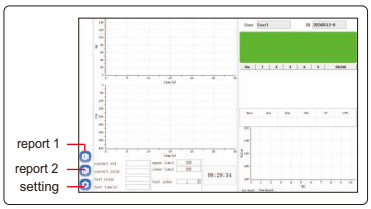
printer (included)

wireless data transmitter (**optional**)

test result display interface



computer software (included)



SPECIFICATION

Measurement range		20~95HRA, 10~100HRB, 10~70HRC
Hardness scale	with indenter included	HRA, HRB, HRC, HRD, HRF, HRG
	with optional indenter	HRE, HRH, HRK, HRL, HRM, HRP, HRR, HRS, HRV
Preliminary test force		98N/10kgf for Rockwell
Test force		588N (60kgf), 980N (100kgf), 1471N (150kgf)
Stage elevation		manual
Load control		automatic (load/dwell/unload)
Load dwell time		2~60 second
Resolution		0.1HR
Max. workpiece height		230mm
Max. testing width		170mm
Power supply		100~240V, 50/60Hz
Dimension		475×200×700mm
Net weight		70kg

STANDARD DELIVERY

Main unit	1 pc
Diamond indenter	1 pc
Ø1.5875mm carbide ball indenter	1 pc
Ø58mm flat anvil	1 pc
Ø150mm flat anvil	1 pc
V-type anvil	1 pc
Hardness test block HRC20~30	1 pc
Hardness test block HRC40~50	1 pc
Hardness test block HRC60~70	1 pc
Hardness test block HRBW80~100	1 pc
Hardness test block HRA80~90	1 pc
Software	1 pc
Printer	1 pc
Anti-dust cover	1 pc

OPTIONAL ACCESSORY

Hardness test block	
Ø12.7mm carbide ball indenter	HDT-RT15-INDENTER1
Ø6.35mm carbide ball indenter	HDT-RT15-INDENTER2
Ø3.175mm carbide ball indenter	HDT-RT15-INDENTER3
Wireless data transmission transmitter *	7315-HDT-M
Wireless data transmission receiver *	7315-2/3/6/7/8/9

* The wireless data transmission transmitter and receiver must be purchased together

AUTOMATIC DIGITAL ROCKWELL/SUPERFICIAL ROCKWELL HARDNESS TESTERS

INSPECTION CERTIFICATE

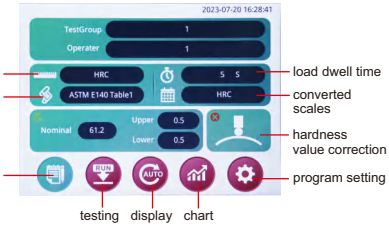
LARGE RANGE

AUTOMATIC LIFTING/ LOADING/UNLOADING

TOUCH SCREEN

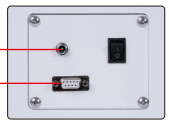
VIDEO

8" touch screen

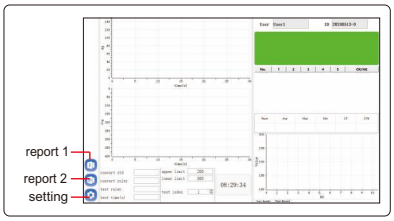


HDT-ST300

the back



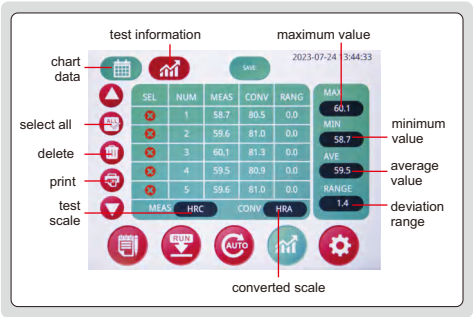
- Comply with test standards ISO 6508, ASTM E18, JIS Z 2245
- Implement ISO, ASTM, GB scale conversion standards, supporting HB, HV conversion
- Worktable (lead screw) auto-ascends/descends and applies test force for stable results
- 8-inch touch screen for operation and display
- Capable of testing 15 Rockwell hardness scales and optional Superficial Rockwell scales
- Main unit stores 500 data groups independently; data retained after power failure
- Hardness correction function available based on cylinder size
- Wireless data transmission system is optional



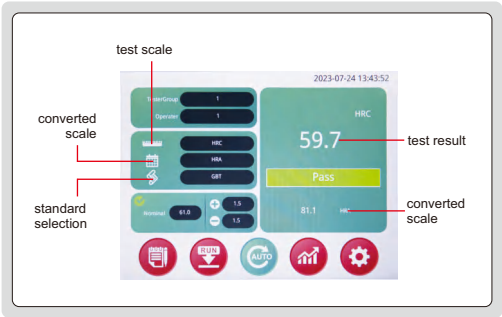
computer software (included)

wireless data transmitter (**optional**)

chart interface



test result display interface



Ø58mm flat anvil (included)

Ø150mm flat anvil (included)

V-type anvil (included)

printer (included)

SPECIFICATION

Code		HDT-ST300	HDT-ST310	HDT-ST320
Type		Rockwell	Superficial Rockwell	Rockwell and Superficial Rockwell
Measurement range		20~95HRA, 10~100HRB, 10~70HRC	70~94HR15N, 42~86HR30N, 20~77HR45N, 67~93HR15T, 29~82HR30T, 10~72HR45T	Rockwell: 20~95HRA, 10~100HRB, 10~70HRC; Superficial RockWell: 70~94HR15N, 42~86HR30N, 20~77HR45N, 67~93HR15T, 29~82HR30T, 10~72HR45T
Hardness scale	with indenter included	HRA, HRB, HRC, HRD, HRF, HRG	HR15N, HR30N, HR45N, HR15T, HR30T, HR45T	HRA, HRB, HRC, HRD, HRF, HRG, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T
	with optional indenter	HRE, HRH, HRK, HRL, HRM, HRP, HRR, HRS, HRV	HR15W, HR30W, HR45W, HR15X, HR30X, HR45X, HR15Y, HR30Y, HR45Y	HRE, HRH, HRK, HRL, HRM, HRP, HRR, HRS, HRV, HR15W, HR30W, HR45W, HR15X, HR30X, HR45X, HR15Y, HR30Y, HR45Y
Preliminary test force		98N/10kgf for Rockwell	29.4N/3kgf for Superficial Rockwell	98N/10kgf for Rockwell 29.4N/3kgf for Superficial Rockwell
Test force		588N (60kgf), 980N (100kgf), 1471N (150kgf)	147N (15kgf), 294N (30kgf), 441N (45kgf)	147N (15kgf), 294N (30kgf), 441N (45kgf), 588N (60kgf), 980N (100kgf), 1471N (150kgf)
Stage elevation		automatic up, down and return		
Load control		automatic (initial test force, main test force loading/holding/unloading)		
Load dwell time		2~60second		
Resolution		0.1HR		
Max. workpiece height		230mm		
Max. testing width		170mm		
Power supply		100~240V, 50/60Hz		
Dimension		475×200×700mm		
Net weight		70kg		

To be continued

Continued from previous page

STANDARD DELIVERY

Code	HDT-ST300	HDT-ST310	HDT-ST320
Main unit	1 pc	1 pc	1 pc
Diamond indenter	1 pc	1 pc	1 pc
Ø1.5875mm carbide ball indenter	1 pc	1 pc	1 pc
Ø58mm flat anvil	1 pc	1 pc	1 pc
Ø150mm flat anvil	1 pc	1 pc	1 pc
V-type anvil	1 pc	1 pc	1 pc
Hardness test block HRC20~30	1 pc	—	1 pc
Hardness test block HRC40~50	1 pc	—	—
Hardness test block HRC60~70	1 pc	—	1 pc
Hardness test block HRBW80~100	1 pc	—	1 pc
Hardness test block HRA80~90	1 pc	—	—
Hardness test block HR15N80~90	—	1 pc	—
Hardness test block HR30N60~85	—	1 pc	1 pc
Hardness test block HR30TW70~85	—	1 pc	1 pc
Software	1 pc	1 pc	1 pc
Printer	1 pc	1 pc	1 pc
Anti-dust cover	1 pc	1 pc	1 pc

OPTIONAL ACCESSORY

Hardness test block	
Ø12.7mm carbide ball indenter	HDT-RT15-INDENTER1
Ø6.35mm carbide ball indenter	HDT-RT15-INDENTER2
Ø3.175mm carbide ball indenter	HDT-RT15-INDENTER3
Wireless data transmission transmitter*	7315-HDT-M
Wireless data transmission receiver*	7315-2/3/6/7/8/9

* The wireless data transmission transmitter and receiver must be purchased together

MOTORIZED ROCKWELL HARDNESS TESTER (BASIC TYPE) CODE HDT-RA151

INSPECTION CERTIFICATE

SPECIFICATION

Hardness scale	HRA, HRB, HRC, HRD, HRF, HRG
Preliminary test force	98N
Test force	588N, 980N, 1471N
Display	analogue
Stage elevation	manual
Load control	automatic (load/dwell/unload)
Load dwell time	1~60 second
Min. reading	0.5HR
Max. workpiece height	170mm
Max. testing width	128mm (from the center of indenter to the wall of main body)
Power supply	220V, 50/60Hz
Dimension	500×225×640mm
Net weight	65kg

Ø150mm flat anvil (included)

Ø58mm flat anvil (included)

V-type anvil (included) for cylinders with diameter Ø4~60mm

small V-type anvil (**optional**) for cylinders with diameter Ø2~4mm

desk (**optional**)

STANDARD DELIVERY

Main unit	1 pc
Ø58mm flat anvil	1 pc
Ø150mm flat anvil	1 pc
V-type anvil	1 pc
Diamond indenter	1 pc
Ø1.5875mm steel ball indenter	1 pc
Hardness test block HRA80~88	1 pc
Hardness test block HRB85~95	1 pc
Hardness test block HRC20~30	1 pc
Hardness test block HRC35~55	1 pc
Hardness test block HRC60~70	1 pc
Anti-dust cover	1 pc

- According to ISO 6508

VIDEO

OPTIONAL ACCESSORY

Hardness test block HRA80~84	HDT-B-HRA
Hardness test block HRB88~100	HDT-B-HRB
Hardness test block HRC20~30	HDT-B-HRC1
Hardness test block HRC35~55	HDT-B-HRC2
Hardness test block HRC60~70	HDT-B-HRC3
Small V-type anvil	HDT-RW160-SV
Desk	HDT-DESK

MANUAL HIGH ROCKWELL HARDNESS TESTER
CODE HDT-RH411

VIDEO

INSPECTION CERTIFICATE

- According to ISO 6508

SPECIFICATION

Hardness scale	HRA, HRB, HRC, HRD, HRF, HRG
Preliminary test force	98N (10kgf)
Test force	588N (60kgf), 980N (100kgf), 1471N (150kgf)
Display	analogue
Stage elevation	manual
Load control	manual
Min. reading	0.5HR
Max. workpiece height	400mm
Max. testing width	160mm (form the center of indenter to the wall of main body)
Dimension	540×300×1030mm
Net weight	140kg

V-type anvil (included) for cylinders with diameter Ø4~60mm

Ø150mm flat anvil (included)

Ø58mm flat anvil (included)

small V-type anvil (**optional**) for cylinders with diameter Ø2~4mm

STANDARD DELIVERY

Main unit	1 pc
Ø58mm flat anvil	1 pc
Ø150mm flat anvil	1 pc
V-type anvil	1 pc
Diamond indenter	1 pc
Ø1.5875mm steel ball indenter	1 pc
Ø1.5875mm steel ball	5 pcs
Hardness test block HRA80~84	1 pc
Hardness test block HRB88~100	1 pc
Hardness test block HRC20~30	1 pc
Hardness test block HRC35~55	1 pc
Hardness test block HRC60~70	1 pc
Anti-dust cover	1 pc

OPTIONAL ACCESSORY

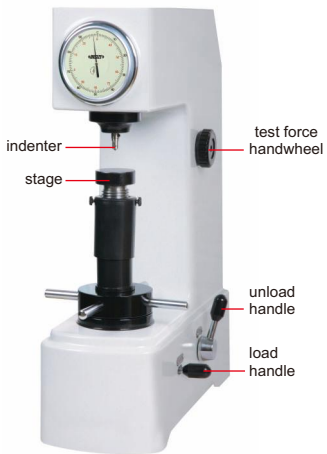
Hardness test block	
Small V-type anvil	HDT-RW160-SV

MANUAL ROCKWELL HARDNESS TESTER (BASIC TYPE)
CODE HDT-RW160

INSPECTION CERTIFICATE

POPULAR MODEL

VIDEO



Ø58mm flat anvil (included)

small V-type anvil (**optional**) for cylinders with diameter Ø2~4mm

Ø150mm flat anvil (included)

V-type anvil (included) for cylinders with diameter Ø4~60mm

desk (**optional**)

- According to ISO 6508

OPTIONAL ACCESSORY

Hardness test block HRA80~84	HDT-B-HRA
Hardness test block HRB88~100	HDT-B-HRB
Hardness test block HRC20~30	HDT-B-HRC1
Hardness test block HRC35~55	HDT-B-HRC2
Hardness test block HRC60~70	HDT-B-HRC3
Small V-type anvil	HDT-RW160-SV
Desk	HDT-DESK

SPECIFICATION

Hardness scale	HRA, HRB, HRC, HRD, HRF, HRG
Preliminary test force	98N (10kg)
Test force	588N (60kg), 980N (100kg), 1471N (150kg)
Display	analogue
Stage elevation	manual
Load control	manual
Min. reading	0.5HR
Max. workpiece height	170mm
Max. testing width	135mm (from the center of indenter to the wall of main body)
Dimension	466×238×630mm
Net weight	70kg

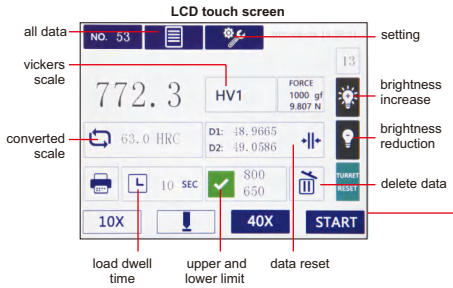
STANDARD DELIVERY

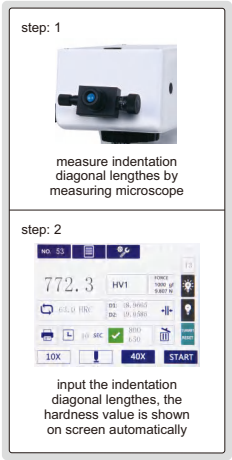
Main unit	1 pc
Ø58mm flat anvil	1 pc
Ø150mm flat anvil	1 pc
V-type anvil	1 pc
Diamond indenter	1 pc
Ø1.5875mm steel ball indenter	1 pc
Ø1.5875mm steel ball	5 pcs
Hardness test block HRA80~88	1 pc
Hardness test block HRB85~95	1 pc
Hardness test block HRC20~30	1 pc
Hardness test block HRC35~55	1 pc
Hardness test block HRC60~70	1 pc
Anti-dust cover	1 pc

DIGITAL MICRO-VICKERS HARDNESS TESTER (BASIC TYPE)
CODE HDT-MVE1300

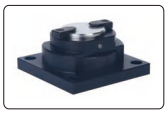
INSPECTION CERTIFICATE | MOTOR DRIVEN TURRET | TOUCH SCREEN

VIDEO

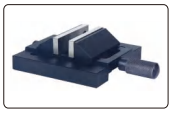




- Touch screen color LCD display
- Data storage and average value calculation
- Automatic switch between the indenter and objective lens
- According to ISO 6507
- Wireless data transmission system is optional


slice holder (included)

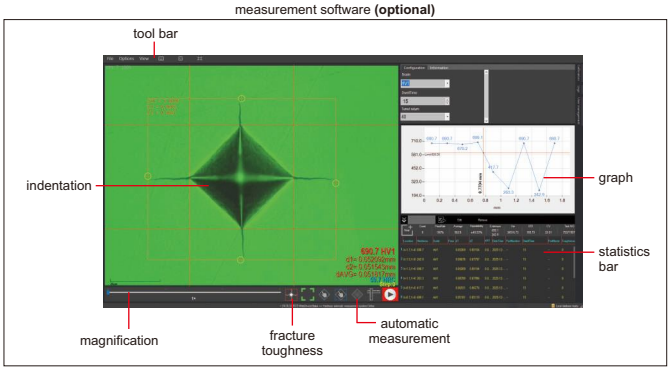
cylinder holder (included)


vice (included)

desk (**optional**)

wireless data transmitter (**optional**)

measurement software (**optional**)



camera and measuring software (**optional**)

SPECIFICATION

Test force	0.098N (10gf), 0.245N (25gf), 0.49N (50gf), 0.98N (100gf), 1.96N (200gf), 2.94N (300gf), 4.9N (500gf), 9.8N (1kgf)
Vickers scales	HV0.01, HV0.025, HV0.05, HV0.1, HV0.2, HV0.3, HV0.5, HV1
Converted scales	HRA, HRB, HRC, HRD, HRF, HV, HK, HBW, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T
Range	5~3000HV
Length measurement resolution	0.5μm
Objective/indenter switch	motor driven turret
Stage lifting	manual
Load control	automatic (load/dwell/unload)
Load dwell time	1~60 second
Objective	10X, 40X
Eyepiece	10X
Total magnification	100X (for measurement or observation), 400X (for measurement)
Max. workpiece height	90mm
Max. testing width	95mm (from the center of indenter to the wall of main body)
X-Y stage	dimension: 100×100mm, travel range: 25×25mm
Power supply	220V, 50/60Hz
Dimension	510×290×570mm
Net weight	40kg

STANDARD DELIVERY

Main unit	1 pc
10X, 40X objective	1 pc of each
Micro vickers indenter	1 pc
Hardness test block 400~500HV0.2	1 pc
Hardness test block 700~750HV1	1 pc
Slice holder	1 pc
Vice	1 pc
Cylinder holder	1 pc
Anti-dust cover	1 pc

OPTIONAL ACCESSORY

Hardness test block	
Desk	**HDT-DESK**
Knoop indenter	**HDT-MV-KNOOP**
Measuring system (manual)*	**HDT-ACM-SW**
Measuring system (automatic)*	**HDT-ACM-AW**
Wireless data transmission transmitter**	**7315-HDT-M**
Wireless data transmission receiver**	**7315-2/3/6/7/8/9**

*Measuring system includes camera and measuring software

**The wireless data transmission transmitter and receiver must be purchased together

DIGITAL MICRO-VICKERS HARDNESS TESTER (STANDARD TYPE)
CODE HDT-MVH1100

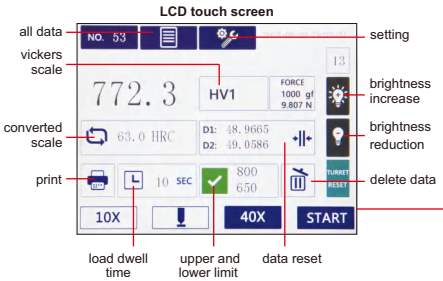
INSPECTION CERTIFICATE

PRESS INPUT BUTTON TO HAVE DIRECT READING OF HARDNESS

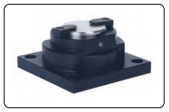
MOTOR DRIVEN TURRET

TOUCH SCREEN

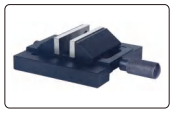
VIDEO

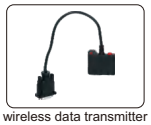


- Touch screen color LCD display
- Data storage and average value calculation
- Automatic switch between the indenter and objective lens
- According to ISO 6507
- Wireless data transmission system is optional


slice holder (included)

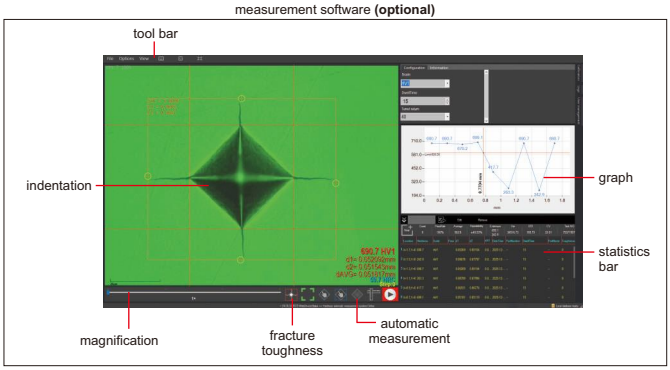
cylinder holder (included)


vice (included)


wireless data transmitter (**optional**)

desk (**optional**)

measurement software (**optional**)



camera and measuring software (**optional**)

SPECIFICATION

Test force	0.098N (10gf), 0.245N (25gf), 0.49N (50gf), 0.98N (100gf), 1.96N (200gf), 2.94N (300gf), 4.9N (500gf), 9.8N (1kgf)
Vickers scales	HV0.01, HV0.025, HV0.05, HV0.1, HV0.2, HV0.3, HV0.5, HV1
Converted scales	HRA, HRB, HRC, HRD, HRF, HV, HK, HBW, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T
Range	5~3000HV
Length measurement resolution	0.03μm
Objective/indenter switch	motor driven turret
Stage lifting	manual
Load control	automatic (load/dwell/unload)
Load dwell time	1~60 second
Objective	10X, 40X
Eyepiece	10X
Total magnification	100X (for measurement or observation), 400X (for measurement)
Max. workpiece height	90mm
Max. testing width	95mm (from the center of indenter to the wall of main body)
X-Y stage	dimension: 100×100mm, travel range: 25×25mm
Data output	built-in printer
Power supply	220V, 50/60Hz
Dimension	510×290×570mm
Net weight	40kg

STANDARD DELIVERY

Main unit	1 pc
10X, 40X objective	1 pc of each
Micro Vickers indenter	1 pc
Hardness test block 400~500HV0.2	1 pc
Hardness test block 700~750HV1	1 pc
Slice holder	1 pc
Vice	1 pc
Cylinder holder	1 pc
Anti-dust cover	1 pc

OPTIONAL ACCESSORY

Hardness test block	
Desk	**HDT-DESK**
Knoop indenter	**HDT-MV-KNOOP**
Measuring system (manual)*	**HDT-ACM-SW**
Measuring system (automatic)*	**HDT-ACM-AW**
Wireless data transmission transmitter**	**7315-HDT-M**
Wireless data transmission receiver**	**7315-2/3/6/7/8/9**

*Measuring system includes camera and measuring software

**The wireless data transmission transmitter and receiver must be purchased together

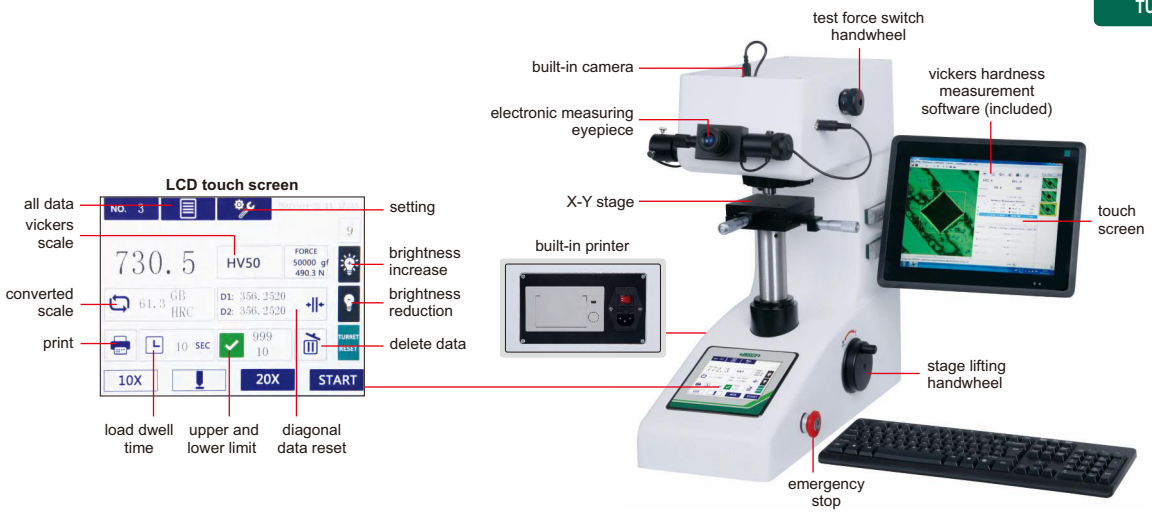
DUAL TOUCH SCREEN DIGITAL MICRO-VICKERS HARDNESS TESTER (ADVANCED TYPE) CODE HDT-DMV90

INSPECTION CERTIFICATE

MOTOR DRIVEN TURRET

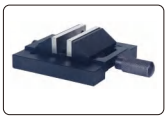
AUTOMATIC TEST

VIDEO

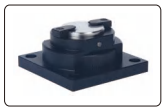


HDT-DMV90

cylinder holder (included)



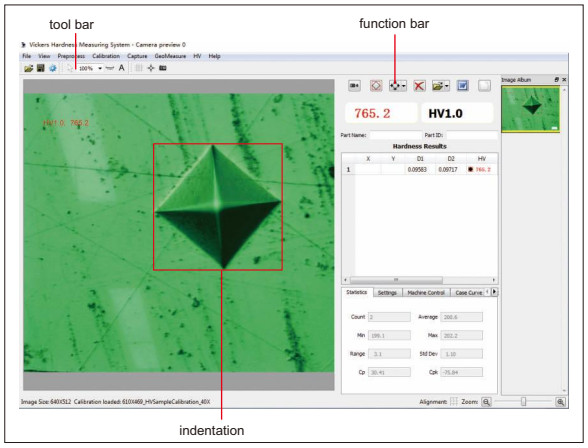
vice (included)



slice holder (included)

desk (**optional**)

vickers hardness measurement software (included)



- Dual touch screen control, high-definition image measurement and analysis
- One click start, automatic pressing and automatic measurement
- The host and vickers hardness measurement software can be operated independently
- Automatic switch between the indenter and objective lens
- Data storage and average value calculation
- Can connect with wired and wireless networks to transmit data
- According to ISO 6507

SPECIFICATION

Test force	0.098N (10gf), 0.245N (25gf), 0.49N (50gf), 0.98N (100gf), 1.96N (200gf), 2.94N (300gf), 4.9N (500gf), 9.8N (1kgf)
Vickers scales	HV0.01, HV0.025, HV0.05, HV0.1, HV0.2, HV0.3, HV0.5, HV1
Converted scales	HRA. HRB, HRC, HRD, HRF, HV,HK,HBW, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T
Range	5~3000HV
Length measurement resolution	0.03μm
Objective/indenter switch	motor driven turret
Stage lifting	manual
Load control	automatic (load/dwell/unload)
Load dwell time	1~60 second
Objective	10X, 40X
Eyepiece	10X
Total magnification	100X (for measurement or observation), 400X (for measurement)
Max. workpiece height	90mm
Max. testing width	95mm (from the center of indenter to the wall of main body)
X-Y stage	dimensions: 100×100mm, travel range: 25×25mm
Data output	built-in printer, USB
Power supply	220V, 50/60Hz
Dimension	500×420×480mm
Net weight	42kg

STANDARD DELIVERY

Main unit	1 pc
Vickers hardness measurement software	1 pc
10X, 40X objective	1 pc of each
Micro vickers indenter	1 pc
Hardness test block 400~500HV0.2	1 pc
Hardness test block 700~750HV1	1 pc
Wireless keyboard	1 pc
Wireless mouse	1 pc
Vice	1 pc
Slice holder	1 pc
Cylinder holder	1 pc
Auti-dust cover	1 pc

OPTIONAL ACCESSORY

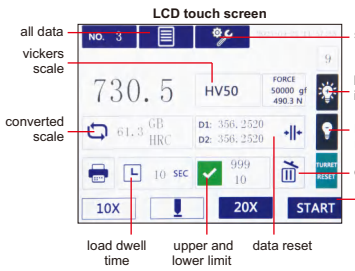
Hardness test block 400~500HV0.2	HDT-B-HV02C
Hardness test block 700~750HV1	HDT-B-HV1F
Knoop indenter	HDT-MV-KNOOP
Desk	HDT-DESK
OFFICE software	7313-OFFICE

DIGITAL VICKERS HARDNESS TESTERS (BASIC TYPE)

INSPECTION CERTIFICATE | MOTOR DRIVEN TURRET | TOUCH SCREEN

VIDEO

- Touch screen color LCD display
- Data storage and average value calculation
- Automatic switch between the indenter and objective lens
- According to ISO 6507
- Wireless data transmission system is optional



HDT-VE56

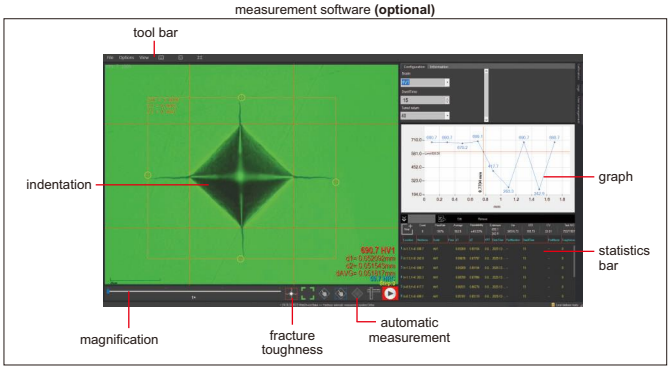
step: 1

measure indentation diagonal lengthes by measuring microscope

step: 2

input the indentation diagonal lengthes, the hardness value is shown on screen automatically

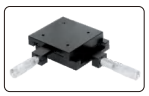
measurement software **(optional)**



camera and measuring software (**optional**)

desk (**optional**)

Ø150mm flat anvil (included)



XY platform (**optional**)

wireless data transmitter (**optional**)

Ø58mm flat anvil (included)

V-type anvil (included)

SPECIFICATION

Code	HDT-VE03	HDT-VE14	HDT-VE35	HDT-VE56
Test force	0.3kgf, 0.5kgf, 1kgf, 2kgf, 3kgf, 5kgf	0.3kgf, 0.5kgf, 1kgf, 3kgf, 5kgf, 10kgf	1kgf, 3kgf, 5kgf, 10kgf, 20kgf, 30kgf	1kgf, 5kgf, 10kgf, 20kgf, 30kgf, 50kgf
Vickers scales	HV0.3, HV0.5, HV1, HV2, HV3, HV5	HV0.3, HV0.5, HV1, HV3, HV5, HV10	HV1, HV3, HV5, HV10, HV20, HV30	HV1, HV5, HV10, HV20, HV30, HV50
Converted scales	HRA, HRB, HRC, HRD, HRF, HV, HK, HBW, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T			
Range	8~3000HV			
Length measurement resolution	1μm			
Objective/indenter switch	motor driven turret			
Stage lifting	manual			
Load control	automatic (load/dwell/unload)			
Load dwell time	1~60 second			
Objective	10X, 20X			
Eyepiece	10X			
Total magnification	100X (for measurement or observation), 200X (for measurement)			
Max. workpiece height	175mm			
Max. testing width	135mm (form the center of indenter to the wall of main body)			
Power supply	220V, 50/60HZ			
Dimension (LxWxH)	580×320×660mm			
Net weight	55kg			

STANDARD DELIVERY

Main unit	1 pc
10X, 20X objective	1 pc of each
Vickers indenter	1 pc
Hardness test block	2 pcs
Ø58mm flat anvil	1 pc
Ø150mm flat anvil	1 pc
V-type anvil	1 pc
Anti-dust cover	1 pc

OPTIONAL ACCESSORY

Hardness test block	
Desk	HDT-DESK
Measuring system (manual, Max. HV10)*	HDT-ACM1-SW
Measuring system (automatic, Max. HV10)*	HDT-ACM1-AW
Measuring system (manual, Max. HV50)*	HDT-ACM2-SW
Measuring system (automatic, Max. HV50)*	HDT-ACM2-AW
Wireless data transmission transmitter**	7315-HDT-M
Wireless data transmission receiver**	7315-2/3/6/7/8/9
X-Y platform	HDT-VEH-ST

*Measuring system includes camera and measuring software

**The wireless data transmission transmitter and receiver must be purchased together

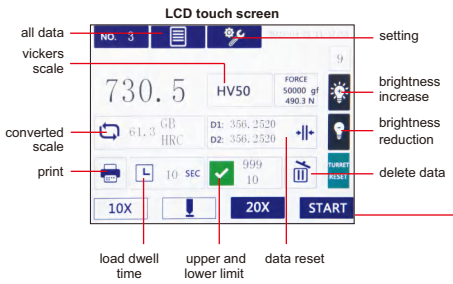
DIGITAL VICKERS HARDNESS TESTERS (STANDARD TYPE)

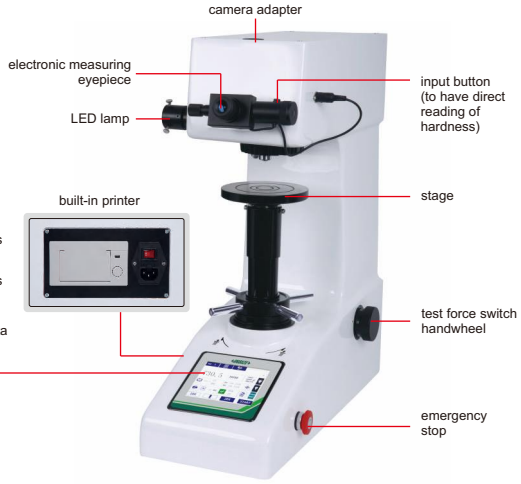
MOTOR DRIVEN TURRET | PRESS INPUT BUTTON TO HAVE DIRECT READING OF HARDNESS | TOUCH SCREEN

VIDEO

INSPECTION CERTIFICATE

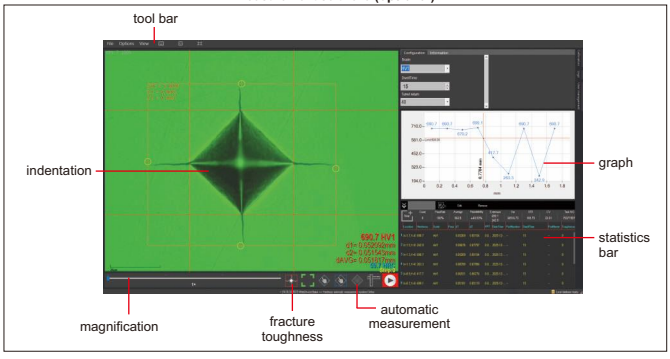
- Touch screen color LCD display
- Data storage and average value calculation
- Automatic switch between the indenter and objective lens
- According to ISO 6507
- Wireless data transmission system is optional



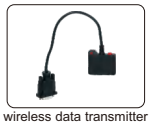


HDT-VH51

measurement software **(optional)**



camera and measuring software (**optional**)



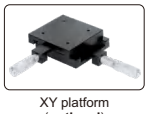
wireless data transmitter (**optional**)

Ø150mm flat anvil (included)

Ø58mm flat anvil (included)

V-type anvil (included)

desk (**optional**)



XY platform (**optional**)

SPECIFICATION

Code	HDT-VH05	HDT-VH11	HDT-VH31	HDT-VH51
Test force	0.3kgf, 0.5kgf, 1kgf, 2kgf, 3kgf, 5kgf	0.3kgf, 0.5kgf, 1kgf, 3kgf, 5kgf, 10kgf	1kgf, 3kgf, 5kgf, 10kgf, 20kgf, 30kgf	1kgf, 5kgf, 10kgf, 20kgf, 30kgf, 50kgf
Vickers scales	HV0.3, HV0.5, HV1, HV2, HV3, HV5	HV0.3, HV0.5, HV1, HV3, HV5, HV10	HV1, HV3, HV5, HV10, HV20, HV30	HV1, HV5, HV10, HV20, HV30, HV50
Converted scales	HRA, HRB, HRC, HRD, HRF, HV, HK, HBW, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T			
Range	8~3000HV			
Length measurement resolution	0.06μm			
Objective/indenter switch	motor driven turret			
Stage lifting	manual			
Load control	automatic (load/dwell/unload)			
Load dwell time	1~60 second			
Objective	10X, 20X			
Eyepiece	10X			
Total magnification	100X (for measurement or observation), 200X (for measurement)			
Max. workpiece height	175mm			
Max. testing width	135mm (form the center of indenter to the wall of main body)			
Output	built-in printer			
Power supply	220V, 50/60HZ			
Dimension	580×320×660mm			
Net weight	55kg			

STANDARD DELIVERY

Main unit	1 pc
10X, 20X objective	1 pc of each
Vickers indenter	1 pc
Hardness test block	2 pcs
Ø58mm flat anvil	1 pc
Ø150mm flat anvil	1 pc
V-type anvil	1 pc
Anti-dust cover	1 pc

OPTIONAL ACCESSORY

Hardness test block	
Desk	HDT-DESK
Measuring system (manual, Max. HV10)*	HDT-ACM1-SW
Measuring system (automatic, Max. HV10)*	HDT-ACM1-AW
Measuring system (manual, Max. HV50)*	HDT-ACM2-SW
Measuring system (automatic, Max. HV50)*	HDT-ACM2-AW
Wireless data transmission transmitter**	7315-HDT-M
Wireless data transmission receiver **	7315-2/3/6/7/8/9
X-Y platform	HDT-VEH-ST

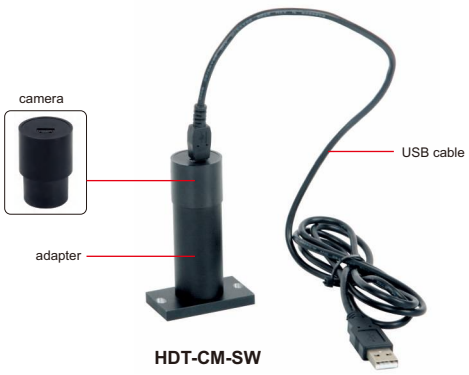
*Measuring system includes camera and measuring software

**The wireless data transmission transmitter and receiver must be purchased together

VICKERS HARDNESS MEASURING SYSTEMS

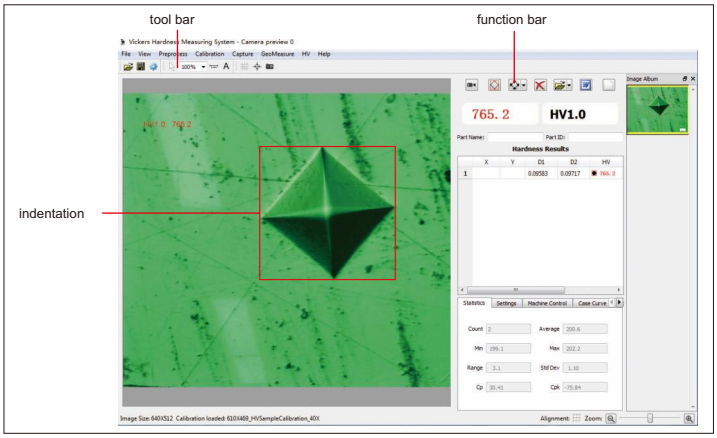
VIDEO

- Connected to computer USB port
- Measurement results can be automatically generated including average, maximum and minimum values, standard deviation, Cp, Cpk, etc.
- Upper and lower limits can be set, and values exceeding the upper and lower limits are automatically marked
- Measurement results can be converted to HRA, HRB, HRC, HRD, HRF, HV, HK, HBW, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T, etc.
- Can be calibrated with standard hardness blocks
- Measurement result can be sent to Word or Excel



HDT-CM-SW

measurement software (included)



application

SPECIFICATION

Code	HDT-CM1-SW	HDT-CM1-AW	HDT-CM2-SW	HDT-CM2-AW	HDT-CM-SW	HDT-CM-AW
Measurement method of indentation	manual	automatic	manual	automatic	manual	automatic
Applicable hardness testers	small force Vickers hardness testers		large force Vickers hardness testers		micro Vickers hardness testers	
Code of applicable hardness testers	HDT-VE03, HDT-VE14, HDT-VH05, HDT-VH11		HDT-VE35, HDT-VE56, HDT-VH31, HDT-VH51		HDT-MVH1100, HDT-MVE1300	
Pixel	5.1M					
Resolution	hardness measurement: 0.1HV; indentation measurement: 0.1μm					
Accuracy	±3%					

STANDARD DELIVERY

Code	HDT-CM1-SW	HDT-CM1-AW	HDT-CM2-SW	HDT-CM2-AW	HDT-CM-SW	HDT-CM-AW
Camera	1 pc	1 pc	1 pc	1 pc	1 pc	1 pc
Extension tube	1 pc	1 pc	1 pc	1 pc	1 pc	1 pc
Adapter	1 pc	1 pc	1 pc	1 pc	—	—
USB cable	1 pc	1 pc	1 pc	1 pc	1 pc	1 pc
Software	1 pc	1 pc	1 pc	1 pc	1 pc	1 pc

MOTORIZED DIGITAL BRINELL HARDNESS TESTER (BASIC TYPE)
CODE HDT-MBE320

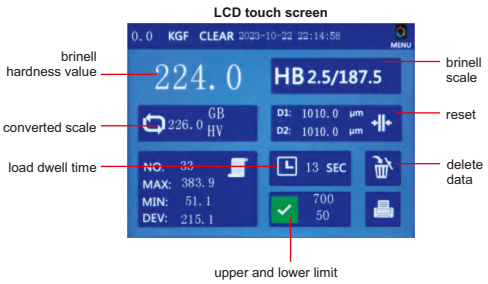
FORCE LOADING BY ELECTRIC MOTOR (WITHUOT WEIGHT)

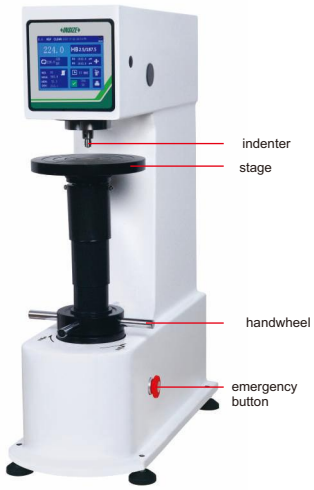
TOUCH SCREEN

KEYBOARD SIGNAL TRANSMISSION IS OPTIONAL

VIDEO

INSPECTION CERTIFICATE





- Touch screen color LCD display SCREEN
- Measure indentation diameter by measuring microscope, then input the diameters, the hardness value is shown on screen automatically
- Optional Wireless data transmission system can be used to output keyboard signals, connecting to a computer or mobile phone to send data to Excel
- Electric loading test force, without weights
- Casting case, structurally stable and not deformed
- According to ISO 6506

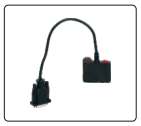
Ø78mm flat anvil (included)

Ø200mm flat anvil (included)

V-type anvil (included)

desk (**optional**)

measuring microscope (included)


wireless transmitter (**optional**)

SPECIFICATION

Test force		62.5kgf, 100kgf, 125kgf, 187.5kgf, 250kgf, 500kgf, 750kgf, 1000kgf, 1500kgf, 3000kgf
Brinell scale		HBW2.5/62.5, HBW2.5/187.5, HBW5/62.5, HBW5/125, HBW5/250, HBW5/750, HBW10/100, HBW10/250, HBW10/500, HBW10/1000, HBW10/1500, HBW10/3000
Range		8~650HBW
Hardness resolution		0.1HBW
Stage elevation		manual
Load control		automatic (load/dwell/unload)
Load dwell time		0~60 second
Measuring microscope	magnification	20X
	resolution	0.01mm
Max. workpiece height		230mm
Max. testing width		140mm (form the center of indenter to the wall of main body)
Output		RS232 (can transmit the keyboard signal by an optional wireless transmitter and receiver)
Power supply		220V, 50/60Hz
Dimension		510×210×750mm
Net weight		130kg

STANDARD DELIVERY

Main unit	1 pc
Ø78mm flat anvil	1 pc
Ø200mm flat anvil	1 pc
V-type anvil	1 pc
Ø2.5mm carbide ball indenter	1 pc
Ø5mm carbide ball indenter	1 pc
Ø10mm carbide ball indenter	1 pc
Hardness test block 100~200HBW2.5/187.5	1 pc
Hardness test block 90~200HBW10/1000	1 pc
Hardness test block 100~200HBW10/3000	1 pc
Measuring microscope	1 pc

OPTIONAL ACCESSORY

Hardness test block 100~200HBW2.5/187.5	HDT-B-HB25A1
Hardness test block 90~200HBW10/1000	HDT-B-HB10C1
Hardness test block 100~200HBW10/3000	HDT-B-HB10A1
Wireless transmitter (receiver is needed)	7315-HDT-M
Receiver	7315-2/3/6/7/8/9
Desk	HDT-DESK
Measuring systems	HDT-MB42□

MOTORIZED DIGITAL BRINELL HARDNESS TESTERS (STANDARD TYPE)

VIDEO

INSPECTION CERTIFICATE

TOUCH SCREEN

FORCE LOADING BY ELECTRIC MOTOR (WITHUOT WEIGHTS)

WIRELESS TRANSMISSION IS OPTIONAL

LCD touch screen

brinell hardness value

converted scale

load dwell time

brinell scale

reset

delete data

print

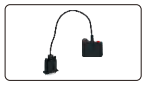
upper and lower limit

Ø78mm flat anvil (included)

Ø200mm flat anvil (included)

V-type anvil (included)

desk (**optional**)



wireless transmitter (**optional**)

- Touch screen color LCD display
- Measure the indentation with microscope, automatically calculate the hardness value and display it on the screen
- Electric loading test force, without weights
- Optional Wireless data transmission system can be used to connect computer or mobile phone to send data to Excel (keyboard signal)
- Casting case, structurally stable and not deformed
- According to ISO 6506

SPECIFICATION

Code		HDT-MB610	HDT-MB710
Turret rotation		manual	automatic
Test force		612.5N (62.5kgf), 980N (100kgf), 1225N (125kgf), 1837.5N (187.5kgf), 2450N (250kgf), 4900N (500kgf), 7350N (750kgf), 9800N (1000kgf), 14700N (1500kgf), 29400N (3000kgf)	
Brinell scale		HBW2.5/62.5, HBW2.5/187.5, HBW5/125, HBW5/750, HBW10/100, HBW10/250, HBW10/500, HBW10/1000, HBW10/1500, HBW10/3000	
Range		8~650HBW	
Hardness resolution		0.1HBW	
Stage elevation		manual	
Load control		automatic (load/dwell/unload)	
Load dwell time		0~60 seconds	
Measuring microscope	magnification	20X	
	resolution	0.1μm	
Max. workpiece height		200mm	
Max. testing width		135mm (form the center of indenter to the wall of main body)	
Data output		built-in printer, RS232 (can transmit by optional wireless transmitter and receiver)	
Power supply		220V, 50/60Hz	
Dimension (L×W×H)		510×210×750mm	
Net weight		130kg	

STANDARD DELIVERY

Main unit	1 pc
Ø78mm flat anvil	1 pc
Ø200mm flat anvil	1 pc
V-type anvil	1 pc
Ø2.5mm carbide ball indenter	1 pc
Ø5mm carbide ball indenter	1 pc
Ø10mm carbide ball indenter	1 pc
Hardness test block 100~200HBW2.5/187.5	1 pc
Hardness test block 90~200HBW10/1000	1 pc
Hardness test block 100~200HBW10/3000	1 pc

OPTIONAL ACCESSORY

Hardness test block 100~200HBW2.5/187.5	HDT-B-HB25A1
Hardness test block 90~200HBW10/1000	HDT-B-HB10C1
Hardness test block 100~200HBW10/3000	HDT-B-HB10A1
Wireless transmitter (receiver is needed)	7315-HDT-M
Receiver	7315-2/3/6/7/8/9
Desk	HDT-DESK
Brinell measuring system	HDT-MB42□

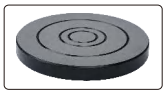
MOTORIZED DIGITAL ROCKWELL/BRINELL/VICKERS HARDNESS TESTER CODE HDT-BRV330

INSPECTION CERTIFICATE | TOUCH SCREEN | FORCE LOADING BY ELECTRIC MOTOR (WITHUOT WEIGHTS)

VIDEO

- 5.6" color touch LCD display
- Electronic closed-loop control of the applied test force, easy to use, stable display value
- Total of 21 measurement scales, including Brinell, Rockwell and Vickers test method
- Convertible to various hardness standards such as HB, HV, HRC, HK, etc.
- Two types of internal and external illumination are available, and different illumination is used according to the size of the indentation to make the indentation clearer
- Average, maximum and minimum value statistic are available
- Data storage and query function, can be printed out by the printer
- According to ISO 6506, ISO 6507, ISO 6508, ASTM E-10, ASTM E-18, ASTM E-92

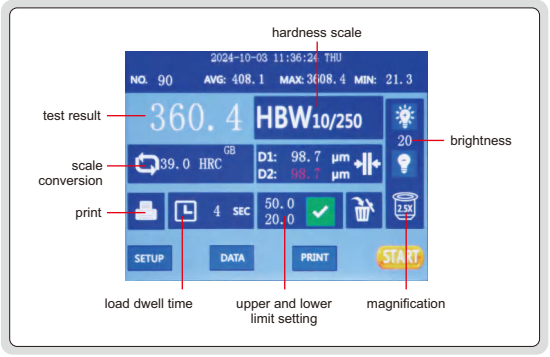
Ø60mm flat anvil (included)



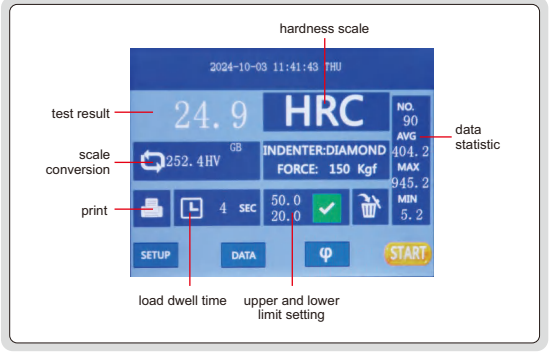
Ø150mm flat anvil (included)

V-type anvil (included)

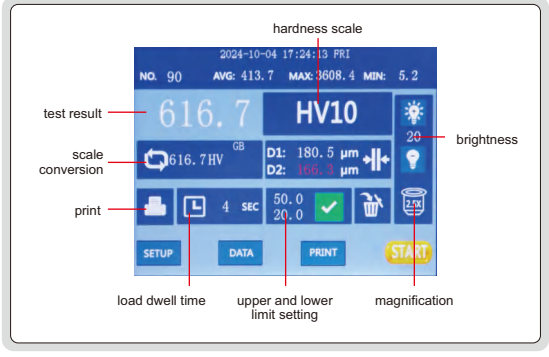
Brinell measurement interface



Rockwell measurement interface



Vickers measurement interface



SPECIFICATION

Type	Brinell	Rockwell	Vickers
Test force	306.5N (31.25kg), 612.9N (62.5kg), 1226N (125kg), 1839N (187.5kg), 980.8N (100kg), 2451.6N (250kg)	588N (60kg), 980N (100kg), 1471N (150kg)	29.42 (3kg), 49.03N (5kg), 98.07N (10kg), 196.1N (20kg), 294.2N (30kg), 490.3N (50kg), 980.7N (100kg)
Hardness scale	HBW2.5/31.25, HBW2.5/62.5, HBW2.5/187.5, HBW5/62.5, HBW5/125, HBW5/250, HBW10/100, HBW10/250	HRA, HRB, HRC, HRD, HRF, HRG	HV3, HV5, HV10, HV20, HV30, HV50, HV100
Conversion scale	HRA, HRB, HRC, HRD,HRF, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T, HB, HV, HK		
Range	5-650HBW	20-88HRA, 20-100HRB, 20-70HRC	10-2900HV
Stage lifting	manual		
Load control	automatic (load/dwell/unload)		
Eyepiece	15X		
Objective	2.5X (included, for Brinell), 5X (included, for Vickers), 10X (**optional**, for Vickers)		
Resolution	0.1HB	0.1HR	0.1HV
Load dwell time	0~99 seconds, can be set		
Max. testing width	160mm		
Max. workpiece height	165mm	180mm	165mm
Power supply	220V, 50/60Hz		
Dimension (LxWxH)	550×235×720mm		
Net weight	80kg		

To be continued

Continued from previous page

STANDARD DELIVERY

Main unit	1 pc
Diamond Rockwell indenter	1 pc
Diamond Vickers indenter	1 pc
Ø2.5mm ball indenter	1 pc
Ø5mm ball indenter	1 pc
Ø1.5875 carbide ball indenter	1 pc
Ø150mm flat anvil	1 pc
Ø60mm flat anvil	1 pc
V-type anvil	1 pc
Skateboard stage	1 pc
Internal lighting bulb	1 pc
External lighting bulb	1 pc
Hardness test block HRC20~30	1 pc
Hardness test block HRC60~70	1 pc
Hardness test block HRB85~100	1 pc
Hardness test block HBW2.5/187.5	1 pc
Hardness test block HV30	1 pc
Anti-dust cover	1 pc

OPTIONAL ACCESSORY

10X objective	HDT-OB-10
Ø10mm ball indenter	HDT-BRV-INDENTER10
Hardness test block 20~30HRC	HDT-B-HRC1
Hardness test block 35~55HRC	HDT-B-HRC2
Hardness test block 60~70HRC	HDT-B-HRC3
Hardness test block 88~100HRB	HDT-B-HRB
Hardness test block 80~84HRA	HDT-B-HRA
Hardness test block 400~500HBW2.5/187.5	HDT-B-HB25A4
Hardness test block 400~500HV5	HDT-B-HV5D

AUTOMATIC DIGITAL BRINELL HARDNESS TESTER CODE HDT-FB301

INSPECTION CERTIFICATE

AUTOMATIC TEST

VIDEO

Ø200mm flat anvil (included)

Ø73mm flat anvil (included)

V-type anvil (included)

- According to ISO 6506, ASTM E10
- Computer-Integrated hardness tester
- Objective lens and indenter switch automatically by the selceted test scale to test Brinell Hardness automatically
- The test results can be generated into Word or Excel reports and can be directly saved or output by an external printer

SPECIFICATION

Test force	612.9N (62.5kg), 980.7N (100kg), 1226N (125kg), 1839N (187.5kg), 2452N (250kg), 4903N (500kg), 7355N (750kg), 9807N (1000kg), 14710N (1500kg), 29420N (3000kg)
Conversion scale	HV, HK, HRA, HRBW, HRC, HRD, HREW, HRFW, HRGW, HRKW, HR15N, HR30N, HR45N, HR15TW, HR30TW, HR45TW, HS, HBS, HBW
Range	3.18~653HBW
Hardness reading method	direct reading
Stage lifting	automatic
Load control	automatic (load/dwell/unload)
Load dwell time	0~99 seconds
Camera pixel	3M
Objective	1X, 2X
Max. field of view	1X: 6mm, 2X: 3mm
Minimum display resolution	1X: 4.6μm, 2X: 2.3μm
Max. workpiece height	290mm
Max. testing width	150mm
Data output	USBx3, VGAx1, network port x1
Power supply	220V, 50/60Hz
Dimension (L×W×H)	690×310×1000mm
Net weight	200kg

STANDARD DELIVERY

Main unit	1 pc
1X, 2X objective	1 pc of each
Ø2.5mm ball indenter	1 pc
Ø5mm ball indenter	1 pc
Ø10mm ball indenter	1 pc
Ø73mm flat anvil	1 pc
Ø200mm flat anvil	1 pc
V-type anvil	1 pc
Hardness test block 150~250HBW5/750	1 pc
Hardness test block 150~250HBW10/3000	1 pc
Anti-dust cover	1 pc

OPTIONAL ACCESSORY

Hardness test block 200~300HBW5/750	HDT-B-HB5A2
Hardness test block 200~300HBW10/3000	HDT-B-HB10A2

BRINELL INDENTATION HARDNESS MEASURING SYSTEMS

PRECISE IDENTIFICATION

SMART VOICE ASSISTANT

VIDEO

INSPECTION CERTIFICATE

- Indentation recognition is highly accurate, capable of handling most complex surface conditions
- Measurement results can be automatically generated including average, maximum and minimum values, standard deviation, etc.
- Measured hardness values can be announced by voice, and the software also supports voice-controlled automatic measurement
- Measurement results can be converted to HRA, HRB, HRC, HV, HK, HBW, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T, Rm etc.
- Built-in software dongle, not easy to lose
- Software interface offers multiple layout modes and also supports customizable layout
- Measurement results can be sent to Word or Excel

HDT-MB425

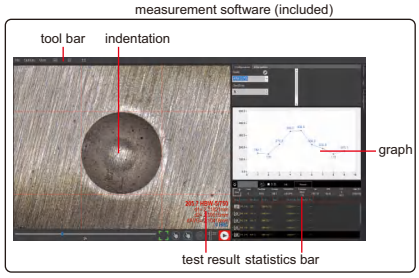
standard base (included)

magnetic base (included)

slender base (included)

application (complex surface condition test case)

measurement software (included)



SPECIFICATION

Code	HDT-MB424	HDT-MB425	HDT-MB426	HDT-MB427	HDT-MB428
Type	Brinell	Brinell	hammer Brinell	shear pin Brinell	Brinell, hammer brinell, shear pin brinell
Measurement method of Indentation	manual	automatic			
Range	10~650HBW		/		
Max. measuring diameter	6mm				
Accuracy	±2%				
Repeatability	±1%				
Pixel	3M				
Dimension (L×W×H)	105×70×200mm				
Net weight	620g				

STANDARD DELIVERY

Camera	1 pc
Software	1 pc
USB cable	1 pc
Standard base	1 pc
Magnetic base	1 pc
Slender base	1 pc

OPTIONAL ACCESSORY

OFFICE software	7313-OFFICE
Tablet computer	7313-4

ULTRASONIC HARDNESS TESTERS

ATTENTION: NEED TO CONFIRM IF THE WORKPIECES ARE SUITABLE BEFORE PURCHASE

SMALL TEST INDENTATION

ATTENTION: HARDNESS BLOCKS FOR CALIBRATION ARE OPTIONAL

WIRELESS TRANSMISSION IS OPTIONAL

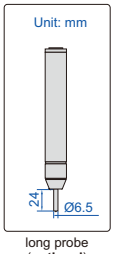
INSPECTION CERTIFICATE

VIDEO

POPULAR MODEL

- Small size, light weight, portable, convenient for on-line measurement and can be used to measure large workpieces
- Support 360°measurement, fast test speed, the fastest results in 1 second
- Standard Vickers indentation, small test indentation and low damage to the workpiece
- 100 measurement data sets and 10 calibration data sets can be stored
- Large display, directly shows the current measured value, maximum value, minimum value, average value and unit conversion value
- For unspecified conversion tables and unknown materials, multi-point calibration on any hardness scale you can choose to eliminate of systematic errors due to conversion tables
- According to DIN 50159, ASTM A1038 standards

9646-300



long probe (optional)

To be continued

Continued from previous page

SPECIFICATION

Code	9646-300	9646-301
Test force of probe	19.6N (2kgf)	49N (5kgf)
Data printout	without printer	with bluetooth printer
Main test parameter	HV	
Convertible parameters	HRA, HRB, HRC, HBW, HS, MPa	
Measurement range	50-1599HV, 20-68HRC, 85-650HB, 41-100HRB, 61-85.6HRA, 34.2-97.3HS, 255-2180MPa	
Resolution	1HV, 0.1HRA, 0.1HRB, 0.1HRC, 1HB, 0.1HS, 1MPa	
Accuracy	±4%HV, ±4%HB, ±1.5HR	
Calibration method	normal material: one-point calibration; special material: multi-point calibration	
Operation temperature	-10°C~40°C	
Power supply	built-in rechargeable lithium battery (for 10 hours working)	
Dimension of main unit (LxWxH)	190×82×30mm	
Dimension of probe	150×Ø22mm	
Net weight	540g	

bluetooth printer
(included in **9646-301**)

stand (**optional**), suitable for measuring small workpieces, fast and stable

STANDARD DELIVERY

Code	9646-300	9646-301
Main unit	1 pc	1 pc
19.6N manual probe	1 pc	1 pc
Bluetooth printer	—	1 pc
Charger	1 pc	1 pc
USB cable	1 pc	1 pc
Ultrasonic hardness test block	1 pc	1 pc

flat base (**optional**),
suitable for measuring flat surface

Applications:
1. Hardness measurement of flange edges and gear root stampings, gears and gear grooves with surface hardening of lamina, taper sections
2. Hardness measurement of shafts and thin-walled pipes and container
3. Hardness measurement of thin plating, wheels, turbine rotors and welded parts
4. Measurement of the depth of a certain diameter deep holes, dents of the larger curvature and convex marks, irregular planes
5. Covering the majority of hardness measurement of industrial production of ferrous metals, non-ferrous metals and their alloys

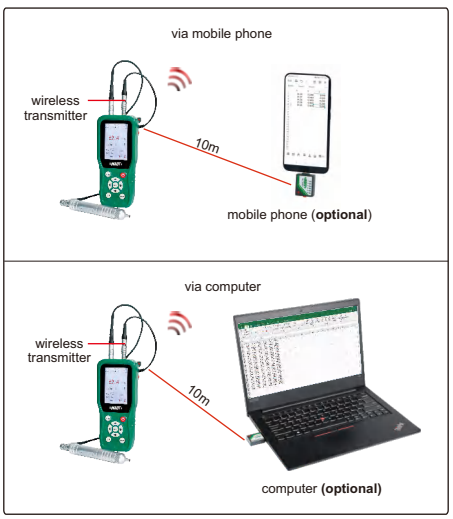
OPTIONAL ACCESSORY

9.8N manual probe	9646-300-10
29.4N manual probe	9646-300-30
49N manual probe	9646-300-50
98N manual probe	9646-300-98
9.8N manual long probe	9646-300-10L
19.6N manual long probe	9646-300-20L
29.4N manual long probe	9646-300-30L
49N manual long probe	9646-300-50L
98N manual long probe	9646-300-98L
Stand	9646-300-STAND
Magnetic stand	9646-STANDV
Flat base	9646-300-FLAT
Wireless transmitter (receiver is needed)	7315-9646
Receiver	7315-2/3/6/7/8/9
Ultrasonic hardness test block	

wireless transmitter
(**optional**)

magnetic stand (**optional**), suitable for measuring large flat surface and shaft workpiece, with stable adsorption

can send data to Excel, TXT and other documents by connecting to mobile phone or computer via optional **7315** series wireless transmission systems



SPECIFICATION OF PROBE

Probe type	9.8N	19.6N	29.4N	49N	98N**
Diameter	22mm	22mm	22mm	22mm	22mm
Length	150mm	150mm	150mm	150mm	150mm
Maximum roughness of measuring surface	Ra<3.2μm	Ra<5μm	Ra<5μm	Ra<10μm	Ra<15μm
Minimum workpiece weight	0.3kg*	0.3kg*	0.3kg*	0.3kg*	0.3kg*
Minimum thickness of workpiece	2mm	2mm	2mm	2mm	2mm
Application	mold shells, fixtures, thin-walled parts, bearings, tooth sides and pipe interiors			measurement of grooves, gear flanks and gear roots	workpieces with low roughness requirement

*If the weight or thickness of workpieces is less than required, the workpieces should be fixed or coupled on solid support
**For large test force, it is recommended to use the probe with a stand
Note: when replacing optional probes, a multi-point calibration with more than three calibration blocks must be performed before use

PORTABLE LEEB HARDNESS TESTERS

VIDEO

INSPECTION CERTIFICATE

BLUETOOTH

DATA OUTPUT

- Can use wired probes or wireless probes
- Dual-coil probe for high accuracy
- Universal testing angle, no need to set impact direction
- Based on Leeb (HLD), converted to Vickers (HV), Brinell (HB), Rockwell (HRC, HRA and HRB), Shore (HS) and tensile strength (σb)
- Dual value display, shows both Leeb and converted hardness
- Large 2.4" LCD display with backlight
- With a magnet on the back, the main unit can be attached on steel surfaces
- According to ASTM A956 and DIN 50156

HDT-CB320
(wired probe is included)

HDT-WL320
(wireless probe is included)

connect to PC, upload the data to PC, print and send to Excel (software is included)

connect to bluetooth printer (**optional**)

hardness test block D (included)

small support ring (included)

SPECIFICATION

Code	HDT-CB320	HDT-WL320
Probe included	wired probe D	wireless probe D
Optional probes	wired (DC/C/D/D+15/DL/E/G), wireless (DC/C/D/DL/G)	
Resolution	1HLD/1HV/1HB/0.1HRC/0.1HRB/0.1HRA/0.1HS/1MPa	
Accuracy	±6HLD (when HLD=800)	
Output	USB	
Measuring range	HL 170-960, 7-89HRA, 13-109HRB, 17-70HRC, 20-655HB, 32-99.5HS, 80-940HV, 255-2639N/mm²	
Applicable materials	1. steel/cast steel 2. alloy steel 3. stainless steel 4. grey cast iron 5. nodular cast iron 6. cast aluminum 7. brass 8. bronze 9. copper 10. forging steel 11. rolling steel	
Statistics	average/max./min./s.value	
Memory	999 data	
Working environment	-10°C~45°C	
Power supply	2×AA batteries	
Dimension	145×68×28mm	
Net weight	158g	

STANDARD DELIVERY

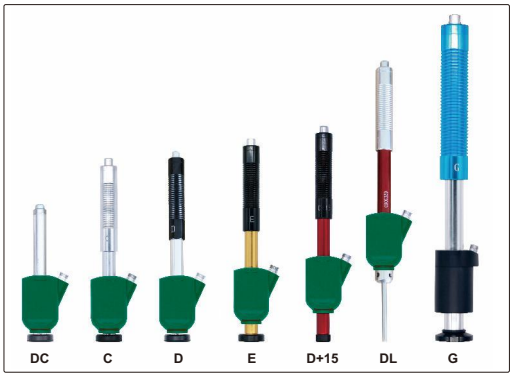
Code	HDT-CB320	HDT-WL320
Main unit	1 pc	1 pc
Wired probe D	1 pc	—
Wireless probe D	—	1 pc
Hardness test block D	1 pc	1 pc
Small support ring	1 pc	1 pc
Cleaning brush	1 pc	1 pc

OPTIONAL ACCESSORY

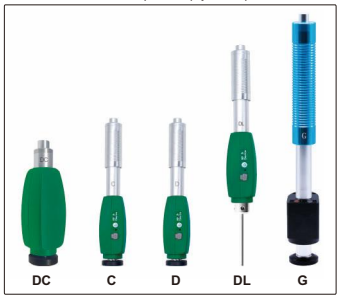
Wired probe	DC	HDT-CB320-DC
	C	HDT-CB320-C
	D	HDT-CB320-D
	D+15	HDT-CB320-D15
	DL	HDT-CB320-DL
	E	HDT-CB320-E
	G	HDT-CB320-G
Wireless probe	DC	HDT-WL320-DCW
	C	HDT-WL320-CW
	D	HDT-WL320-DW
	DL	HDT-WL320-DLW
	G	HDT-WL320-GW
Hardness test block D**		HDT-B-HLD3
Hardness test block G*		HDT-B-HLG2
Printer		ISH-LP200-PRINTER
Support rings		ISH-PH-SP9

* Hardness test block G (**HDT-B-HLG2**) is for probe G (**HDT-CB320-G** or **HDT-WL320-GW**)
** Hardness test block D (**HDT-B-HLD3**) is for all other probes

wired probes (**optional**)



wireless probes (**optional**)



APPLICABLE WORKPIECE

Probes		DC	C	D	D+15	DL	E	G
Application		inner wall of small space	small or thin workpiece, coating layer	general use	deep groove	narrow slot or small hole	very hard material	casting or forging workpiece
Maximum roughness of workpiece (Ra)		2μm	0.4μm	2μm	2μm	2μm	2μm	7μm
Minimum weight of workpiece	direct measurement	5kg	1.5kg	5kg	5kg	5kg	5kg	15kg
	on solid support	2.5kg	0.5kg	2kg	2kg	2kg	2.5kg	5kg
	coupled on plate	0.05-2kg	0.02kg	0.05-2kg	0.1kg	0.1kg	0.1-2kg	0.5kg
Minimum thickness of workpiece		3mm	1mm	3mm	3mm	3mm	3mm	10mm

PORTABLE LEEB HARDNESS TESTER WITH WIRELESS PROBE
CODE HDT-WP201

INSPECTION CERTIFICATE

VIDEO

- Wireless digital probe
- Bluetooth digital probe
- Universal testing angle, no need to set impact direction
- Based on Leeb (HLD), converted to Vickers (HV), Brinell (HB), Rockwell (HRC, HRB), Shore (HSD) and tensile strength (σb)
- Dual value display, shows both Leeb and converted hardness
- Large LCD display with backlight
- Can choose large font display and statistics display
- Automatically calculate maximum, minimum and average value
- Save 300 data
- Operation temperature: -10°C~45°C
- According to ASTM A956, DIN 50156 GB/T 17394

hardness test block D (included)

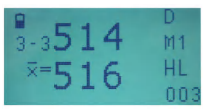
small support ring (included)

bluetooth printer (**optional**)

SPECIFICATION

Resolution	1HLD/1HV/1HB/0.1HRC/0.1HRB/ 0.1HSD/1σb
Accuracy	±6HLD (when HLD=800)
Measuring range	HL 170-960/HRC 17-69/HRB 13-101.7/ HB 20-655/HV 80-940/HSD 32-99.5/ σb (rm) 255-2180N/mm²
Power supply	2×AA batteries
Dimension	135×77×32mm
Net weight	240g

large font display



statistics display

STANDARD DELIVERY

Main unit	1 pc
Hardness test block D	1 pc
Small support ring	1 pc
Cleaning brush	1 pc
Impact device D	1 pc

OPTIONAL ACCESSORY

Impact device DC	**HDT-WL320-DCW**
Impact device C	**HDT-WL320-CW**
Impact device DL	**HDT-WL320-DLW**
Impact device G	**HDT-WL320-GW**
Hardness test block D**	**HDT-B-HLD3**
Hardness test block G*	**HDT-B-HLG2**
Bluetooth printer	**ISH-LP200-PRINTER**
Support rings	

* Hardness test block G (**HDT-B-HLG2**) is for probe G (**HDT-WL320-GW**)
** Hardness test block D (**HDT-B-HLD3**) is for all others probes

DC **(optional)** | C **(optional)** | D (included) | DL **(optional)** | G **(optional)**

APPLICABLE WORKPIECE

Impact device		**DC**	**C**	**D**	**DL**	**G**
Application		inner wall of small space	small or thin workpiece, coating layer	general use	narrow slot or small hole	casting or forging workpiece
Maximum roughness of workpiece (Ra)		2μm	0.4μm	2μm	2μm	7μm
Minimum weight of workpiece	**direct measurement**	5kg	1.5kg	5kg	5kg	15kg
	on solid support	2kg	0.5kg	2kg	2kg	5kg
	coupled on plate	0.05kg	0.02kg	0.05kg	0.05kg	0.5kg
Minimum thickness of workpiece		3mm	1mm	3mm	3mm	10mm

PORTABLE LEEB HARDNESS TESTERS (BASIC TYPE)

INSPECTION CERTIFICATE

VIDEO

POPULAR MODEL

- Can change probes
- Dual-coil probe for high accuracy
- Universal testing angle, no need to set impact direction
- Based on Leeb (HLD), converted to Vickers (HV), Brinell (HB), Rockwell (HRC, HRB), Shore (HSD) and tensile strength (σb)
- Dual value display, shows both Leeb and converted hardness
- Large LCD display with backlight
- Can choose large font display and statistics display
- Automatically calculate maximum, minimum and average value
- Save 300 data
- Upload the memory to PC software via USB cable and send to EXCEL
- Operation temperature: -10°C~45°C
- According to ASTM A956, GB/T 17394

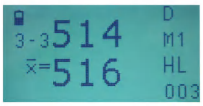
HDT-LP200

hardness test block D (included)

small support ring (included)

bluetooth printer (included in **HDT-LP200B**)

large font display



statistics display

SPECIFICATION

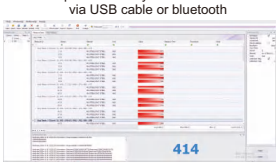
Code	HDT-LP200	HDT-LP200B
Printer	not included	included
Resolution	1HLD/1HV/1HB/0.1HRC/0.1HRB/0.1HRA/ 0.1HSD/1σb	
Accuracy	±6HLD (when HLD=800)	
Measuring range	HL 170-960/HRC 17-70/HRB 13-109/ HRA 7-89/HB 20-655/HV 80-940/ HSD 32-99.5/σb(rm) 255-2639N/mm²	
Power supply	2×AA batteries	main unit: 2×AA batteries printer: rechargeable lithium battery
Dimension	135×77×32mm	
Net weight	240g	

STANDARD DELIVERY

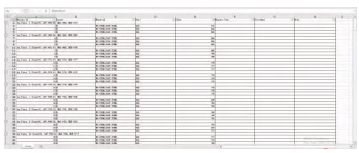
Main unit	1 pc
Hardness test block D	1 pc
Small support ring	1 pc
Cleaning brush	1 pc
Impact device D	1 pc
USB cable and software	1 pc
Bluetooth printer (included in HDT-LP200B)	1 pc

computer software (included)

upload memory to PC software via USB cable or bluetooth



send the stored data to EXCEL

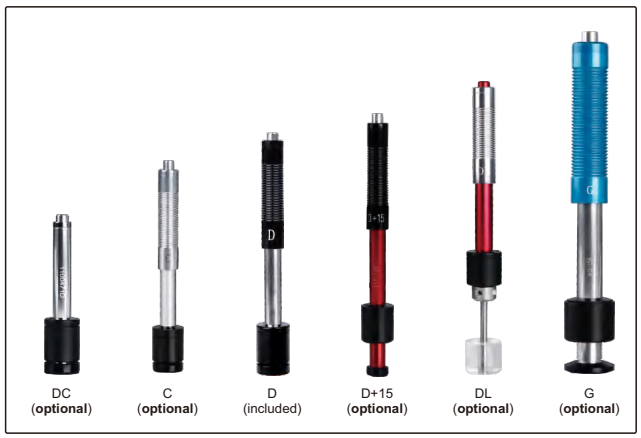


OPTIONAL ACCESSORY

Impact device DC	HDT-LP200-DC
Impact device C	HDT-LP200-C
Impact device D+15	HDT-LP200-D15
Impact device DL	HDT-LP200-DL
Impact device G	HDT-LP200-G
Hardness test block D**	HDT-B-HLD3
Hardness test block G*	HDT-B-HLG2
Support rings	ISH-PH-SP9
Receiver	7315-2/3/6/7/8/9

*Hardness test block G (**HDT-B-HLG2**) is for impact device G (**HDT-LP200-G**)

Hardness test block D (HDT-B-HLD3**) is for all other impact devices



DC (**optional**) | C (**optional**) | D (included) | D+15 (**optional**) | DL (**optional**) | G (**optional**)

APPLICABLE WORKPIECE

Impact device		DC	C	D	D+15	DL	G
Application		inner wall of small space	small or thin workpiece, coating layer	general use	deep groove	narrow slot or small hole	casting or forging workpiece
Maximum roughness of workpiece (Ra)		2μm	0.4μm	2μm	2μm	2μm	7μm
Minimum weight of workpiece	direct measurement	5kg	1.5kg	5kg	5kg	5kg	15kg
	on solid support	2kg	0.5kg	2kg	2kg	2kg	5kg
	coupled on plate	0.05kg	0.02kg	0.05kg	0.1kg	0.05kg	0.5kg
Minimum thickness of workpiece		3mm	1mm	3mm	3mm	3mm	10mm

PEN-TYPE LEEB HARDNESS TESTER (ADVANCED TYPE)
CODE HDT-L410

INSPECTION CERTIFICATE | DATA OUTPUT | HIGH ACCURACY | DL PROBE IS OPTIONAL

VIDEO

- Metal housing
- HD TFT 320×320 display
- Impact device D
- Based on Leeb (HLD), converted to Vickers (HV), Brinell (HB), Rockwell (HRC, HRA and HRB), Shore (HS) and tensile strength (SGM)
- Four display modes
- Automatic direction correction
- Tolerance testing
- Automatic power off, automatic calculation of statistics
- Dual value display, shows both Leeb and other conversion values
- 31 files can be saved, each containing 100 measurement data
- Connected to PC software via USB or Bluetooth 2.0
- Connected with printer via Bluetooth
- Operation temperature: -20°C~70°C
- According to ASTM A956, DIN 50156, GB/T 17394

DL probe can be installed (**optional**)

software flash disk (included)

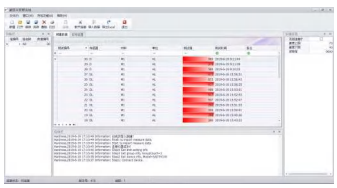
hardness test block D (included)

wireless printer (**optional**)

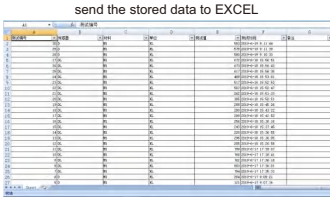
small support ring (included)

software (included), upload the memory to PC, print and send to EXCEL

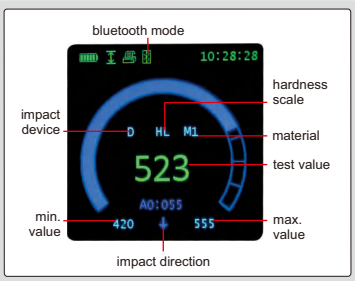
upload the memory to PC software via USB cable or Bluetooth



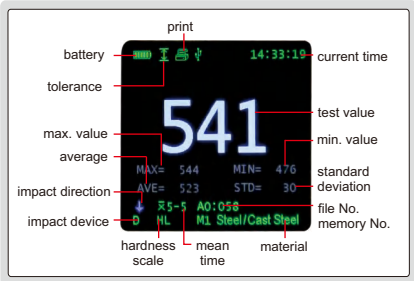
send the stored data to EXCEL



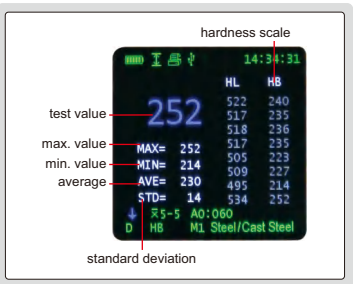
dynamic ring display



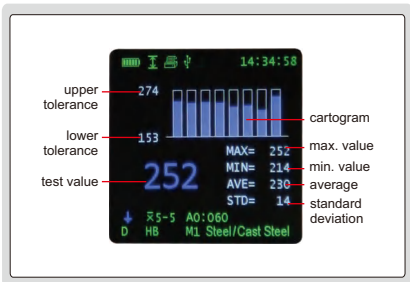
can choose large font display



statistic display



histogram display



SPECIFICATION

Resolution	1HLD, 1HV, 1HB, 0.1HRC, 0.1HRB, 0.1HRA, 0.1HS, 1SGM	
Accuracy	±4HLD (when HLD=800)	
Output	USB and bluetooth	
Applicable workpiece	minimum weight	5kg (direct measurement)
		2kg (on solid support)
		0.05kg (coupled on plate)
	minimum thickness: 5mm	
	minimum radius of curved surface: 30mm	
	maximum roughness (Ra): 2μm	
Power supply	built-in 3.7V rechargeable battery	
Dimension	148×44×22mm	
Net weight	115g	

STANDARD DELIVERY

Main unit	1 pc
Hardness test block D	1 pc
Small support ring	1 pc
Cleaning brush	1 pc
AC/DC adapter	1 pc
Software flash disk and USB cable	1 pc

OPTIONAL ACCESSORY

Printer	**HDT-L410-PRINTER**
Support rings	**ISH-PH-SP9**
Hardness test block D	**HDT-B-HLD3**
DL probe	**HDT-L410-DL**

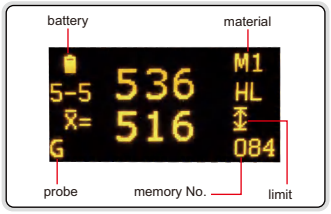
PEN-TYPE LEEB HARDNESS TESTER (TYPE G)
CODE HDT-LG210

INSPECTION CERTIFICATE

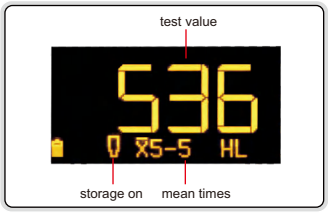
BUILT-IN BLUETOOTH

VIDEO

- Impact device G is included
- High contrast OLED display
- No need to set the testing direction
- Based on Leeb(HLG), converted to Rockwell (HRB), Brinell (HB). Dual value display, shows both Leeb and other conversion values
- Built-in wireless bluetooth,connected to PC software via USB or Bluetooth
- Connected with printer via Bluetooth
- Stores 31 files (100 test data points per files), supports Excel export
- According to DIN 50156, EN ISO 16859, ASTM A956

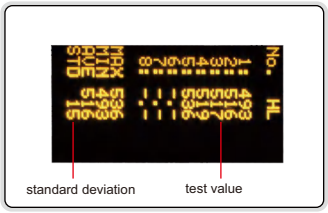


standard display



big character diaplay

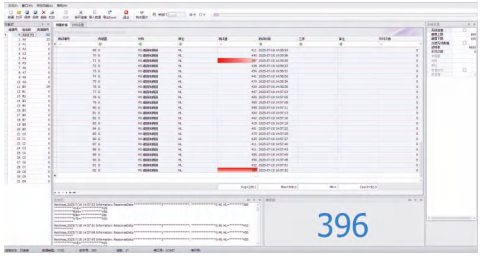
statistical parameter display



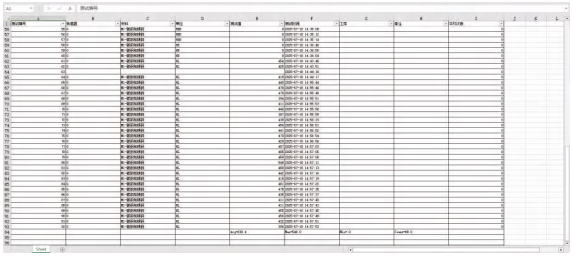
portrait display

software (included), upload the memory to PC, print and send to EXCEL

upload the memory to PC software via USB cable or Bluetooth



send the stored date to EXCEL



SPECIFICATION

Accuracy	±6HLG
Probe	Type G
Converted scales	HLG, HRB, HB
Range	300-750HLG, 47-100HRB, 90-650HB
Resolution	1HLG, 0.1HRB, 1HB
Materials	steel/cast steel, lamellar iron, nodular iron
Output	Bluetooth and USB
Working environment	-40°C~70°C
Power supply	3.7V li-ion rechargeable battery
Dimension (L×W×H)	255×37×48mm
Net weight	285g

STANDARD DELIVERY

Main unit	1 pc
Hardness test block (HLG)	1 pc
Small support ring	1 pc
Cleaning brush	1 pc
Software and USB cable	1 pc
AC/DC adapter	1 pc

OPTIONAL ACCESSORY

Printer	ISH-LP200-PRINTER
Hardness test block 460-540HLG	HDT-B-HLG1
Hardness test block 550-630HLG	HDT-B-HLG2

PEN-TYPE LEEB HARDNESS TESTER (STANDARD TYPE)
CODE HDT-B430

VIDEO

DATA OUTPUT

DL PROBE IS OPTIONAL

INSPECTION CERTIFICATE

software flash disk (included)

hardness test block D (included)

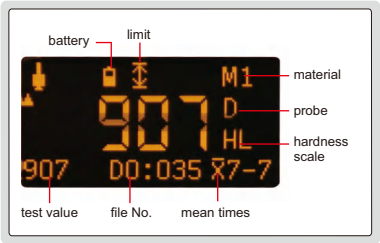
small support ring (included)

wireless printer (**optional**)

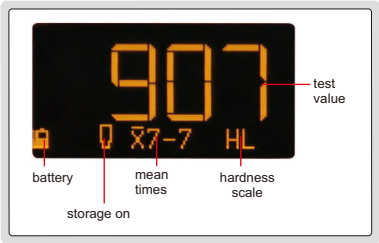
DL probe can be installed (**optional**)

- Impact device D is included
- High contrast OLED display
- Based on Leeb (HLD), converted to Vickers (HV), Brinell (HB), Rockwell (HRC, HRA and HRB), Shore (HS) and tensile strength (σb)
- Dual value display, shows both Leeb and other conversion values
- No need to set the testing direction
- 31 files can be saved, each containing 100 measurement data
- Automatically calculate maximum, minimum, average value
- Connected to PC software via USB or Bluetooth
- Connected with printer via Bluetooth
- Operation temperature: -20°C~45°C
- According to ASTM A956, DIN 50156 GB/T, 17394

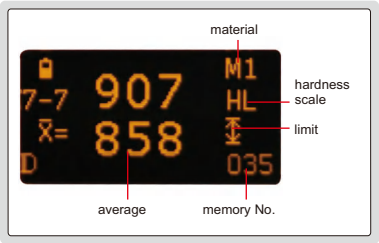
standard display



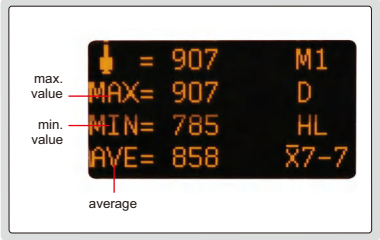
big character display



average display

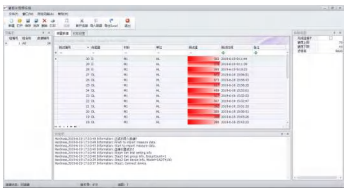


statistical parameter display

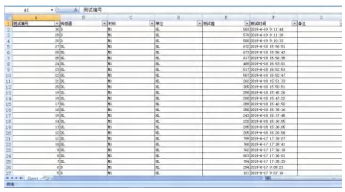


software (included), upload the memory to PC, print and send to EXCEL

upload the memory to PC software via USB cable or Bluetooth



send the stored data to EXCEL



SPECIFICATION

Resolution	1HLD, 1HV, 1HB, 0.1HRC, 0.1HRB, 0.1HRA, 0.1HSD, 1σb	
Accuracy	±6HLD (when HLD=800)	
Measuring range	HLD170-960, HRC17-70, HRB13-109, HB20-655, HV80-940 HSD32-99.5, HRA30-88, σb (rm) 255-2180N/mm²	
Applicable workpiece	minimum weight	5kg (direct measurement)
		2kg (on solid support)
		0.05kg (coupled on plate)
	minimum thickness: 5mm	
	minimum radius of curved surface: 30mm	
	maximum roughness (Ra): 2μm	
Output	USB and bluetooth	
Power supply	built-in 3.7V rechargeable battery	
Dimension	148×44×28mm	
Net weight	110g	

STANDARD DELIVERY

Main unit	1 pc
Hardness test block D	1 pc
Small support ring	1 pc
Cleaning brush	1 pc
AC/DC adapter	1 pc
Software flash disk and USB cable	1 pc

OPTIONAL ACCESSORY

Printer	**ISH-LP200-PRINTER**
Support rings	**ISH-PH-SP9**
Hardness test block D	**HDT-B-HLD3**
DL probe	**HDT-L410-DL**

PEN-TYPE LEEB HARDNESS TESTER (BASIC TYPE)
CODE HDT-L411

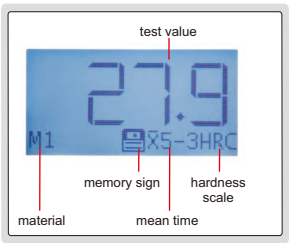
VIDEO

DATA OUTPUT

INSPECTION CERTIFICATE

- Impact device D
- Universal testing angle, no need to set impact direction
- Dual-coil probe, high accuracy
- Based on Leeb (HLD), converted to Vickers (HV), Brinell (HB), Rockwell (HRC, HRA and HRB), Shore (HS) and tensile strength (SGM)
- Dual value display, shows both Leeb and converted hardness
- High contrast digital LCD display
- Can choose large font display
- Automatically calculate maximum, minimum, average value
- Connected to PC via USB
- Save 999 data
- Operation temperature: -20°C~45°C
- According to ASTM A956, DIN 50156, GB/T 17394

can choose large font display



SPECIFICATION

Resolution	1HLD, 1HV, 1HB, 0.1HRC, 0.1HRB, 0.1HRA, 0.1HS, 1SGM	
Accuracy	±6HLD (when HLD=800)	
Output	USB	
Measuring range	HL 170-960, 7-89HRA, 13-109HRB, 17-70HRC, 20-655HB, 32-99.5HS, 80-940HV, 255-2639N/mm²	
Applicable workpiece	minimum weight	5kg (direct measurement)
		2kg (on solid support)
		0.05kg (coupled on plate)
	minimum thickness: 5mm	
	minimum radius of curved surface: 30mm	
	maximum roughness (Ra): 2μm	
Power supply	1×AAA battery	
Dimension	148×45×21mm	
Net weight	105g	

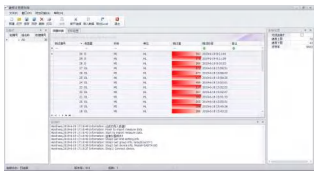
software flash disk (included)

hardness test block D (included)

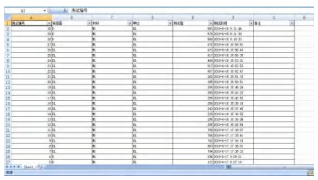
small support ring (included)

software (included), upload the memory to PC, print and send to EXCEL

upload the memory to PC software via USB cable



send the stored data to EXCEL



STANDARD DELIVERY

Main unit	1 pc
Hardness test block D	1 pc
Cleaning brush	1 pc
AAA battery	1 pc
Small support ring	1 pc
Software flash disk and USB cable	1 pc

OPTIONAL ACCESSORY

Support rings	ISH-PH-SP9
Hardness test block D	HDT-B-HLD3

PORTABLE ROCKWELL HARDNESS TESTER
CODE ISHR-P151

VIDEO

- According to ISO 6508, ASTM E18

anvil extension for thin workpieces (included)

flat anvil (included)

V-type anvil (included)

SPECIFICATION

Hardness scale	HRA, HRB, HRC, HRD, HRF, HRG
Preliminary test force	98N (10kgf)
Test force	588N (60kgf), 980N (100kgf), 1471N (150kgf)
Load control	manual
Min. reading	1HR
Max. workpiece thickness	25mm
Max. testing width	25mm (from the center of indenter to the main body)
Dimension (L×W×H)	240×70×160mm
Net weight (with base)	2.5kg

STANDARD DELIVERY

Main unit	1 pc
Diamond indenter	1 pc
Ø1.5875mm carbide ball indenter	2 pcs
Hardness test block HRB88~95	1 pc
Hardness test block HRC60~65	1 pc
Hardness test block HRC20~30	1 pc
Flat anvil	1 pc
V-type anvil	1 pc
Base	1 pc
Anvil extension	1 pc
Magnifier	2 pcs

HYDRAULIC BRINELL HARDNESS TESTER
CODE ISHB-H131

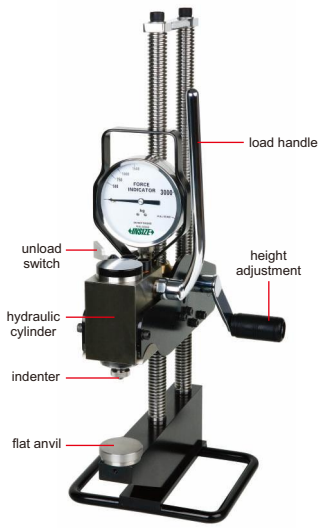
VIDEO

- According to ISO 6506, ASTM E10

measuring microscope (included)

spherical anvil (included)

V-type anvil (included)



SPECIFICATION

Measuring range	16~650HBW
Test force	3000kg
Indenter	Ø10mm carbide ball
Measuring microscope	20X, graduation 0.01mm
Max. workpiece height	350mm
Max. testing width	90mm (from the center of indenter to the column)
Dimension (L×W×H)	270×225×570mm
Net weight	13.8kg

STANDARD DELIVERY

Main unit	1 pc
Flat anvil	1 pc
V-type anvil	1 pc
Spherical anvil	1 pc
Ø10mm carbide ball	2 pcs
Brinell test block	2 pcs
Measuring microscope	1 pc

ELECTRIC ALUMINUM HARDNESS TESTERS

VIDEO

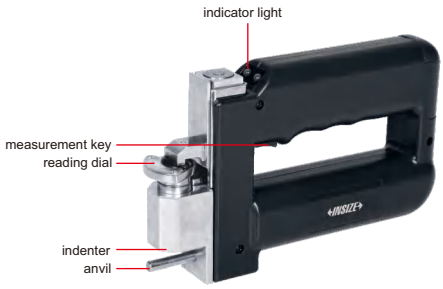
ONE-BUTTON MEASUREMENT

- According to ASTM B647
- To measure the hardness of soft metal such as aluminum profiles, tubes, plates, aluminum parts, copper alloy and other soft metals
- Easy to carry and read
- Using one-button measurement, micro servo motor as the power, accurate control of the applied force, improve the stability of the measurement
- The needle is made of special material for long life

SPECIFICATION

Code	ISHW-EH20	ISHW-ED21
Display mode	pointer	digital
Conversion scale	/	934-1 (Barcol), HRE, HRF, HV, HBS *
Thickness requirement of flat workpieces	1~5mm	
Pipe workpiece inner diameter requirement	>Ø10mm	
Pipe workpiece wall thickness requirement	1~5mm	
Hardness range	0~20HW	
Resolution	1HW	0.1HW
Accuracy	±0.5HW (at 5~18HW)	
Power supply	rechargeable lithium battery	
Dimension (L×W×H)	187×38×118mm	187×38×131mm
Net weight	906g	934g

*Conversion scale values are only for reference, there is no direct conversion standard



ISHW-EH20

ISHW-ED21

STANDARD DELIVERY

Code	ISHW-EH20	ISHW-ED21
Main unit	1 pc	1 pc
Hardness test block	1 pc	1 pc
Spare indenter	1 pc	1 pc
Hex wrench	1 pc	–
Calibration wrench	1 pc	1 pc
Lithium battery	1 pc	1 pc
Lithium battery charger	1 pc	1 pc

DIGITAL ALUMINUM HARDNESS TESTERS

- To measure the hardness of soft metals such as aluminum profiles, tubes, plates, aluminum parts and other soft metals
- Easy to read, with peak hold function
- According to ASTM B647-2023

ISHW-D20

SPECIFICATION

Code	ISHW-D20	ISHW-D21	ISHW-D22
Application	for aluminum alloy general use	for aluminum alloy thick workpieces	for aluminum alloy small tubes
Thickness requirement of flat workpieces	1~6mm	1~13mm	1~6mm
Internal diameter requirement of tube workpieces	>Ø10mm	>Ø10mm	>Ø6mm
Wall thickness requirement of tube workpieces	1~6mm	6~13mm (internal diameter Ø10mm~24mm) 1~6mm (internal diameter >Ø24mm)	1~6mm
Hardness range	0~20HW		
Min. reading	0.1HW		
Accuracy	±0.5HW (at 5~18HW)		
Dimension	203×44×105mm		
Net weight	500g		

STANDARD DELIVERY

Main unit	1 pc
Spare indenter	1 pc
Hardness test block	1 pc
Wrench	1 pc
Lithium battery	2 pcs
Lithium battery charger	1 pc

ALUMINUM HARDNESS TESTERS (BASIC TYPE)

- To measure the hardness of soft metals such as aluminum alloy, copper, brass, soft steel, etc.
- According to ASTM B647-10 (2016)

ISHW-H10

STANDARD DELIVERY

Main unit	1 pc
Spare indenter	1 pc
Hardness test block	1 pc
Wrench	1 pc

SPECIFICATION

Code	ISHW-H10	ISHW-H11	ISHW-H12	ISHW-H13	ISHW-H14	ISHW-H15
Application	for aluminum alloy general use	for aluminum alloy thick workpiece	for aluminum alloy small tube	for hard aluminum alloy and hard brass	for soft brass and copper	for soft steel and cold-rolled steel
Thickness requirement of flat workpiece	0.6~6mm	0.6~13mm	0.6~8mm	0.6~6mm	0.6~6mm	0.6~6mm
Internal diameter requirement of tube workpiece	>Ø10mm	>Ø10mm	>Ø6mm	>Ø10mm	>Ø10mm	>Ø10mm
Wall thickness requirement of tube workpiece	0.6~6mm	6~13mm (internal diameter Ø10~23.3mm) 0.6~6mm (internal diameter>Ø23.3mm)	0.6~8mm	0.6~6mm	0.6~6mm	0.6~6mm
Hardness range	0~20HW					
Min. reading	1HW					
Accuracy	±0.5HW (at 5~17HW)					
Dimension	205×30×95mm					
Net weight	500g					

ALUMINUM HARDNESS TESTER
CODE ISHW-L20

VIDEO

- To measure the hardness of soft metals such as aluminum alloy, copper, brass, soft steel, etc.
- According to ASTM B647-84 (2000)

SPECIFICATION

Application	for aluminum alloy general use
Thickness requirement of flat workpiece	0.6~6mm
Internal diameter requirement of tube workpiece	>Ø10mm
Wall thickness requirement of tube workpiece	0.6~6mm
Hardness range	0~20HW
Min. reading	1HW
Accuracy	±0.5HW (at 5~17HW)
Dimension	205×30×85mm
Net weight	500g

STANDARD DELIVERY

Main unit	1 pc
Spare indenter	1 pc
Hardness test block	1 pc
Wrench	1 pc

ALUMINUM HARDNESS TESTER
CODE ISHB-B300

VIDEO

- To measure the hardness of workpieces made of pure aluminum, aluminum alloy, fiber reinforced plastic, hard plastic, etc.
- According to ASTM B648-00, ASTM D2853-07

SPECIFICATION

Hardness range	0~100HBa
Effective range	35~90HBa (equal to 25~150HBW)
Min. reading	1HBa
Accuracy	±2HBa (at 42~52HBa) ±1HBa (at 84~88HBa)
Min. workpiece thickness	0.8mm
Dimension	142×65×90mm
Net weight	500g

STANDARD DELIVERY

Main unit	1 pc
Spare indenter	2 pcs
Hardness test block	2 pcs
Wrench	1 pc

DIGITAL ALUMINUM HARDNESS TESTER
CODE HDT-DB337

INSPECTION CERTIFICATE

VIDEO

- To measure the hardness of workpieces made of pure aluminum, aluminum alloy, fiber reinforced plastic, hard plastic, etc.
- The support can be rotated, no need to disassemble
- Can be converted to HW, HRE, HRF, HV, HB values
- Full scale one key reset, no need to disassemble for external calibration
- According to ASTM B648, ASTM HD2583-2007

SPECIFICATION

Hardness range	0~100HBa
Effective range	40~90HBa (equal to 25~135HBW)
Min. reading	0.1HBa
Accuracy	±2HBa (at 42~52HBa) ±1HBa (at 84~88HBa)
Repeatability	±2.5HBa (at 42~52HBa) ±1.5HBa (at 84~88HBa)
Min. workpiece thickness	1.5mm
Dimension	143×40×87mm
Net weight	260g

STANDARD DELIVERY

Main unit	1 pc
Full scale calibration block	1 pc
Hardness test block	2 pcs
Spare pin	1 pc
Wrench	1 pc
Power adapter	1 pc

DIGITAL SHORE DUROMETERS

DATA OUTPUT

VIDEO

blunt taper indenter

ISH-DSA

sharp point indenter

ISH-DSD

- According to ISO868, ISO7619, ASTM D 2240
- Average and peak (max.) mode
- Dwell time is adjustable
- Tolerance testing
- 500 memories
- Wireless connection to printer
- Handhold use or work with test stand (code **ISH-DS-STANDA**)
- Automatic power off

software flash disk (included)

calibration block (included)

printer (**optional**)

SPECIFICATION

Code	ISH-DSA	ISH-DSD
Unit	Shore A	Shore D
Test material	soft plastic, soft rubber, etc.	hard plastic, hard rubber, etc.
Measuring range	0~100HA*	0~100HD *
Resolution	0.1HA	0.1HD
Accuracy	±1HA	±1HD
Indenter protrusion	2.5mm	
Output	wireless and USB	
Power supply	built-in rechargeable battery	
Dimension (L×W×H)	115×47×24mm	
Net weight	175g	

*Use **ISH-DSD** when measuring result is higher than 90HA
Use **ISH-DSA** when measuring result is lower than 20HD

STANDARD DELIVERY

Main unit	1 pc
Calibration block	1 pc
Software and USB cable	1 pc
AC/DC adapter	1 pc

OPTIONAL ACCESSORY

Printer	ISH-DS-PRINTER
Test stand	ISH-DS-STANDA

TEST STAND FOR DIGITAL SHORE DUROMETERS CODE ISH-DS-STANDA

VIDEO

- For digital shore durometers (code **ISH-DSA** and **ISH-DSD**)
- Perform repeatable hardness measurement due to fewer possibilities of human error or measurement variations
- Special structure for stable loading
- Weight block A (included) is for **ISH-DSA**, weight block D (**optional**) is for **ISH-DSD**

weight block D (**optional**) for **ISH-DSD**

SPECIFICATION

Stage diameter	Ø115mm
Max. workpiece height	45mm
Max. testing width	63mm (from test point to the column)
Dimension	Ø195×370mm
Net weight	5.61kg

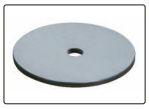
STANDARD DELIVERY

Test stand	1 pc
Weight block A (for ISH-DSA)	1 pc

OPTIONAL ACCESSORY

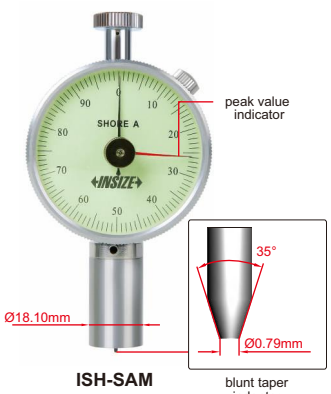
Weight block D (for ISH-DSD)	ISH-DS-W4

SHORE DUROMETERS



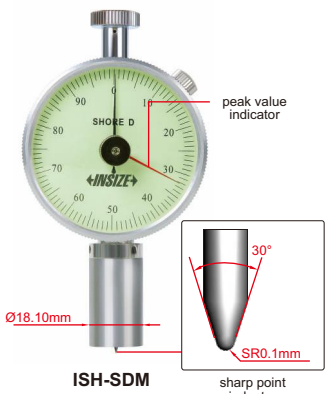
calibration block
(**optional**)

- According to ISO868, ISO7619, ASTM D 2240
- With peak value indicator
- Optional accessory:
  test stand **ISH-STAC**



ISH-SAM

blunt taper indenter



ISH-SDM

sharp point indenter

SPECIFICATION

Code	ISH-SAM	ISH-SDM
Scale	Shore A	Shore D
Application	nature rubber, soft elastomer, etc.	hard rubber, plastic, hard elastomer, etc.
Measuring range*	10~90HA	20~90HD
Graduation	1HA	1HD
Indenter protrusion	2.5mm	
Dimension	115×60×25mm	
Net weight	160g	

* Use **ISH-SDM** when measuring result is higher than 90HA
Use **ISH-SAM** when measuring result is lower than 20HD

OPTIONAL ACCESSORY

Calibration block	ISH-DS-BLOCK

TEST STAND FOR SHORE DUROMETERS CODE ISH-STAC

- For shore durometers
  (code **ISH-SAM** and **ISH-SDM**)
- Perform repeatable hardness
  measurement due to fewer possibilities
  of human error or measurement variations

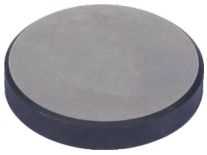
ISH-STAC

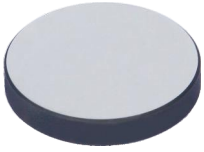
SPECIFICATION

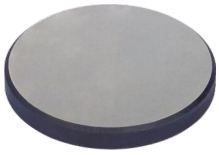
Applicable durometer	ISH-SAM
Stage diameter	Ø100mm
Max. workpiece height	75mm
Max. testing width	65mm (from test point to the column)
Weight block	1kg

HARDNESS TEST BLOCKS

INSPECTION CERTIFICATE


Rockwell


Vickers

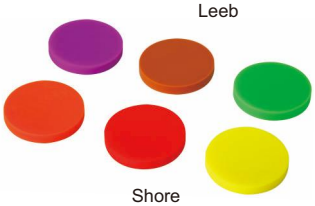

Brinell

Leeb

Micro-Vickers

Knoop

Ultrasonic


Shore

- Supplied with manufacturer inspection certificate

Rockwell hardness test blocks

Code	Type	Hardness	Dimension*
HDT-B-HRA	HRA	80-84	diameter: (60±1)mm thickness: (11±1)mm
HDT-B-HRB	HRB	88-100	
HDT-B-HRC1	HRC	20-30	
HDT-B-HRC2	HRC	35-55	
HDT-B-HRC3	HRC	55-65	
HDT-B-HRD1	HRD	40-47	
HDT-B-HRD2	HRD	55-63	
HDT-B-HRD3	HRD	70-75	
HDT-B-HRE	HRE	107-114	
HDT-B-HRF	HRF	106-127	
HDT-B-HRG1	HRG	30-66	
HDT-B-HRG2	HRG	66-129	

Rockwell superficial hardness test blocks

Code	Type	Hardness	Dimension*
HDT-B-HR15N1	HR15N	70-77	diameter: (60±1)mm thickness: (11±1)mm
HDT-B-HR15N2	HR15N	78-88	
HDT-B-HR15N3	HR15N	89-91	
HDT-B-HR30N1	HR30N	42-54	
HDT-B-HR30N2	HR30N	55-73	
HDT-B-HR30N3	HR30N	74-80	
HDT-B-HR45N1	HR45N	20-31	
HDT-B-HR45N2	HR45N	32-61	
HDT-B-HR45N3	HR45N	63-70	
HDT-B-HR15T	HR15T	90-100	
HDT-B-HR30T	HR30T	75-100	
HDT-B-HR45T	HR45T	60-100	

Leeb hardness test blocks

Code	Type	Hardness	Dimension*
HDT-B-HLD1	HLD	490-570	diameter: (90±1)mm thickness: (55±1)mm
HDT-B-HLD2	HLD	590-670	
HDT-B-HLD3	HLD	750-830	
HDT-B-HLG1	HLG	460-540	diameter: (120±1)mm thickness: (70±1)mm
HDT-B-HLG2	HLG	550-630	

Shore hardness test blocks

Code	Type	Hardness	Dimension*
HDT-B-SA	SA	6pcs/set (30, 40, 50, 60, 70, 80)	Ø50×7mm
HDT-B-SD	SD	3pcs/set (15, 30, 90)	50×50×7mm

Vickers hardness test blocks

Code	Type	Hardness	Dimension*
HDT-B-HV5A	HV5	140-200	diameter: (60±1)mm thickness: (11±1)mm
HDT-B-HV5B	HV5	200-300	
HDT-B-HV5C	HV5	300-400	
HDT-B-HV5D	HV5	400-500	
HDT-B-HV5E	HV5	500-600	
HDT-B-HV5F	HV5	600-700	
HDT-B-HV5G	HV5	700-750	
HDT-B-HV10A	HV10	175-200	
HDT-B-HV10B	HV10	200-300	
HDT-B-HV10C	HV10	300-400	
HDT-B-HV10D	HV10	400-500	
HDT-B-HV10E	HV10	500-600	
HDT-B-HV10F	HV10	600-700	
HDT-B-HV10G	HV10	700-750	
HDT-B-HV30A	HV30	140-200	
HDT-B-HV30B	HV30	200-300	
HDT-B-HV30C	HV30	300-400	
HDT-B-HV30D	HV30	400-500	
HDT-B-HV30E	HV30	500-600	
HDT-B-HV30F	HV30	600-700	
HDT-B-HV30G	HV30	700-750	
HDT-B-HV50A	HV50	140-200	
HDT-B-HV50B	HV50	200-300	
HDT-B-HV50C	HV50	300-400	
HDT-B-HV50D	HV50	400-500	
HDT-B-HV50E	HV50	500-600	
HDT-B-HV50F	HV50	600-700	
HDT-B-HV50G	HV50	700-750	
HDT-B-HV100A	HV100	140-200	
HDT-B-HV100B	HV100	200-300	
HDT-B-HV100C	HV100	300-400	
HDT-B-HV100D	HV100	400-500	
HDT-B-HV100E	HV100	500-600	
HDT-B-HV100F	HV100	600-700	
HDT-B-HV100G	HV100	700-750	

To be continued

Continued from previous page

Micro-Vickers hardness test blocks

Code	Type	Hardness	Dimension*
HDT-B-HV005A	HV0.05	200-300	diameter: (25±1)mm thickness: (6±2)mm
HDT-B-HV005B	HV0.05	300-400	
HDT-B-HV005C	HV0.05	400-500	
HDT-B-HV005D	HV0.05	500-600	
HDT-B-HV005E	HV0.05	600-700	
HDT-B-HV005F	HV0.05	700-830	
HDT-B-HV01A	HV0.1	200-300	
HDT-B-HV01B	HV0.1	300-400	
HDT-B-HV01C	HV0.1	400-500	
HDT-B-HV01D	HV0.1	500-600	
HDT-B-HV01E	HV0.1	600-700	
HDT-B-HV01F	HV0.1	700-830	
HDT-B-HV02A	HV0.2	200-300	
HDT-B-HV02B	HV0.2	300-400	
HDT-B-HV02C	HV0.2	400-500	
HDT-B-HV02D	HV0.2	500-600	
HDT-B-HV02E	HV0.2	600-700	
HDT-B-HV02F	HV0.2	700-830	
HDT-B-HV03A	HV0.3	200-300	
HDT-B-HV03B	HV0.3	300-400	
HDT-B-HV03C	HV0.3	400-500	
HDT-B-HV03D	HV0.3	500-600	
HDT-B-HV03E	HV0.3	600-700	
HDT-B-HV03F	HV0.3	700-830	
HDT-B-HV05A	HV0.5	200-300	
HDT-B-HV05B	HV0.5	300-400	
HDT-B-HV05C	HV0.5	400-500	
HDT-B-HV05D	HV0.5	500-600	
HDT-B-HV05E	HV0.5	600-700	
HDT-B-HV05F	HV0.5	700-830	
HDT-B-HV1A	HV1	200-300	
HDT-B-HV1B	HV1	300-400	
HDT-B-HV1C	HV1	400-500	
HDT-B-HV1D	HV1	500-600	
HDT-B-HV1E	HV1	600-700	
HDT-B-HV1F	HV1	700-830	

Knoop hardness test blocks

Code	Type	Hardness	Dimension*
HDT-B-HK005A	HK0.05	200-300	diameter: (25±1)mm thickness: (6±2)mm
HDT-B-HK005B	HK0.05	400-500	
HDT-B-HK005C	HK0.05	700-800	
HDT-B-HK01A	HK0.1	200-300	
HDT-B-HK01B	HK0.1	400-500	
HDT-B-HK01C	HK0.1	700-800	
HDT-B-HK02A	HK0.2	200-300	
HDT-B-HK02B	HK0.2	400-500	
HDT-B-HK02C	HK0.2	700-800	
HDT-B-HK03A	HK0.3	200-300	
HDT-B-HK03B	HK0.3	400-500	
HDT-B-HK03C	HK0.3	700-800	
HDT-B-HK05A	HK0.5	200-300	
HDT-B-HK05B	HK0.5	400-500	
HDT-B-HK05C	HK0.5	700-800	
HDT-B-HK1A	HK1	200-300	
HDT-B-HK1B	HK1	400-500	
HDT-B-HK1C	HK1	700-800	

*The above dimensions are for reference only, subject to actual supply

Brinell hardness test blocks

Code	Type	Hardness	Dimension*
HDT-B-HB10A1	HBW10/3000	75-150	diameter: (100±1)mm thickness: >16mm
HDT-B-HB10A2	HBW10/3000	180-300	
HDT-B-HB10A3	HBW10/3000	300-400	
HDT-B-HB10A4	HBW10/3000	400-500	
HDT-B-HB10A5	HBW10/3000	500-600	
HDT-B-HB10A6	HBW10/3000	600-650	
HDT-B-HB10B1	HBW10/1500	125-200	
HDT-B-HB10B2	HBW10/1500	200-300	
HDT-B-HB10B3	HBW10/1500	300-400	
HDT-B-HB10B4	HBW10/1500	400-500	
HDT-B-HB10B5	HBW10/1500	500-600	
HDT-B-HB10B6	HBW10/1500	600-650	
HDT-B-HB10C1	HBW10/1000	125-200	
HDT-B-HB10C2	HBW10/1000	200-300	
HDT-B-HB10C3	HBW10/1000	300-400	
HDT-B-HB10C4	HBW10/1000	400-450	
HDT-B-HB10D1	HBW10/500	115-150	
HDT-B-HB10D2	HBW10/500	150-300	
HDT-B-HB10D3	HBW10/500	300-400	
HDT-B-HB10D4	HBW10/500	400-450	
HDT-B-HB25A1	HBW2.5/187.5	150-180	diameter: (64±1)mm thickness: >6mm
HDT-B-HB25A2	HBW2.5/187.5	180-300	
HDT-B-HB25A3	HBW2.5/187.5	300-400	
HDT-B-HB25A4	HBW2.5/187.5	400-500	
HDT-B-HB25A5	HBW2.5/187.5	500-600	
HDT-B-HB25A6	HBW2.5/187.5	600-650	
HDT-B-HB25B1	HBW2.5/62.5	90-200	
HDT-B-HB25B2	HBW2.5/62.5	200-300	
HDT-B-HB25B3	HBW2.5/62.5	300-400	
HDT-B-HB25B4	HBW2.5/62.5	400-450	
HDT-B-HB5A1	HBW5/750	150-180	diameter: (100±1)mm thickness: >12mm
HDT-B-HB5A2	HBW5/750	180-300	
HDT-B-HB5A3	HBW5/750	300-400	
HDT-B-HB5A4	HBW5/750	400-500	
HDT-B-HB5A5	HBW5/750	500-600	
HDT-B-HB5A6	HBW5/750	600-650	
HDT-B-HB5B1	HBW5/250	125-200	diameter: (64±1)mm thickness: >6mm
HDT-B-HB5B2	HBW5/250	200-300	
HDT-B-HB5B3	HBW5/250	300-400	
HDT-B-HB5B4	HBW5/250	400-450	

Ultrasonic hardness test blocks

Code	Type	Hardness	Dimension*
HDT-B-HRCU1	HRC	20-30	diameter: (90±1)mm thickness: >16mm
HDT-B-HRCU2	HRC	35-55	
HDT-B-HRCU3	HRC	60-65	
HDT-B-HV2U8	HV2	200-300	
HDT-B-HV2U9	HV2	400-500	
HDT-B-HV2U10	HV2	700-800	
HDT-B-HV5U1	HV5	200-300	
HDT-B-HV5U2	HV5	400-500	
HDT-B-HV5U3	HV5	700-800	
HDT-B-HB10U2	HBW10/3000	200-300	
HDT-B-HB10U3	HBW10/3000	300-400	
HDT-B-HB10U4	HBW10/3000	400-500	

Hammer impact brinell hardness bar

Code	Type	Hardness	Dimension*
HDT-B-HB5C1	HBS5/750	177-217	12×12×150mm

AUTOMATIC SPECIMEN CUTTING MACHINE (ADVANCED TYPE) CODE MLP-ACM160

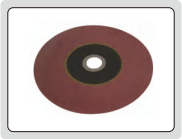
TOUCH SCREEN OPERATION

CUSTOMIZED CUTTING PROGRAM

VIDEO

- Touch screen operation, high precision stepper motor control
- Suitable for cutting all kinds of metal and non-metallic materials, in order to observe the metallographic and petrographic organization of materials
- Automated cutting process, low noise, easy to operate, safe and reliable

diamond blade (**optional**)



cutting blade (included)

cutting coolant (**optional**)

SPECIFICATION

Maximum cutting diameter	Ø160mm
Cutting speed	0.03~1mm/s
Maximum travel	Z-axis: 0~220mm, Y-axis: 0~200mm, X-axis: 0~240mm
Feed method	continuous feed, pulse feed
Rotation speed range	500~2300r/min
Cutting method	chopping cutting, flat push cutting
Cutting chamber size	1240×780mm
Cutting power	7.5kW
Power supply	AC 380V, 50Hz
Dimension (L×W×H)	1300×1560×1880mm

STANDARD DELIVERY

Main unit	1 pc
Cutting blade	5 pcs, Ø450×3.2×Ø32mm
Cutting blade chuck	1 set, 2 pcs
Cutting coolant	1 barrel, 6L
Tank assembly	1 set
Clamping station	1 pc

OPTIONAL ACCESSORY

Cutting coolant	MLP-OL4
Cutting blade	MLP-10R series*
Diamond blade	MLP-DP9

*Optionally available with a cutting blade with an inner diameter of Ø32mm

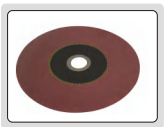
AUTOMATIC CUTTING MACHINE (ADVANCED TYPE) CODE MLP-HCM102

VIDEO

- Suitable for cylinder workpieces (diameter≤100mm) and rectangular samples (height≤70mm, width≤100mm)
- Cooling system avoids overheating and destroying sample structure
- Three cutting modes (manual, pulse, continuous cutting), the cutting feed speed and cutting stroke can be programed

cutting coolant (included)

cutting blade **MLP-50Z4** (included)



cutting blade **MLP-60Y4** (**optional**)

SPECIFICATION

Maximum cutting diameter	Ø100mm
Cutting blade	Ø350×2.5×Ø32mm
Rotation speed	2200r/min
Spindle travel	145mm
Table travel	300mm
Illumination	LED ceiling light
Noise	≤85dB
Cooling tank	60L
Removable baffle	contain
Table dimension	330×280mm
Power	3kW
Power supply	AC 380V, 50Hz
Dimension	900×860×620mm
Net weight	285kg

STANDARD DELIVERY

Main unit	1 pc
Cutting blade	5 pcs
Cutting blade chuck	2 pcs
Cutting coolant	1 barrel (4L)
Water tank	1 pc

OPTIONAL ACCESSORY

Cutting coolant (4L, 1:20 diluted with water)	MLP-OL3
Cutting blade (Ø350×2.5×Ø32mm, 40 pcs/box)	MLP-50Z4
	MLP-60Y4 *
Cutting blade chuck (for Ø32mm cutting blade)	MLP-HCM102-CHUCK

*Special cutting blade for high hardness

CUTTING MACHINE (STANDARD TYPE)
CODE MLP-CM60

VIDEO

- For metal and non-metal materials
- Cooling device avoids overheating and destroying sample structure
- With safety switch, the machine will automatically stop when the cover is opened

water tank (included)

SPECIFICATION

Maximum cutting diameter	Ø60mm
Cutting blade	Ø250×1.5×Ø32mm
Cutting method	chopping cutting
Rotation speed	2800r/min
Motor power	2.2kW
Power supply	AC 380V, 50Hz
Dimension	830×620×450mm
Net weight	82kg

STANDARD DELIVERY

Main unit	1 pc
Cutting blade (MLP-50Z1)	2 pcs
Cutting coolant (MLP-OL3)	1 barrel
Water tank	1 pc

cutting blade (included)

cutting coolant (included)

OPTIONAL ACCESSORY

Description	Code	Specification
Coolant	MLP-OL3	4L
Diamond blade	MLP-DM5	Ø250×1.2×Ø32mm, 1 pc/box
Cutting blade	MLP-50Z1	Ø250×1.5×Ø32mm, 60 pcs/box
Cutting blade chuck	MLP-CM60-CHUCK	for 32mm bore cutting blades

CUTTING MACHINE (BASIC TYPE)
CODE MLP-CM86

VIDEO

- For metal and non-metal materials
- Cooling device avoids overheating and destroying sample structure

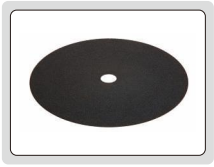
SPECIFICATION

Maximum cutting diameter	Ø80mm
Cutting blade	Ø250×2×Ø32mm
Rotation speed	2800r/min
Power	3kW
Power supply	AC 380V, 50Hz
Dimension	690×790×670mm

STANDARD DELIVERY

Main unit	1 pc
Cutting blade	2 pcs
Cutting coolant	1 barrel (4L)
Water tank	1 pc

cutting coolant (included)

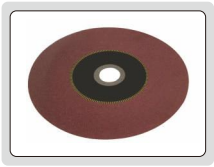


cutting blade **MLP-50Z2** (included)

OPTIONAL ACCESSORY

Cutting coolant (4L, 1:20 diluted with water)	MLP-OL3
Cutting blade (Ø250×2×Ø32mm, 50 pcs/box)	MLP-60Y2*
	MLP-50Z2
Cutting blade chuck (for Ø32mm cutting blade)	MLP-CM86-CHUCK

* Special cutting blade for high hardness



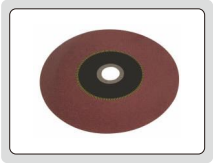
cutting blade **MLP-60Y2** (**optional**)

MANUAL PRECISION CUTTING MACHINE
CODE MLP-PCM100

VIDEO

- Equipped with a high-torque DC motor and stepless speed control system, boasting strong power and high efficiency
- The rotation speed is digitally displayed for simple operation
- With a magnetic safety switch, the motor automatically stops when the protective cover is opened, ensuring safety performance
- Integrally formed high-strength composite material shell, anti-corrosive and rust-proof
- Panoramic transparent observation window, facilitating the observation of the sample cutting process
- With circulating cooling water tank, lightweight in volume

diamond blade (**optional**)



cutting blade (**optional**)

cutting coolant (**optional**)

SPECIFICATION

Maximum cutting diameter	Ø40mm
Maximum travel	190mm
Diamond blade	Ø200×0.8×Ø12.7mm
Cutting method	manual cutting, Y-axis
Rotation speed	500~3000r/min
Table dimension	368×424mm
Motor power	600W
Power supply	220V, 50Hz
Dimension (L×W×H)	550×475×360mm
Net weight	35kg

STANDARD DELIVERY

Main unit	1 pc
Diamond blade	1 pc
Fixed fixture	1 set
Cutting coolant	1 barrel, 2L
Tool package	1 set

OPTIONAL ACCESSORY

Cutting coolant	**MLP-OL2**
Cutting blade	**MLP-10R** series*
Diamond blade	**MLP-DQ** series*

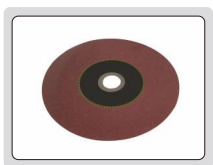
*Select the cutting blade with an inner hole of Ø12.7mm and a diameter not exceeding 230mm

AUTOMATIC PRECISION CUTTING MACHINE
CODE MLP-PCM200

VIDEO

- Equipped with a high-torque DC motor and stepless speed control system, boasting strong power and high efficiency
- Closed-loop speed control, precise speed regulation, customizable rotational speed
- Manual or automatic cutting, straight line or pulse cutting
- Color high-definition touch screen, simple and intuitive operation
- With a magnetic safety switch, the motor automatically stops when the protective cover is opened, ensuring safety performance
- Integrally formed high-strength composite material shell, anti-corrosive and rust-proof
- Panoramic transparent observation window, facilitating the observation of the sample cutting process
- With circulating cooling water tank, lightweight in volume

coolant (**optional**)



cutting blade (**optional**)

diamond blade (**optional**)

SPECIFICATION

Maximum cutting diameter	Ø40mm
Maximum travel	190mm
Diamond blade	Ø200×0.8×Ø12.7mm
Cutting method	manual/automatic, straight line/pulse
Automatic moving speed	0~10mm/s
Automatic cutting speed	0.1~5mm/s
Pulse feed distance	0~5mm
Rotation speed	500~3000r/min (can be customized)
Table dimension	368×424mm
Motor power	600W
Power supply	220V, 50Hz
Dimension (L×W×H)	550×475×360mm
Net weight	35kg

STANDARD DELIVERY

Main unit	1 pc
Diamond blade	1 pc
Fixed fixture	1 set
Coolant	1 barrel, 2L
Tool package	1 set

OPTIONAL ACCESSORY

Cutting coolant	**MLP-OL2**
Cutting blade	**MLP-10R** series*
Diamond blade	**MLP-DQ** series*

*Select the cutting blade with an inner hole of Ø12.7mm and a diameter not exceeding 230mm

MOUNTING PRESS (STANDARD TYPE)
CODE MLP-MP30

VIDEO

- Automatic heating, pressuring, cooling and pressure relief
- Water cooling system

hot mounting resin (**optional**)

SPECIFICATION

Diameter of workpiece	Ø30mm
Heating temperature range	100~200°C
Delay range	0~999s
Hold time	0~999s
Cooling temperature	20~90°C
Heating power	600W
Power supply	AC 220V, 50Hz
Dimension	350×450×470mm
Net weight	45kg

STANDARD DELIVERY

Main unit	1 pc
Hot mounting resin	1 bottle (250g)
Funnel	1 pc

OPTIONAL ACCESSORY

Hot mounting resin (black, 4kg)	**MLP-DR3**

MOUNTING PRESS (BASIC TYPE)
CODE MLP-MP62

VIDEO

- Suitable for tiny, difficult to handle or irregular metallographic and petrographic samples
- The sample preparation program has three modes: bakelite powder, electric jade powder and user-defined
- The sample preparation program controls the sample preparation time and realizes unattended sample preparation

hot mounting resin (**optional**)

SPECIFICATION

Mounting diameter	Ø30mm (customizable Ø22mm, Ø45mm)
Heating range	room temperature~200°C
Timing range	0~30min
Power	≤800W
Power supply	AC220V, 50Hz
Dimension	440×253×310mm
Net weight	32kg

STANDARD DELIVERY

Main unit	1 pc
Hot mounting resin	1 bottle (60g)
Funnel	1 pc

OPTIONAL ACCESSORY

Hot mounting resin (black, 4kg)	**MLP-DR3**

AUTOMATIC GRINDER AND POLISHER (ADVANCED TYPE) CODE MLP-GP505

CUSTOMIZED GRINDING AND POLISHING PROGRAMS | TOUCHSCREEN OPERATION | AUTOMATIC DISPENSING OF ABRASIVES

VIDEO

- ABS shell and stainless steel parts, anti-corrosion, easy to clean
- Can hold up to 6 samples (4 holes are optional)
- Smooth rotation, low noise
- Adjustable speed
- Intuitive pressure and time setting, 256 sets of grinding and polishing programs can be stored
- Water cooling device and abrasive cleaning nozzle prevent samples from overheating and destroying structure
- Replaceable platen, platen rotation direction can be selected
- Centre loading and single point loading, automatic abrasive distribution

polishing cloth (included)

anti-stick disc (included)

magnetic pad (included)

silicon carbide paper (included)

dripping system (**optional**)

SPECIFICATION

Wheel diameter		Ø250mm (customizable)
Wheel rotation speed		0~1000r/min (adjustment step 20rpm), 150r/min, 300r/min, 600r/min, 1000r/min (four fixed speeds)
Wheel rotation direction		clockwise or counterclockwise
Grinding head speed		50~150r/min (stepless adjustable)
Pressure range		5~60N (single point loading), 20~200N (centre loading)
Operation	**number**	6
	time	0~12h
Sample diameter		Ø30mm (customizable)
Air pressure		>0.35MPa
Programmable quantity		256 sets of grinding programs can be stored
Power supply		AC 220V, 50Hz, 2.1kW
Dimension (L×W×H)		596×714×707mm
Net weight		102kg

STANDARD DELIVERY

Main unit	1 pc
Polishing cloth	velvet, 3 pcs, **MLP-CT7**
	wool fabric, 3 pcs, **MLP-CT27**
Silicon carbide paper	Ø250mm, 20 pcs each (240#, 400#, 800#, 1200#)
Diamond polishing liquid	1 pc, **MLP-DLA2.5**
Anti-stick disc	5 pcs, **MLP-DC2**
Magentic pad	1 pc, **MLP-AD2**

OPTIONAL ACCESSORY

Silicon carbide paper	**MLP-SZG□□*** series, select Ø250mm sandpaper (PSA)
Polishing cloth	**MLP-CT□□*** series, select Ø250mm polishing cloth (PSA)
Diamond polishing liquid	**MLP-DL□□*** series
Magnetic pad	**MLP-AD2**
Anti-stick disc	**MLP-DC2**
Automatic liquid dropper	**MLP-PLD101, MLP-PLD101S**

*□□ is detailed specs; e.g., code **MLP-DLA2.5** stands for single-crystal diamond suspension polishing fluid with a particle size of 2.5μm

AUTOMATIC GRINDER AND POLISHER (STANDARD TYPE)
CODE MLP-GP305

- Replaceable double wheels, rotation direction can be selected
- Multi sample holder, pneumatic single point loading, automatic abrasive distribution
- Adjustable speed
- Water cooling device and abrasive cleaning nozzle prevent samples from overheating and destroying structure
- ABS case and stainless steel parts, anti-corrosion, easy to clean
- Metallographic samples can be roughly ground, finely ground, roughly polished and finely polished

SPECIFICATION

Wheel diameter		Ø250mm (customizable Ø300mm)
Wheel rotation speed		0~1000r/min (adjustment step 20rpm), 150r/min, 300r/min, 600r/min, 1000r/min (four fixed speeds)
Wheel rotation direction		clockwise or counterclockwise
Grinding head speed		50~150r/min (stepless adjustable)
Pressure range		5~60N (single point loading)
Operation	**number**	6
	time	0~999s
Sample diameter		Ø30mm (customizable)
Air pressure		0.6~0.9MPa
Power supply		AC 220V, 50Hz, 2.1kW
Dimension (L×W×H)		760×706×736mm
Net weight		128kg

silicon carbide paper (included)

polishing cloth (included)

anti-stick disc (included)

magnetic pad (included)

STANDARD DELIVERY

Main unit	1 pc
Polishing cloth	velvet, 3 pcs, **MLP-CT7**
	wool fabric, 3 pcs, **MLP-CT27**
Silicon carbide paper	Ø250mm, 20 pcs each (240#, 400#, 800#, 1200#)
Diamond polishing liquid	1 pc, **MLP-DLA2.5**
Anti-stick disc	5 pcs, **MLP-DC2**
Magentic pad	2 pcs, **MLP-AD2**

OPTIONAL ACCESSORY

Silicon carbide paper	**MLP-SZG□□*** series, select Ø250mm sandpaper (PSA)
Polishing cloth	**MLP-CT□□*** series, select Ø250mm polishing cloth (PSA)
Diamond polishing liquid	**MLP-DL□□*** series
Magnetic pad	**MLP-AD2**
Anti-stick disc	**MLP-DC2**

*□□ is detailed specs; e.g., code **MLP-DLA2.5** stands for single-crystal diamond suspension polishing fluid with a particle size of 2.5μm

AUTOMATIC GRINDER AND POLISHER (STANDARD TYPE)
CODE MLP-GP260

VIDEO

cooling water pipe

- ABS case and stainless steel parts, anti-corrosion, easy to clean
- Can hold up to 4 samples (6 holes are optional and can hold up to 6 samples)
- Smooth rotation, low noise
- Adjustable speed
- Water cooling device and abrasive cleaning nozzle prevent samples from overheating and destroying structure
- Wheel rotation direction can be selected
- Replaceable wheel

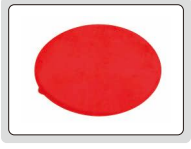
SPECIFICATION

Wheel diameter		Ø250mm
Wheel rotation speed		0~1000r/min (adjustment step 20rpm), 150r/min, 300r/min, 600r/min, 1000r/min (four fixed speeds)
Wheel rotation direction		clockwise or counterclockwise
Grinding head speed		50~150r/min (stepless adjustable)
Pressure range		5~60N (single point loading)
Operation	**number**	4
	time	0~999s
Sample diameter		Ø30mm (customized)
Air pressure		0.6~0.9MPa
Power supply		AC 220V, 50Hz, 2.1kW
Dimension (L×W×H)		595×715×730mm
Net weight		93kg

anti-stick disc (included)

magnetic pad (included)

silicon carbide paper (included)



polishing cloth (included)

STANDARD DELIVERY

Main unit	1 pc
Polishing cloth	velvet, 3 pcs, **MLP-CT7**
	wool fabric, 3 pcs, **MLP-CT27**
Silicon carbide paper	Ø250mm, 20 pcs each (240#, 400#, 800#, 1200#)
Diamond polishing liquid	1 pc, **MLP-DLA2.5**
Anti-stick disc	5 pcs, **MLP-DC2**
Magentic pad	1 pc, **MLP-AD2**

OPTIONAL ACCESSORY

Silicon carbide paper	**MLP-SZG□□***series, select Ø250mm sandpaper (PSA)
Polishing cloth	**MLP-CT□□***series, select Ø250mm polishing cloth (PSA)
Diamond polishing liquid	**MLP-DL□□***series
Magnetic pad	**MLP-AD2**
Anti-stick disc	**MLP-DC2**

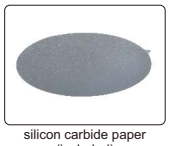
*□□ is detailed specs; e.g., code **MLP-DLA2.5** stands for single-crystal diamond suspension polishing fluid with a particle size of 2.5μm

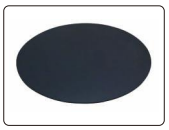
MANUAL GRINDER AND POLISHER (STANDARD TYPE)
CODE MLP-GP280

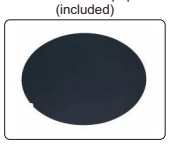
VIDEO

- ABS case and stainless steel parts, anti-corrosion, easy to clean
- Replaceable double wheel, wheel can be controlled independently, rotation direction can be selected
- Smooth rotation, low noise
- Four fixed speeds/stepless adjustable speed
- Water cooling device, prevent samples from overheating and destroying structure
- Metallographic samples can be roughly ground, finely ground, roughly polished and finely polished

polishing cloth (included)


silicon carbide paper (included)


magnetic pad (included)


anti-stick disc (included)

SPECIFICATION

Wheel diameter	Ø250mm
Wheel rotation speed	0-1000r/min (stepless adjustable)
Wheel rotation direction	clockwise or counterclockwise
Fixed speed	150r/min, 300r/min, 600r/min, 1000r/min
Power supply	AC 220V, 50Hz
Input power	1.5kW
Dimension	758×785×310mm
Net weight	52kg

STANDARD DELIVERY

Main unit	1 pc
Silicon carbide paper	Ø250mm, 5 pcs each (240#, 400#, 800#, 1200#)
Polishing cloth	3 pcs, **MLP-CT7**
Diamond polishing liquid	1 pc, **MLP-DLA2.5**
Magentic pad	2 pcs, **MLP-AD2**
Anti-stick disc	2 pcs, **MLP-DC2**

OPTIONAL ACCESSORY

Silicon carbide paper	**MLP-SZG□□*** series, select Ø250mm sandpaper (PSA)
Polishing cloth	**MLP-CT□□*** series, select Ø250mm polishing cloth (PSA)
Diamond polishing liquid	**MLP-DL□□*** series
Magentic pad	**MLP-AD2**
Anti-stick disc	**MLP-DC2**

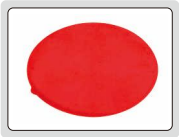
*□□ is detailed specs; e.g., code **MLP-DLA2.5** stands for single-crystal diamond suspension polishing fluid with a particle size of 2.5μm

MANUAL GRINDER AND POLISHER (BASIC TYPE)
CODE MLP-GP314

VIDEO

- Double wheels, rotation direction can be selected
- Smooth rotation, low noise
- Water cooling device, prevent samples from overheating and destroying structure
- Replaceable silicon carbide paper and polishing cloth for grinding and polishing process

silicon carbide paper (included)


polishing cloth (included)

anti-stick disc (included)

magnetic pad (included)

SPECIFICATION

Wheel diameter	Ø203mm
Wheel rotation speed	0~1400r/min (stepless adjustable)
Wheel rotation direction	clockwise or counterclockwise
Power supply	AC 220V, 50Hz
Input power	0.75kW
Dimension	755×700×310mm
Net weight	52kg

STANDARD DELIVERY

Main unit	1 pc
Polishing cloth	velvet, 3 pcs, **MLP-CT6**
Silicon carbide paper	Ø250mm, 20 pcs each (240#, 400#, 800#, 1200#)
Diamond polishing liquid	1 pc, **MLP-DLA2.5**
Anti-stick disc	2 pcs, **MLP-DC2**
Magentic pad	2 pcs, **MLP-AD2**

OPTIONAL ACCESSORY

Polishing cloth	**MLP-CT□□*** series, select Ø250mm polishing cloth (PSA)
Silicon carbide paper	**MLP-SZG□□*** series, select Ø250mm sandpaper (PSA)
Diamond polishing liquid	**MLP-DL□□*** series
Magnetic pad	**MLP-AD2**
Anti-stick disc	**MLP-DC2**

*□□ is detailed specs; e.g., code **MLP-DLA2.5** stands for single-crystal diamond suspension polishing fluid with a particle size of 2.5μm

PORTABLE EDDY CURRENT FLAW DETECTOR
CODE ECT-S610

VIDEO

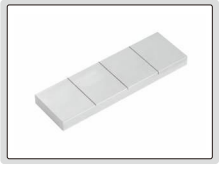
- Real-time impedance plane and time base sweep display modes available
- Easy to operate menu interface, with universal knob operation is more convenient and fast
- Analyzes the signal waveform of the entire detection process, automatically measuring phase and amplitude
- With amplitude and phase alarms and settable boundaries
- 5.7" industrial-grade TFT display, can work in outdoor and direct sunlight environment
- 500 sets of data, 500 sets of parameters, or 40 minutes of video storage
- Applicable to all kinds of metal materials and parts, such as weld cracks, copper pipe, seamless steel pipe, stainless steel pipe, folding, scars, pits, cracks, delamination and other defects, with high sensitivity

SPECIFICATION

Detection channel	channel 1 (X1-Y1), channel 2 (X2-Y2), mixing channel
Detection frequency	2
Transmission frequency	50Hz~10MHz
Driving voltage	8 adjustable steps
Phase adjustment	360° (1° step)
Gain adjustment	0~90dB (step 0.1dB)
Sampling frequency	40MHz, 12-bit data acquisition
Digital filtering	high pass: 1Hz-1950Hz, low pass: 3Hz-2000Hz
Alarm mode	amplitude and phase alarm
Alarm box	alarm frame modes: off, amplitude phase, half-amplitude phase, square box
Probe type	bridge
Display	time base, impedance plane
Auxiliary measurements	automatic/manual measurement of amplitude and phase
Balance mode	digital balance
Display modes	dot, line, fade mode
Interface	Q9 interface, USB HOST, Mini HDMI
Environmental temperature	-10~50°C
Relative humidity	20~95%RH
Power supply	rechargeable lithium battery, working time 6~8h
Dimensions (L×W×H)	251×171×52mm
Net weight	1.5kg

right angle probe (included)

pen probe (included)



aluminum alloy flat test block (included)

stainless steel plate test block (included)

STANDARD DELIVERY

Main unit	1 pc
Pen probe 50K~500KHz	1 pc
Pen probe 500K~3MHz	1 pc
Right angle probe 50K~500KHz	1 pc
Right angle probe 500K~3MHz	1 pc
Aluminum alloy flat test block	1 pc
Stainless steel plate test block	1 pc
Hexagon bar wrench	1 pc
Probe connecting cable	1 pc
Mainframe backpack	1 pc
USB disk	1 pc
Power adapter	1 pc

DIGITAL ULTRASONIC FLAW DETECTOR (ADVANCED TYPE)
CODE UFD-P710

VIDEO

external wireless phased array module (**optional**)

- With fast, accurate display and analysis of defective echo signals, a variety of weak signal changes and details can respond in a timely manner, the real-time echo signal and authenticity can be effectively guaranteed
- For the detection of high attenuation materials or thick workpiece has excellent penetration and letter ratio; sharp wave excitation technology and adjustable pulse width, pulse voltage, emission anisotropic square wave technology in the detection of thin workpiece and composite materials have a high resolution
- FIR digital filtering technology better signal-to-noise ratio; probe frequency harmonic analysis, can better analyze the probe performance information
- Automatic calibration of material speed of sound, probe delay, probe K value; convenient DAC, AVG curve creation and application
- USB HOST interface, can be connected to an external U disk to achieve data transmission; can be connected to an external WIFI module to achieve communication with other wireless devices
- HDMI video output for flaw detection and teaching presentations
- Ultra-large capacity storage space for continuous dynamic recording data storage
- Wireless phased array module can be connected, so that the conventional ultrasonic flaw detector has the same detection function as phased array instrument

single-element straight probe (included)

single-element angle probe (included)

wireless phased array module (**optional**)

phased array probe (**optional**)

FUNCTIONS

Flaw detection standard	built-in common flaw detection standards, direct call, convenient and fast
Auto calibration	automatic calibration of probe zero offset, probe angle (K value) and material velocity
Peak hold	compare frozen peak waveforms to live A-Scans to easily interpret test results
Flaw locating	live display sound-path, projection (surface distance), depth, amplitude
Flaw discrimination	automatic flaw sizing using AVG or DAC, speeds reporting of defect acceptance or rejection
Flaw sizing	the equivalent dB value of defects or equivalent size of defects are displayed in real time
Curved surface correction	used for flaw detection of curved workpiece, it can display the circumferential position of defects in real time
DAC/AVG	the curve is automatically generated, and the sampling points can be compensated and corrected. The curve automatically floats with the gain, automatically expands with the detection distance, and automatically moves with the delay time. It can display the AVG curve of any aperture
AWS D1.1/1.5	choosing this standard can reduce manual calculations and improve detection efficiency
Automatic rating	select different AWS standards, automatically calculate the rating of defects and display
Crack height	the crack height is measured and calculated automatically by the diffracted wave at the end
Gate magnify	spreading of the gate range over the entire screen width
Continuous record	video recording and playback
Echo coding	display 1~9 echo display area in different colors, used to analyze the defect position
Scan freeze	display freeze holds waveform and test distance data
Peak mark	capture and mark the peak in real time
B scan	intuitively display the defect shape of the workpiece and the detection result is more intuitive

To be continued

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SPECIFICATION

Measuring range	0~10000mm
Working frequency	0.5~20MHz
Material velocity	1000~15000m/s, adjustable in continuity; 30 pre-set nominated velocities for common materials
Repetition frequency	25~1600Hz
Dynamic range	≥32dB
Gain range	0.0~110dB (steps: 0.1dB, 1.0dB, 2.0dB, 6.0dB)
Vertical linearity	≤3.0%
Horizontal linearity	≤0.4%
Resolving power	>26dB (2.5P20)
Sensitivity leavings	>62dB (200Ø2 flat bottom hole, narrow band)
Attenuator	12dB±1dB
Suppression	0~99%
Noise	≤10%
Display screen	5.7"TFT color LCD, resolution 640x480
Pulse type	sharp wave, negative square wave, bipolar square wave; transmit voltage 50~250V adjustable, step 50V
Pulse shift	-7.5~3000us
Probe zeroing	0~200us
Rectification	positive, negative, full-play, RF
Gates and alarms	two-way gate, optional: into the wave alarm, lost wave alarm, DAV curve alarm, alarm signal for sound and light alarms measurement mode: peak, frontal
Interface	Q9 (BNC), USB HOST, Mini HDMI
Damping	400Ω, 80Ω
Power supply	rechargeable lithium-ion battery, working time 6~8h
Storage temperature	-30~50°C
Relative humidity	20~95%RH
Dimensions (L×W×H)	246×166×50mm
Net weight	1.3kg

STANDARD DELIVERY

Main unit	1 pc
Single-element straight probe UFD-P70	1 pc
Single-element angle probe UFD-P71	1 pc
Probe connecting cable	2 pcs
Mainframe backpack	1 pc
USB disk	1 pc
Power adapter	1 pc

OPTIONAL ACCESSORY

Probe	refer to specification of transducers
Wireless phased array module	UFD-PA11
Phased array probe	UFD-PA06

SPECIFICATION OF PROBE

Code	Frequency	Size	Probe type	Probe transducer angle
UFD-P70 (included)	2.5MHz	Ø20mm	single-element straight probe	90°
UFD-P71 (included)	2.5MHz	13×13mm	single-element angle probe	45°
UFD-P72 (optional)	2.5MHz	Ø14mm	dual-element straight probe	90°
UFD-P73 (optional)	5.0MHz	Ø20mm	single-element straight probe	90°
UFD-P74 (optional)	2.5MHz	13×13mm	single-element angle probe	63.4°
UFD-P75 (optional)	5.0MHz	8×12mm	single-element angle probe	68.2°

Note: other probes can be customized according to customer requirements

SPECIFICATION OF PHASED ARRAY PROBE (OPTIONAL)

Code	Frequency	E-Nos	Pitch (mm)	Elev (mm)	Ptd. angle	Ptd. material
UFD-PA06 (optional)	2.5MHz	16	1.0	10	55°	plexiglass

DIGITAL ULTRASONIC FLAW DETECTOR (EXCELLENT TYPE)
CODE UFD-C870

VIDEO

- Small size, light weight, long battery standby time
- High sensitivity, accurate defect positioning, super anti-interference ability, stable and reliable performance
- Resistive touch screen, dust and oil resistant, sensitive touch
- The performance of instrument and probe combinations can be tested automatically
- Unique square wave excitation signal processing technology
- Launch voltage, probe damping, pulse width, filter band adjustable, suitable for different materials, different thickness of the workpiece accurate detection
- The background color and brightness can be freely adjusted to adapt to strong or low light environments to ensure a clear display
- Full course, continuous, dynamic high-capacity recording of test echoes and data, support for data playback, through the U disk export
- Built-in wifi, can realize the flaw detector and computer synchronization real-time display

FUNCTIONS

Flaw detection standard	built-in common flaw detection standards, direct call, convenient and fast
Auto calibration	automatic calibration of probe zero offset, probe angle (K value) and material velocity
Peak hold	compare frozen peak waveforms to live A-Scans to easily interpret test results
Flaw locating	real-time display of defect level, depth (vertical), sound range projection
Flaw discrimination	automatic flaw sizing using AVG or DAC, speeds reporting of defect acceptance or rejection
Flaw sizing	the equivalent dB value of defects or equivalent size of defects are displayed in real time
Curved surface correction	used for flaw detection of curved workpiece, it can display the circumferential position of defects in real time
DAC/AVG	the curve is automatically generated, and the sampling points can be compensated and corrected. The curve automatically floats with the gain, automatically expands with the detection distance, and automatically moves with the delay time. It can display the AVG curve of any aperture
AWS D1.1	choosing this standard can reduce manual calculations and improve detection efficiency
Weld diagram	support V type, T type, X type and other weld types, acoustic path navigation real-time display, weld and defect location real-time display, scaling, easy to locate defects
Automatic rating	select different AWS standards, automatically calculate the rating of defects and display
Gate magnify	spreading of the gate range over the entire screen width
Continuous record	real-time waveform recording, storage and playback
Echo coding	distinguish between odd/even wave colors only
Scan freeze	display freeze holds waveform and test distance data
Peak mark	capture and mark the peak in real time
B scan	intuitively display the defect shape of the workpiece and the detection result is more intuitive

single-element straight probe (included)

single-element angle probe (included)

SPECIFICATION

Measuring range	0~20000mm
Working frequency	0.4~20MHz
Material velocity	20~20000m/s
Repetition frequency	60~1000Hz
Dynamic range	≥32dB
Gain range	0~110dB (steps: 0.1dB, 1.0dB, 2.0dB, 6.0dB, 12dB)
Vertical linearity	≤2.0%
Horizontal linearity	≤0.1%
Resolving power	>36dB
Sensitivity leavings	>62dB (200Ø2 flat bottom hole, narrow band)
Attenuator	20dB±1dB
Suppression	0~90%
Noise	≤10%
Displsy screen	5.0"TFT color LCD touch screen, resolution 800×480
Pulse voltage	50V/100V/200V/400V four adjustable steps
Pulse width	50ns~1000ns adjustable
Rectification	positive, negstive, full-paiy, RF
Gates and alarms	two-way gate optional: into the wave alarm, lost wave alarm, DAV curve alarm, alarm signal for sound and light alarms measurement mode: peak, frontal
Interface	C5 (BNC), USB (type C), VGA
Damping	50Ω/500Ω adjustable in two steps
Operating temperature	-20~50°C
Relative humidity	20~95%
Power	rechargeable lithium-ion battery, working time>8h
Dimensions (L×W×H)	180×110×45mm
Net weight	0.68kg

To be continued

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STANDARD DELIVERY

Main unit	1 pc
Single-element straight probe UFD-C80	1 pc
Single-element angle probe UFD-C81	1 pc
Probe connecting cable	2 pcs
USB cable	1 pc
USB disk	1 pc
Power adapter	1 pc

SPECIFICATION OF PROBE

Code	Frenquency	Size	Probe type	Probe sensor angle
UFD-C80 (included)	2.5MHz	Ø20mm	single-element straight probe	90°
UFD-C81 (included)	2.5MHz	13×13mm	single-element angle probe	63.4°
UFD-C82 (optional)	5.0MHz	Ø10mm	dual-element straight probe	90°
UFD-C83 (optional)	5.0MHz	Ø10mm	single-element straight probe	90°
UFD-C84 (optional)	2.5MHz	9×9mm	single-element angle probe	45°
UFD-C85 (optional)	2.5MHz	9×9mm	single-element angle probe	71.6°

Note: other probes can be customized according to customer requirements

DIGITAL ULTRASONIC FLAW DETECTOR (STANDARD TYPE) CODE UFD-F720

VIDEO

straight-beam probe (included)

angle-beam probe (included)

- Compact and lightweight, easy to carry
- High sensitivity, accurate defect positioning, super anti-interference ability, stable and reliable performance
- Built-in automatic performance test function
- Unique square wave excitation signal processing technology
- The background color and brightness can be freely adjusted to adapt to strong or low light environments to ensure a clear display
- Real-time dynamic recording of detection waveforms, data, rapid export via U disk

FUNCTIONS

Flaw detection standard	built-in common flaw detection standards, direct call, convenient and fast
Auto calibration	automatic calibration of probe zero offset, probe angle (K value) and material velocity
Peak hold	compare frozen peak waveforms to live A-Scans to easily interpret test results
Flaw locating	real-time display of defect level, depth (vertical), sound range projection
Flaw discrimination	automatic flaw sizing using AVG or DAC, speeds reporting of defect acceptance or rejection
Flaw sizing	the equivalent dB value of defects or equivalent size of defects are displayed in real time
DAC/AVG	the curve is automatically generated, and the sampling points can be compensated and corrected. The curve automatically floats with the gain, automatically expands with the detection distance, and automatically moves with the delay time. It can display the AVG curve of any aperture
AWS D1.1	choosing this standard can reduce manual calculations and improve detection efficiency
Automatic rating	select different AWS standards, automatically calculate the rating of defects and display
Gate magnify	spreading of the gate range over the entire screen width
Continuous record	real-time waveform recording, storage and playback
Scan freeze	display freeze holds waveform and test distance data
Peak mark	capture and mark the peak in real time

To be continued

Continued from previous page

SPECIFICATION

Measuring range	0~15000mm
Working frequency	0.4~20MHz
Material velocity	0~10000m/s
Dynamic range	≥36dB
Gain range	0~110dB (steps:0.1dB, 1.0dB, 2.0dB, 6.0dB, 12dB)
Vertical linearity	≤3.0%
Horizontal linearity	≤0.1%
Resolving power	>36dB
Sensitivity leavings	>62dB (200Ø2 flat bottom hole, narrow band)
Attenuator	20dB±1dB
Suppression	0~90%
Pulse energy	400V
Noise	≤10%
Pulse front	≤10ns
Displsy screen	5.7"TFT color LCD, resolution 640×480
Probe selection	straight probe, angle probe, penetrating probe, climbing probe
Gates	incoming wave gate, lost wave gate, single gate reading, double gate reading
Alarms	incoming wave alarm, lost wave alarm, double gate alarm, buzzer alarm, LED light alarm
Interface	Q9 (BNC), USB 2.0, VGA
Operating temperature	-20~50°C
Relative humidity	20~95%
Power	rechargeable lithium-ion battery
Dimensions (L×W×H)	228×140×42mm
Net weight	1.0kg

STANDARD DELIVERY

Main unit	1 pc
Single-element straight probe UFD-F70	1 pc
Single-element angle probe UFD-F71	1 pc
Probe connecting cable	2 pcs
USB cable	1 pc
Mainframe backpack	1 pc
USB disk	1 pc
Power adapter	1 pc

SPECIFICATION OF PROBE

Code	Frenquency	Size	Probe type	Probe sensor angle
UFD-F70 (included)	2.5MHz	Ø20mm	single-element straight probe	90°
UFD-F71 (included)	2.5MHz	13×13mm	single-element angle probe	63.4°
UFD-F72 (optional)	5.0MHz	Ø10mm	dual-element straight probe	90°
UFD-F73 (optional)	5.0MHz	Ø10mm	single-element straight probe	90°
UFD-F74 (optional)	2.5MHz	9×9mm	single-element angle probe	45°
UFD-F75 (optional)	2.5MHz	9×9mm	single-element angle probe	71.6°

Note: other probes can be customized according to customer requirements

DIGITAL ULTRASONIC FLAW DETECTOR (BASIC TYPE)
CODE UFD-B450

VIDEO

- Full plastic housing with tempered glass panel, extremely hard, wear-resistant and scratch-resistant
- Full-digital multi-color high resolution (640×480 pixels) TFT LCD display
- The operation interface style can be selected according to the working environment, and the brightness of LCD can be set freely
- Selectable frequency ranges (automatically set by the instrument) to match probe for optimum performance
- Can choose to set the incoming wave alarm or lost wave alarm, accompanied by LED light display
- Real-time screenshots of all pages and flaw detection reports, and save them as BMP pictures to U disk
- Export the flaw detection report as a PDF file
- Unique Fn multifunction key design
- There is no limit of the number and duration of video recording through U disk
- Memory of 500 channel files to store calibration setups and probe parameter
- Memory of 1000 wave report files to store A-Scan wave and setting

FUNCTIONS

Flaw detection standard	built-in common flaw detection standards, direct call, convenient and fast
Auto calibration	automatic calibration of probe zero offset, probe angle (K value) and material velocity
Peak hold	compare frozen peak waveforms to live A-Scans to easily interpret test results
Flaw locating	live display sound-path, projection (surface distance), depth, amplitude
Flaw discrimination	automatic flaw sizing using AVG or DAC, speeds reporting of defect acceptance or rejection
Flaw sizing	the equivalent dB value of defects or equivalent size of defects are displayed in real time
Curved surface correction	used for flaw detection of curved workpiece, it can display the circumferential position of defects in real time
DAC/AVG	the curve is automatically generated, and the sampling points can be compensated and corrected; the curve automatically floats with the gain, automatically expands with the detection distance, and automatically moves with the delay time; it can display the AVG curve of any aperture
AWS D1.1	choosing this standard can reduce manual calculations and improve detection efficiency
Weld diagram	support V type, T type, L type and other weld types, acoustic path navigation real-time display, weld and defect location real-time display, scaling, easy to locate defects
Automatic rating	select different AWS standards, automatically calculate the rating of defects and display
Crack height	the crack height is measured and calculated automatically by the diffracted wave at the end
Gate magnify	spreading of the gate range over the entire screen width
Continuous record	video recording and playback
Echo coding	display 1~9 echo display area in different colors, used to analyze the defect position
Scan freeze	display freeze holds waveform and test distance data
Peak mark	capture and mark the peak in real time
B scan	intuitively display the defect shape of the workpiece and the detection result is more intuitive

couplant (included)

straight-beam probe (included)

angle-beam probe (included)

SPECIFICATION

Measuring range	0~15000mm
Working frequency	1~20MHz
Material velocity	100~20000m/s
Repetition frequency	20~2000Hz
Dynamic range	≥26dB
Vertical linearity	≤5.0%
Horizontal linearity	≤0.5%
Resolving power	>32dB
Sensitivity leavings	>54dB
Suppression	0~80%
Noise	≤10%
Probe selection	single crystal probe, dual crystal probe, penetrating probe, climbing probe
Pulse energy	100V, 200V, 250V, 300V, 350V, 400V, 450V, 500V (selectable)
Probe damping	50Ω, 150Ω, 250Ω, 500Ω (selectable)
Rectification	positive half wave, negative half wave, full wave, RF
Gates	two independent gates controllable over entire sweep range
Trigger	peak trigger, edge trigger
Alarms	threshold positive/negative with LED flash
Interface	USB 2.0
Operating temperature	-10~50°C
Relative humidity	20~95%RH
Power	build-in rechargeable battery
Dimensions (L×W×H)	230×157×52mm
Net weight	1.13kg

To be continued

Continued from previous page

STANDARD DELIVERY

Main unit	1 pc
Single-element straight probe UFD-T40	1 pc
Single-element angle probe UFD-T41	1 pc
USB cable	1 pc
Couplant	1 bottle
Probe connecting cable	2 pcs
USB disk	1 pc
Power adapter	1 pc

SPECIFICATION OF PROBE

Code	Frenquency	Size	Probe type	Transducer sensor angle
UFD-T40 (included)	2.5MHz	Ø20mm	single-element straight probe	90°
UFD-T41 (included)	4.0MHz	8×9mm	single-element angle probe	60°
UFD-T42 (optional)	5.0MHz	Ø10mm	dual-element straight probe	90°
UFD-T43 (optional)	5.0MHz	Ø10mm	single-element straight probe	90°
UFD-T44 (optional)	4.0MHz	8×9mm	single-element angle probe	45°
UFD-T45 (optional)	4.0MHz	8×9mm	single-element angle probe	70°

Note: other probes can be customized according to customer requirements

DIGITAL ULTRASONIC FLAW DETECTOR (BASIC TYPE) CODE UFD-T680

VIDEO

- The all-aluminum metal shell is strong and durable, and the electromagnetic shielding performance is very good
- Tempered glass panel, extremely hard, wear-resistant and scratch-resistant
- Full-digital multi-color high resolution (640×480 pixels) TFT LCD display
- 4 operating interface styles can be selected according to the environment
- Real-time screenshots of all pages and flaw detection reports, and save them as BMP pictures to U disk
- Export the flaw detection report as a PDF file
- Unique Fn multifunction key design
- There is no limit of the number and duration of video recording through U disk
- Memory of 500 channel files to store calibration setups and probe parameter
- Memory of 1000 wave report files to store
- A-Scan wave and settings
- Two fully independent gates offer a range of measurement options for signal height or distance using peak triggering
- Can choose to set the incoming wave alarm or lost wave alarm, accompanied by LED light display
- Selectable frequency ranges (automatically set by the instrument) to match probe for optimum performance
- The unique automatic gain adjustment and gain scanning function make flaw detection fast and accurate

FUNCTIONS

Flaw detection standard	built-in common flaw detection standards, direct call, convenient and fast
Auto calibration	automatic calibration of probe zero offset, probe angle (K value) and material velocity
Peak hold	compare frozen peak waveforms to live A-Scans to easily interpret test result
Flaw locating	live display sound-path, projection (surface distance), depth, amplitude
Flaw discrimination	automatic flaw sizing using AVG or DAC, speeds reporting of defect acceptance or rejection
Flaw sizing	the equivalent dB value of defects or equivalent size of defects are displayed in real time
Curved surface correction	used for flaw detection of curved workpiece, it can display the circumferential position of defects in real time
DAC/AVG	the curve is automatically generated, and the sampling points can be compensated and corrected. The curve automatically floats with the gain, automatically expands with the detection distance, and automatically moves with the delay time. It can display the AVG curve of any aperture
AWS D1.1	choosing this standard can reduce manual calculations and improve detection efficiency
Weld diagram	support V type, T type, L type and other weld types, acoustic path navigation real-time display, weld and defect location real-time display, scaling, easy to locate defects
Automatic rating	select different AWS standards, automatically calculate the rating of defects and display
Crack height	the crack height is measured and calculated automatically by the diffracted wave at the end
Gate magnify	spreading of the gate range over the entire screen width
Continuous record	video recording and playback
Echo coding	display 1~9 echo display area in different colors, used to analyze the defect position
Scan freeze	display freeze holds waveform and test distance data
Peak mark	capture and mark the peak in real time
B scan	intuitively display the defect shape of the workpiece and the detection result is more intuitive

straight-beam probe (included)

angle-beam probe (included)

USB disk (included)

couplant (included)

To be continued

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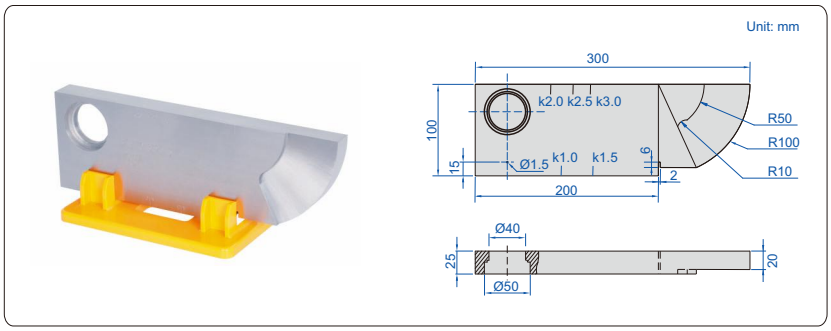


calibration block (**optional**)

SPECIFICATION

Measuring range	0~15000mm
Working frequency	0.2~20MHz
Material velocity	100~20000m/s
Repetition frequency	20~2000Hz
Dynamic range	≥36dB
Vertical linearity	≤3.0%
Horizontal linearity	≤1.0%
Resolving power	>42dB
Sensitivity leavings	>65dB
Suppression	0~80%
Noise	≤10%
Probe selection	single crystal probe, dual crystal probe, penetrating probe, climbing probe
Pulse energy	100V, 200V, 250V, 300V, 350V, 400V, 450V, 500V (selectable)
Pulse width	30ns-510ns
Probe damping	50Ω, 150Ω, 250Ω, 500Ω (selectable)
Rectification	positive half wave, negative half wave, full wave, RF
Gates	two independent gates controllable over entire sweep range
Interface	USB 2.0
Operation temperature	-10~50°C
Relative humidity	20~95%RH
Power supply	build-in rechargeable battery
Dimensions (L×W×H)	263×170×61mm
Net weight	1.92kg

STANDARD DELIVERY

Main unit	1 pc
Single-element straight probe UFD-T60	1 pc
Single-element angle probe UFD-T61	1 pc
USB cable	1 pc
Couplant	1 bottle
Probe connecting cable	1 pc
USB disk	1 pc
Power adapter	1 pc

OPTIONAL ACCESSORY

Calibration block	**UFD-CSK1**

SPECIFICATION OF PROBE

Code	Frequency	Size	Probe type	Transducer sensor angle
UFD-T60 (included)	2.5MHz	Ø20mm	single-element straight probe	90°
UFD-T61 (included)	4.0MHz	8×9mm	single-element angle probe	63.4°
UFD-T62 (optional)	5.0MHz	Ø10mm	dual-element straight probe	90°
UFD-T63 (optional)	5.0MHz	Ø10mm	single-element straight probe	90°
UFD-T64 (optional)	4.0MHz	8×9mm	single-element angle probe	45°
UFD-T65 (optional)	4.0MHz	8×9mm	single-element angle probe	71.6°

Note: other types of the probes are available

ULTRASONIC FLAW DETECTOR FOR CONCRETE
CODE UFD-Q390

VIDEO

application

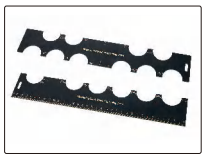
- Ultrasonic rebound synthesis method to measure the strength, defects, depth and width of the 4 major functions in one
- Automatically read the sound time and wave amplitude of a wave, without manual judgment operation, and directly display the test results
- Manually adjustable sound time line, data correction for more accurate detection results
- During the test process, you can arbitrarily playback, overwrite, and delete the waveform of the stored measurement points
- 10" high brightness touch screen, intelligent interaction interface, easy to learn and use convenient operation
- 4cm thin body, light weight and easy to carry
- Computer dedicated analysis software is powerful, data analysis and processing, print reports easily
- Suitable for: concrete strength testing, internal defect testing, surface crack depth testing, crack width testing in the construction industry; acoustic parameter testing of rock and non-metallic concrete materials, etc.

hand torch (included)

planar probe (included)

crack width calibration template (included)

miniature camera (included)



crack ranging scale (included)

SPECIFICATION

Detection channel	2
Depth measurement range	5~500mm
Width measurement range	0.01~10mm
Sound time measurement range	0~4096000μs
Wave amplitude measurement range	0~170dB
Sampling interval	0.025μs~2000μs multi-speed selectable
Sampling length	512points~2048points multi-speed selectable
Acceptance sensitivity	≤10μV
Transmit pulse width	0.1μs~100μs
Emission voltage	125V, 250V, 500V, 1000V selectable
Trigger method	automatic
Storage	built-in 16GB
Data output	USB, WIFI
Operating temperature	-20~60°C
Power supply	rechargeable lithium battery, working time>8 hours
Dimensions (L×W×H)	283×216×41mm
Net weight	1.8kg

STANDARD DELIVERY

Main unit	1 pc
Planar probe	2 pcs
Miniature camera	1 pc
Crack ranging scale	2 pcs
Crack width calibration template	1 pc
Hand torch	1 pc
Probe connection cables	2 pcs
USB disk	1 pc
Power adapter	1 pc

PERMANENT MAGNET YOKE FLAW DETECTOR
CODE MPI-PM177

- Strong magnetism, small size, light weight, no need for charging, portable use
- Suitable for electric power, petroleum, chemical, machinery and other industries

SPECIFICATION

Lifting power	>18kg
Magnetic pole spacing	50~200mm (continuously adjustable)
Dimension (L×W×H)	175×160×45mm
Net weight	2.25kg

STANDARD DELIVERY

Main unit	1 pc
Iron block	1 pc

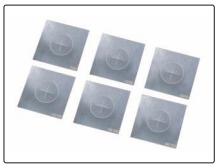
PORTABLE MAGNETIC POWDER FLAW DETECTORS

VIDEO

- Conformity to standards JB/T7411-2012 ASTM E1444-05 ASTM E709
  EN10228-1:1999 ISO 9934 ASTM E3024
- Multiple power supply modes available

DC battery pack 4400mAh **(optional)**

AC battery pack 6600mAh **(optional)**

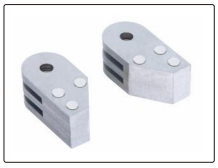

A1 standard sensitivity test piece **(optional)**

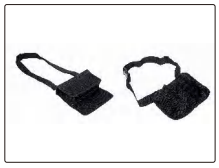
45N lifting force test block **(optional)**

MPI-P110

177N lifting force test block **(optional)**

magnetic pole slope angle A **(optional)**


magnetic pole slope angle B **(optional)**


bag **(optional)**

SPECIFICATION

Code		MPI-P110	MPI-P220	MPI-P330
Magnetic field strength		>2KA/m		
Sensitivity		15/50 engraved groove clearly displayed on A1 standard sensitivity test piece		
Illumination		—	white light ≥2320Lux	UV lamp ≥5220μW/cm²
Duty cycle		>50% maximum excitation time 90 seconds		>30%
Lifting power	AC	≥4.5kg (44N)		
	DC	≥18.1kg (177N)		
Magnetic pole spacing		0-230mm		
Magnetic pole size		22×22mm		
Power supply		AC220V, 50/60Hz (DC battery pack or AC battery pack are optional)		
Power cord		european power cord		
Operation temperature		-10~40°C		
Relative humidity		<80% (no condensation)		
Dimension (L×W×H)		235×50×195mm		
Net weight		2.3kg		

STANDARD DELIVERY

Main unit	1 pc

OPTIONAL ACCESSORY

DC battery pack 4400mAh	MPI-PDC440
AC battery pack 6600mAh	MPI-PAC660
A1 standard sensitivity test piece	MPI-PA1
45N lifting force test block	MPI-P45N
177N lifting force test block	MPI-P177N
Magnetic pole slope angle A	MPI-PMA
Magnetic pole slope angle B	MPI-PMB
Bag	MPI-PBG
British power cord	MPI-POWER-K
Brazilian power cord	MPI-POWER-B

UV FLAW DETECTION LIGHT CODE MPI-HD130

VIDEO

- UV-B content is 0
- No need to wait, instantly reaches 100% power
- Supplied with glass filter
- External surface temperature increase <5K (5°C) for continuous working

SPECIFICATION

UV (light) Lux	6000~11000μW/cm²
UV light power	UV LED-3W
FLUX error	±10% (at 0°C~40°C)
Lighting characteristics	center lighting
Wavelength	365nm±3nm (UVA), at temperature 25°C
Power supply	3.7V rechargeable lithium battery
Battery capacity	2600mAh
Charging time	2h~3h
Battery life	UV LED 3h~4h
Dimension	180×47mm
Net weight	260g (including battery)

STANDARD DELIVERY

Main unit	1 pc
Battery	2 pcs
Charger	1 pc

RECHARGEABLE UV FLAW DETECTION LIGHT
CODE MPI-HF360

VIDEO

- UV-B content is 0
- Without preheating, instant start, instant on/off, no need to wait
- Supplied with glass filter
- External surface temperature increase <8K (8°C) for continuous working

goggles (included)

SPECIFICATION

UV (light) Lux	about 6000μW/cm²
UV light power	UV LED-12VA
Covering area	diameter approximately 300mm (calibrated at 381mm distance)
FLUX error	±10% (at 0°C~40°C)
White light content	≤20LUX
Lighting characteristics	center lighting
Wavelength	365nm±3nm (UVA), at temperature 25°C
Power supply	10.8V rechargeable lithium battery
Battery capacity	3200mAh
Charging time	3~4h
Battery life	UV LED 5~6h
Dimension	175×75×170mm
Net weight	750g (including battery)

STANDARD DELIVERY

Main unit	1 pc
Battery	2 pcs
Charger	1 pc
Goggles	1 pc

RECHARGEABLE UV/WHITE LIGHT FLAW DETECTION LIGHT
CODE MPI-HW369

VIDEO

- UV-B content is 0
- With UV and white light dual function, one hand switching
- Without preheating, instant start, instant on/off, no need to wait
- Supplied with glass filter
- External surface temperature increase <8K (8°C) for continuous working

goggles (included)

SPECIFICATION

UV (light) Lux	>6000μW/cm²
White light brightness	>1000LUX
Lamp power	UV LED-9VA, white light-3VA
Covering area	300mm (at 381mm distance)
FLUX error	±10% (at 0°C~40°C)
White light content	≤20 LUX
Lighting characteristics	center lighting
Wavelength	365nm±3nm (UVA), at temperature 25°C
Power supply	10.8V rechargeable lithium battery
Battery capacity	3200mAh
Charging time	3h~4h
Battery life	UV LED 5h~6h, white light 7h
Dimension	175×75×170mm
Net weight	750g (including battery)

STANDARD DELIVERY

Main unit	1 pc
Battery	2 pcs
Charger	1 pc
Goggles	1 pc

INTELLIGENT IMAGE UV FLAW DETECTION LIGHT
CODE MPI-SC608

VIDEO

- UV-B/C content is 0
- Without preheating, instant start, instant on/off, no need to wait
- Continuous irradiation surface spot uniform, no dark areas, no point-like strong light source
- 13M UV-resistant specialized lens for high-definition photos and videos
- Precise measurement of small defects
- High-definition defects can be freely magnified up to 12 times (3 times optical magnification, 4 times electronic magnification)
- Android system, free to download applications
- Support WIFI, USB, Bluetooth data transmission function, and can realize real-time synchronization between light interface and computer screen
- Languages: Chinese, English, French, German, Japanese

measuring camera (**optional**)

goggles (included)

imaging

SPECIFICATION

UV (light) Lux	about 4000μW/cm²
Light source	3 UV LED's, 1 white LED
Covering area	Ø180mm (at 381mm distance)
White light content	<5LUX
Minimum working distance	≤13cm
Camera pixels	13M
Display	3" touch LCD
Display resolution	720×720
Camera focus	auto focus or manual focus
White balance	adjust white balance automatically
Internal storage	32GB
Data transmission	USB, WIFI, Bluetooth
Operation system	Android 6.0
Power supply	rechargeable lithium battery ≥4hours, power adapter (for continuous use)
Dimension	175×80×180mm
Net weight	880g (including battery)

STANDARD DELIVERY

Main unit	1 pc
Battery	2 pcs
Charger	1 pc
Power adapter	1 pc
Data cable	1 pc
Goggles	1 pc
4G USB flash disk	1 pc
Screwdriver	1 pc

OPTIONAL ACCESSORY

Measuring camera	**MPI-SC608-AW**

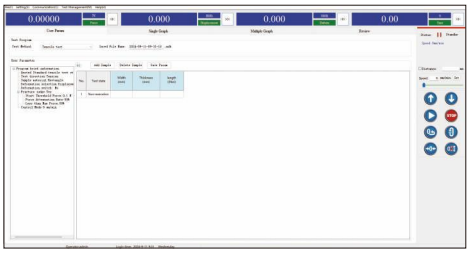
SPECIFICATION (OPTIONAL)

Product	Code	Defect measurement range	Camera pixels	UV light	White light
measuring camera	**MPI-SC608-AW**	0.01-7mm	2M	about 14000μW/cm²	about 2200LUX

ELECTRONIC UNIVERSAL TESTING MACHINES

VIDEO

computer and software (included)



UTM-Z500

- Applicable to metal, non-metal and composite materials for tensile, compression, bending and other mechanical properties test analysis and analytical research
- Automatically obtain the maximum force, breaking force, yield strength, upper and lower yield strength, tensile strength, compressive strength, elongation at break, tensile modulus of elasticity, bending modulus of elasticity and other test data
- Test standards and test parameters can be managed and imported or exported test standards
- Overload emergency shutdown protection device, up and down travel limit protection device
- Crossbeam movement collision mitigation function

SPECIFICATION

Code	UTM-Z50	UTM-Z500	UTM-Z1000	UTM-Z2000	UTM-Z5000
Max. test force*	50N	500N	1000N	2000N	5000N
Accuracy class	class 0.5				
Range of test force	0.4%~100%FS				
Accuracy of test force	±0.5% of indicating value				
Resolution of test force	1/300000FS				
Accuracy of displacement	±0.5% of indicating value				
Resolution of displacement	0.2μm				
Range of crossbeam speed	0.001~1000mm/min				
Accuracy of crossbeam speed	±0.5% of indicating value				
Range of force control speed	0.05%~10%FS/s				
Accuracy of force control speed	±0.5% of indicating value				
Effective tensile travel*	450mm				
Effective compression travel*	700mm				
Dimension (L×W×H)	500×380×1150mm				
Power supply	AC 220V, 50Hz				
Net weight	100kg				

STANDARD DELIVERY

Main unit	1 pc
Computer	1 set
Software	1 set
Control box	1 pc
Tensile fixture	1 set

OPTIONAL ACCESSORY

Fixture*	customized
Extensometer*	
Large deformation extensometer*	
Security cover*	

*Can be customized according to test requirements

ELECTRONIC UNIVERSAL TESTING MACHINES (ADVANCED TYPE)

VIDEO

INSPECTION CERTIFICATE

CUSTOMIZABLE

- According to GB/T, ISO, ASTM etc.
- For testing and researching the mechanical properties such as tension, compression, bending, shear, peeling and tearing of products including plastics, rubber, wires, electronic connectors (for insertion and extraction), metal wires, films, textiles, adhesives, biomaterials, elastomers, food packaging, small components, paper and springs
- Single-column structure, with compactness and high rigidity
- With powerful operation and analysis software
- With touchscreen and button integrated control box

UTM-GA5000

SPECIFICATION FOR LIGHT-SENSING INTERACTIVE SYSTEM

Equipment status	Light strip color	Light strip behavior
Power on	yellow	steady on
Standby (servo OFF)	yellow	bidirectional running lights
Standby (servo ON)	blue	steady on
Standby (servo ON)>60s	blue	breathing light
Alarm (limit, overload, etc.)	red	steady on
Upward	green	upward running lights
Downward	green	downward running lights
Load holding	green	steady on

SPECIFICATION

Code	UTM-GA50	UTM-GA500	UTM-GA5000
Max. test force	50N	500N	5000N
Accuracy class	0.5 class		
Accuracy of test force	±0.5%		
Range of test force	0.4%~100%FS		
Resolution of test force	1/600000FS		
Accuracy of crossbeam displacement	±0.2% or ±0.01mm (whichever is larger)		
Resolution of crossbeam displacement	0.0133μm		
Range of test speed adjustment	0.00005~2400mm/min		
Range of return speed adjustment	0.00005~3000mm/min		
Accuracy of crossbeam speed	0.05mm/min~100%FS, ±0.2% of the set value		
Resolution of deformation	1/600000FS		
Accuracy of strain measurement	superior to the requirements of standards such as GB/T 228, ISO 6892-1, ASTM E8, and ASTM E21		
Frequency of data sampling	1200Hz		
Frequency of control loop	1200Hz		
Stiffness	10kN/mm		
Vertical test space*	960mm		
Distance between axis and frame	100mm		
Protection function	force overload protection, limit protection, anti-collision protection voltage overload protection		
Power supply	AC 220V, 50Hz, 0.6kW		
Dimension (L×W×H)	580×520×1580mm		
Net weight	150kg		

*Can be customized according to test requirements

SPECIFICATION OF ELECTRONIC EXTENSOMETER (OPTIONAL)

Code	Accuracy of deformation	Gauge length	Deformation
UTM-G-EX12D5-5	±0.5%	12.5mm	5mm
UTM-G-EX15-5		15mm	5mm
UTM-G-EX20-10		20mm	10mm
UTM-G-EX25-5		25mm	5mm
UTM-G-EX25-10		25mm	10mm
UTM-G-EX25-12D5		25mm	12.5mm
UTM-G-EX50-5		50mm	5mm
UTM-G-EX50-10		50mm	10mm
UTM-G-EX50-25		50mm	25mm
UTM-G-EX75-25		75mm	25mm
UTM-G-EX100-5		100mm	5mm
UTM-G-EX100-10		100mm	10mm
UTM-G-EX100-25		100mm	25mm
UTM-G-EX200-10		200mm	10mm
UTM-G-EX200-20		200mm	20mm
UTM-G-EX220-20		220mm	20mm
UTM-G-EX250-10		250mm	10mm
UTM-G-EX250-25		250mm	25mm
UTM-G-EX500-10		500mm	10mm
UTM-G-EX500-25		500mm	25mm
UTM-G-EX600-10		600mm	10mm

To be continued

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SPECIFICATION OF LARGE DEFORMATION EXTENSOMETER (OPTIONAL)

Code	UTM-G-EX100L
Range of deformation	10~850mm
Accuracy of deformation	±0.5%
Resolution of deformation	7.8μm
Gauge length	10mm, 15mm, 20mm, 25mm, 50mm, 75mm, 100mm (adjustable)
Accuracy of gauge length	±0.25mm (room temperature)
Type of knife edge	flat blade edge, rubber roller blade edge
Range of clamp	thickness≤20mm, width≤30mm
Range of clamping force	4.5~23.5N
Length of measure arm	142~165mm
Net weight	5kg

SPECIFICATION OF AUTOMATIC EXTENSOMETER (OPTIONAL)

Code	UTM-G-EX350A	UTM-G-EX450A
Length of clamping arm	350mm	450mm
Range of deformation	0~80mm	0~100mm
Accuracy of deformation	<0.0015mm (deformation: 0~0.3mm) <0.5% (deformation: 0.3~100mm)	
Resolution of deformation	0.5μm	
Range of gauge length	20~250mm	
Accuracy of gauge length	±0.5%	
Type of knife edge	flat blade edge, arc blade edge	
Range of clamp	flat: 0.2~40mm, circular: Ø2~Ø40mm	

SPECIFICATION OF HIGH-TEMPERATURE EXTENSOMETER (OPTIONAL)

Code	UTM-G-EX50-5H
Range of deformation	0~5mm
Accuracy of deformation	±0.5%
Resolution of deformation	0.01μm
Gauge length	25mm, 50mm (adjustable)
Sensitivity	2mV/V
Linearity	<0.15%FS
Type of knife edge	flat blade edge
Clamping force	200cN
Test temperature	room temperature~1200°C
Net weight	0.95kg

SPECIFICATION OF HIGH-TEMPERATURE FURNACE (OPTIONAL)

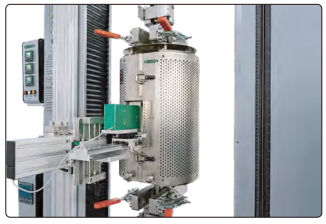
Code	UTM-G-FU1200
Internal structure	three-segment electric heating elements with segmented control
Range of temperature control	200°C~1200°C
Temperature fluctuation	±3°C (200°C~900°C), ±4°C (900°C~1200°C)
Temperature gradient	≤3°C (200°C~900°C) ≤4°C (900°C~1200°C)
Effective temperature uniformity	150mm
Furnace heating wire	resistance wire: Ø0.8~Ø1.2mm KANTHAL-A1
Service life of high-temperature furnace	operating time>10000 hours (≤1200°C)
Heating power	3.2kW
Power supply	AC380V, 3Ø, 50Hz

STANDARD DELIVERY

Main unit	1 pc
Control box	1 pc
Measuring software	1 pc
Computer	1 pc
Printer	1 pc
Compression fixture	1 set
Tensile fixture	1 set

automatic extensometer (**optional**)

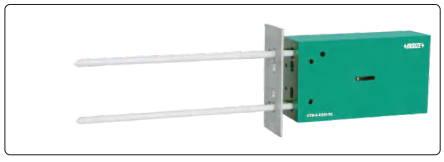
electronic extensometer (**optional**)



high-temperature furnace (**optional**)

large deformation extensometer (**optional**)

video extensometer (**optional**)



high-temperature extensometer (**optional**)

pneumatic parallel-push fixture (**optional**)

OPTIONAL ACCESSORY

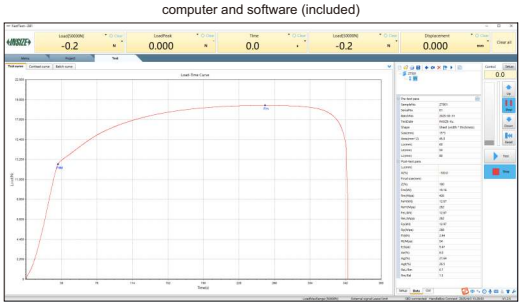
Fixture	rubber tensile fixture, film tensile fixture, bending fixture, pneumatic fixture other fixtures (customized)
Electronic extensometer	**UTM-G-EX** series (customizable)
Large deformation extensometer	**UTM-G-EX100L** (customizable)
Automatic extensometer	**UTM-G-EX350A** (customizable)
	UTM-G-EX450A (customizable)
High-temperature extensometer	**UTM-G-EX50-5H** (customizable)
High-temperature furnace	**UTM-G-FU1200** (customizable)
Video extensometer	**UTM-M** series
Security door	**UTM-G-SD1**
Workbench	**UTM-G-W1**

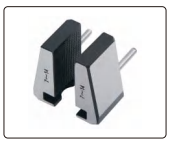
ELECTRONIC UNIVERSAL TESTING MACHINES

INSPECTION CERTIFICATE

VIDEO

computer and software (included)





flat jaws (included)

V-shaped jaws (included)

UTM-E50

- For testing and researching the mechanical properties of metals, ceramics, plastics, rubber and composite materials
- For research and quality control of mechanical properties of materials for a wide range of products such as mechanical components, electronic components, food packaging materials, chemical fibres, films and new energy batteries

SPECIFICATION

Code	UTM-E10	UTM-E20	UTM-E30	UTM-E50
Max. test force	10kN	20kN	30kN	50kN
Accuracy class	class 0.5			
Accuracy of test force	±0.5% of indicated value			
Range of test force	0.2%~100%FS			
Resolution of test force	1/500000FS			
Crossbeam displacement accuracy	±0.5% of indicated value			
Crossbeam displacement resolution	0.025μm			
Range of speed adjustment	0.001~500mm/min			
Accuracy of crossbeam speed	±1% of the set value (speed<0.5mm/min) ±0.2% of the set value (speed≥0.5mm/min)			
Range of force control speed	0.005~5%FS/s			
Accuracy of constant load force	±2% of the set value (speed<0.05%FS/s) ±0.5% of the set value (speed≥0.05%FS/s)			
Compression fixture	Ø100mm	Ø100mm	Ø100mm	Ø100mm
Wedge tension fixture	flat jaw: 0~7mm	flat jaw: 0~7mm V-jaw: Ø4~Ø9mm	flat jaw: 0~7mm V-jaw: Ø4~Ø9mm	flat jaw: 0~14mm V-jaw: Ø4~Ø14mm
Effective test width *	400mm	440mm	440mm	440mm
Vertical test space *	1030mm	970mm	970mm	970mm
Effective compression height *	800mm	700mm	700mm	700mm
Dimension (L×W×H)	715×500×1680mm	820×620×1880mm	820×620×1880mm	820×620×1880mm
Net weight	230kg	350kg	350kg	350kg
Power supply	AC 220V, 50Hz, 0.4kW~1kW			

*Can be customized according to test requirements

To be continued

Continued from previous page

SPECIFICATION

Code	UTM-E100	UTM-E200	UTM-E300	UTM-E600
Max. test force	100kN	200kN	300kN	600kN
Accuracy class	class 0.5			
Accuracy of test force	±0.5% of indicated value			
Range of test force	0.2%~100%FS			
Resolution of test force	1/500000FS			
Crossbeam displacement accuracy	±0.5% of indicated value			
Crossbeam displacement resolution	0.025μm			
Range of speed adjustment	0.001~500mm/min			0.001~250mm/min
Accuracy of crossbeam speed	±1% of the set value (speed<0.5mm/min) ±0.2% of the set value (speed≥0.5mm/min)			
Range of force control speed	0.005~5%FS/s			
Accuracy of constant load force	±2% of the set value (speed<0.05%FS/s) ±0.5% of the set value (speed≥0.05%FS/s)			
Compression fixture	Ø160mm	Ø150mm	Ø150mm	Ø200mm
Wedge tension fixture	flat jaw: 0~20mm V-jaw: Ø8~Ø26mm	flat jaw: 0~30mm V-jaw: Ø8~Ø36mm	flat jaw: 0~30mm V-jaw: Ø8~Ø36mm	flat jaw: 0~30mm V-jaw: Ø8~Ø46mm
Effective test width*	600mm	600mm	600mm	750mm
Vertical test space*	1250mm	1000mm	1000mm	1100mm
Effective compression height*	700mm	600mm	600mm	650mm
Dimension (L×W×H)	1070×855×2180mm	1070×920×2550mm	1070×920×2550mm	1580×1140×2980mm
Net weight	1000kg	1500kg	1500kg	5000kg
Power supply	AC380V, 3Ø, 50Hz, 2kW~5kW			

*Can be customized according to test requirements

SPECIFICATION OF LARGE DEFORMATION EXTENSOMETER (OPTIONAL)

Code	UTM-EY1	UTM-EY2
Range of deformation	10~800mm	
Accuracy of deformation	±1%	
Resolution of deformation	0.01mm	0.004mm
Type of blade	flat blade	
Range of clamp	thicknesses<10mm, width<30mm	

STANDARD DELIVERY

Main unit	1 pc
Control box	1 pc
Measuring software	1 pc
Computer	1 pc
Printer	1 pc
Compression fixture	1 set
Wedge tension fixture	1 set

large deformation extensometer
(**optional**)

OPTIONAL ACCESSORY

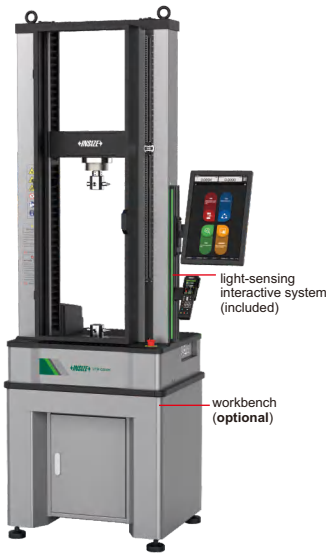
Fixture	**UTM-F** series (customized, selection of specifications according to test requirements)
Extensometer	**UTM-EX** series (customizable)
Video extensometer	**UTM-M** series
Large deformation extensometer	**UTM-EY** series (customizable)
Security door	customized, available in plexiglass or wire mesh

ELECTRONIC UNIVERSAL TESTING MACHINES (ADVANCED TYPE)

INSPECTION CERTIFICATE

CUSTOMIZABLE

VIDEO



UTM-GB50K

UTM-GB300K

UTM-GB600K

- According to GB/T, ISO, ASTM etc.
- For testing and researching the mechanical properties such as tension, compression, bending, shear and peeling of metals, non-metals and composite materials
- With a high-rigidity frame structure to achieve low-vibratio and precise loading
- With powerful operation and analysis software
- With touchscreen and button integrated control box

SPECIFICATION FOR LIGHT-SENSING INTERACTIVE SYSTEM

Equipment status	Light strip color	Light strip behavior
Power on	yellow	steady on
Standby (servo OFF)	yellow	bidirectional running lights
Standby (servo ON)	blue	steady on
Standby (servo ON)>60s	blue	breathing light
Alarm (limit, overload, etc.)	red	steady on
Upward	green	upward running lights
Downward	green	downward running lights
Load holding	green	steady on

SPECIFICATION

Code	UTM-GB10K	UTM-GB50K	UTM-GB100K	UTM-GB300K	UTM-GB600K
Max. test force*	10kN	50kN	100kN	300kN	600kN
Type of testing machine*	bench-top single-space	bench-top single-space	floor-standing single-space		
Accuracy class	0.5 class				
Accuracy of test force	±0.5%				
Range of test force	0.4%~100%FS				
Resolution of test force	1/600000FS				
Accuracy of crossbeam displacement	±0.2% or ±0.01mm (whichever is larger)				
Resolution of crossbeam displacement	0.0110μm	0.0100μm	0.0095μm	0.0067μm	0.0110μm
Minimum test speed	0.00005mm/min				0.0005mm/min
Maximum test speed	2000mm/min	900mm/min	850mm/min	600mm/min	330mm/min
Maximum return speed	2400mm/min	1500mm/min	1200mm/min	1200mm/min	500mm/min
Accuracy of crossbeam speed	0.05mm/min~100%FS, ±0.2% of the set value				
Resolution of deformation	1/600000FS				
Accuracy of strain measurement	superior to the requirements of standards such as:GB/T 228, ISO 6892-1, ASTM E8, and ASTM E21				
Frequency of data sampling*	1200Hz				
Frequency of control loop*	1200Hz				
Stiffness	50kN/mm	180kN/mm	270kN/mm	380kN/mm	900kN/mm
Vertical test space*	1090mm	1000mm	1350mm	1200mm	750mm
	/	/	/	/	including hydraulic horizontal-thrust fixture
Effective test width	420mm	420mm	600mm	600mm	750mm
Protection function	force overload protection, limit protection, anti-collision protection, voltage overload protection				
Power supply	AC 220V 50/60Hz, 1kW	AC 220V 50/60Hz, 1.5kW	AC 380V, 3Ø 50/60Hz, 2kW	AC 380V, 3Ø 50/60Hz, 4.6kW	AC 380V, 3Ø 50/60Hz, 7kW
Dimension (L×W×H)	1700×770×640mm	1700×770×640mm	2550×1175×710mm	2550×1175×710mm	1430×850×2760mm
Net weight	310kg	400kg	1000kg	1300kg	3500kg

*Can be customized according to test requirements

To be continued

Continued from previous page

SPECIFICATION OF ELECTRONIC FIXTURE (INCLUDED)

Code		UTM-GB10K	UTM-GB50K	UTM-GB100K	UTM-GB300K	UTM-GB600K
Compression fixture	max. force	20kN	100kN	100kN	300kN	600kN
	diameter	Ø100mm	Ø00mm	Ø50mm	Ø50mm	/
	operating temperature	room temperature				
Dispositivo** de fijación en cuña	max. force	20kN	50kN	100kN	300kN	600kN
	type of fixture	mechanical fixture				hydraulic flat-push fixture
	operating temperature	room temperature				
	clamping range of flat jaw	0~6mm 6~12mm	0~7mm 7~14mm 14~21mm	0~7mm 7~14mm 14~21mm	0~8mm 8~16mm 16~24mm 24~32mm	2~60mm
	clamping range of V-jaw	Ø4~Ø9mm Ø9~Ø14mm	Ø4~Ø9mm Ø9~Ø14mm Ø4~Ø9mm	Ø4~Ø9mm Ø9~Ø14mm Ø4~Ø9mm	Ø4~Ø9mm Ø9~Ø16mm Ø16~Ø23mm Ø23~Ø30mm	Ø10~Ø20mm Ø20~Ø45mm

** High-hardness jaw clamps can be customized

SPECIFICATION OF ELECTRONIC EXTENSOMETER (OPTIONAL)

Code	Accuracy of deformation	Gauge length	Deformation
UTM-G-EX12D5-5	±0.5%	12.5mm	5mm
UTM-G-EX15-5		15mm	5mm
UTM-G-EX20-10		20mm	10mm
UTM-G-EX25-5		25mm	5mm
UTM-G-EX25-10		25mm	10mm
UTM-G-EX25-12D5		25mm	12,5mm
UTM-G-EX50-5		50mm	5mm
UTM-G-EX50-10		50mm	10mm
UTM-G-EX50-25		50mm	25mm
UTM-G-EX75-25		75mm	25mm
UTM-G-EX100-5		100mm	5mm
UTM-G-EX100-10		100mm	10mm
UTM-G-EX100-25		100mm	25mm
UTM-G-EX200-10		200mm	10mm
UTM-G-EX200-20		200mm	20mm
UTM-G-EX220-20		220mm	20mm
UTM-G-EX250-10		250mm	10mm
UTM-G-EX250-25		250mm	25mm
UTM-G-EX500-10		500mm	10mm
UTM-G-EX500-25		500mm	25mm
UTM-G-EX600-10		600mm	10mm

electronic extensometer (**optional**)

SPECIFICATION OF LARGE DEFORMATION EXTENSOMETER (OPTIONAL)

Code	UTM-G-EX100L
Range of deformation	10~850mm
Accuracy of deformation	±0.5%
Resolution of deformation	7.8μm
Gauge length	10mm, 15mm, 20mm, 25mm, 50mm, 75mm, 100mm (adjustable)
Accuracy of gauge length	±0.25mm (room temperature)
Type of knife edge	flat blade edge, rubber roller blade edge
Range of clamp	thickness≤20mm, width≤30mm
Range of clamping force	4.5~23.5N
Length of measure arm	142~165mm
Net weight	5kg

large deformation extensometer (**optional**)

To be continued

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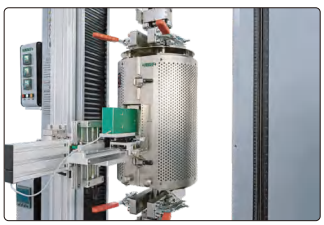
SPECIFICATION OF AUTOMATIC EXTENSOMETER (OPTIONAL)

Code	UTM-G-EX350A	UTM-G-EX450A
Length of clamping arm	350mm	450mm
Range of deformation	0~80mm	0~100mm
Accuracy of deformation	<0.0015mm (deformation: 0~0.3mm) <0.5% (deformation: 0.3~100mm)	
Resolution of deformation	0.5μm	
Range of gauge length	20~250mm	
Accuracy of gauge length	±0.5%	
Type of knife edge	flat blade edge, arc blade edge	
Range of clamp	flat: 0.2~40mm, circular: Ø2~Ø40mm	

automatic extensometer (**optional**)

SPECIFICATION OF HIGH-TEMPERATURE EXTENSOMETER (OPTIONAL)

Code	UTM-G-EX50-5H
Range of deformation	0~5mm
Accuracy of deformation	±0.5%
Resolution of deformation	0.01μm
Gauge length	25mm, 50mm (adjustable)
Sensitivity	2mV/V
Linearity	<0.15%FS
Type of knife edge	flat blade edge
Clamping force	200cN
Test temperature	room temperature~1200°C
Net weight	0.95kg

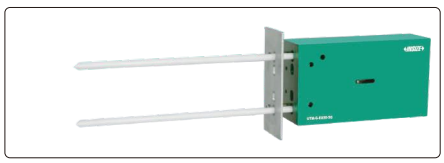


high-temperature furnace (**optional**)

video extensometer (**optional**)

SPECIFICATION OF HIGH-TEMPERATURE FURNACE (OPTIONAL)

Code	UTM-G-FU1200
Internal structure	three-segment electric heating elements with segmented control
Range of temperature control	200°C~1200°C
Temperature fluctuation	±3°C (200°C~900°C), ±4°C (900°C~1200°C)
Temperature gradient	≤3°C (200°C~900°C) ≤4°C (900°C~1200°C)
Effective temperature uniformity	150mm
Furnace heating wire	resistance wire: Ø0.8~Ø1.2mm KANTHAL-A1
Service life of high-temperature furnace	operating time>10000 hours (≤1200°C)
Heating power	3.2kW
Power supply	AC380V, 3Ø, 50Hz



high-temperature extensometer (**optional**)

pneumatic parallel-push fixture (**optional**)

OPTIONAL ACCESSORY

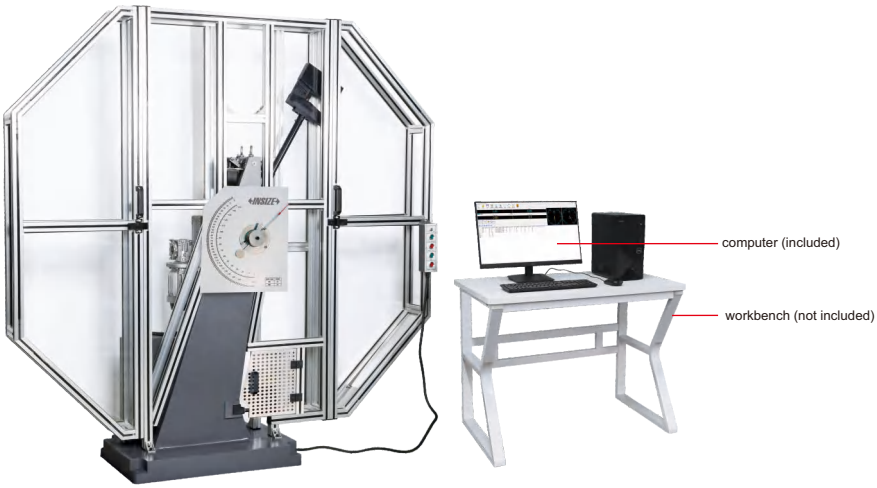
Fixture	bending fixture, shear fixture, pneumatic fixture, hydraulic fixture, other fixtures (customized)
Electronic extensometer	**UTM-G-EX** series (customizable)
Large deformation extensometer	**UTM-G-EX100L** (customizable)
Automatic extensometer	**UTM-G-EX350A** (customizable)
	UTM-G-EX450A (customizable)
High-temperature extensometer	**UTM-G-EX50-5H** (customizable)
High-temperature furnace	**UTM-G-FU1200** (customizable)
Video extensometer	**UTM-M** series
Security door	**UTM-G-SD2**
Workbench	**UTM-G-W2**

STANDARD DELIVERY

Main unit	1 pc
Control box	1 pc
Measuring software	1 pc
Computer	1 pc
Printer	1 pc
Compression fixture	1 set
Tensile fixture	1 set

IMPACT TESTING MACHINES

VIDEO



ITM-S300J

low-temperature chamber (**optional**)

- According to GB/T 3808, GB/T 229, JJG 145, ASTM E23 (with American standard blade), ISO 148.1, ISO 148.2, ISO 148.3, ISO R83
- For testing the anti-impact performance of metal materials under dynamic load
- Capable of performing metal impact tests in large quantities on a continuous basis

SPECIFICATION

Code	ITM-S150J	ITM-S300J
Impact energy	150J	300J
Dial range	0~150J	0~300J
Dial graduation	1J	2J
Pendulum moment	M=80.3848N·m	M=160.7695N·m
Pendulum preparing angle	150°	
Distance between pendulum shaft center and specimen center	750mm	
Impact speed	5.24m/s	
Span of specimen seat	40mm	
End face radius of specimen seat	R (1.0~1.5)mm	
Radius of impact blade	R (2.0~2.5)mm	
Inclination angle of support surface of specimen seat	11°±1°	
Angle of impact blade	30°±1°	
Thickness of impact blade	16mm	
Range of measuring angle	0~360°	
Angle resolution	≤0.06°	
Specimen size	10×10×55mm	
Base size	800×500mm	
Dimension of main body	2050×690×2015mm	
Net weight	450kg	
Power supply	AC 380V, 3Ø, 50Hz	
Power	400W	

To be continued

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SPECIFICATION OF LOW-TEMPERATURE CHAMBER (OPTIONAL)

Code	ITM-S-40	ITM-S-60	ITM-S-80	ITM-S-80S	ITM-S-100	ITM-S-196*
Range of temperature	room temperature ~-40°C	room temperature ~-60°C	room temperature ~-80°C	room temperature ~-80°C	room temperature ~-100°C	-20°C~-196°C
Accuracy of temperature control	±0.5°C					±2°C
Evenness	≤1.0°C					≤2.0°C
Resolution	0.1°C					0.1°C
Method of refrigeration	compressor refrigeration					liquid nitrogen refrigeration
Cooling medium	ethanol or other unfrozen liquid					liquid nitrogen
Number of specimen	≥60 pcs					
Cooling speed	+25°C~0°C about 1.5°C/min, 0°C~-20°C about 1.2°C/min, -20°C~-40°C about 1.0°C/min	+25°C~0°C about 1.8°C/min, 0°C~-20°C about 1.5°C/min, -20°C~-40°C about 1.3°C/min, -40°C~-60°C about 1.0°C/min	+25°C~0°C about 1.5°C/min, 0°C~-20°C about 1.3°C/min, -20°C~-60°C about 1.0°C/min, -60°C~-80°C about 0.8°C/min		+25°C~0°C about 2.0°C/min, 0°C~-40°C about 1.5°C/min, -40°C~-80°C about 1.3°C/min, -80°C~-100°C about 0.8°C/min	1°C~-3°C
Heating speed	3°C/min					
Timekeeping device	1min~9999min, resolution: 1min					
Volume of refrigeration room (L×W×H)	275×160×120mm					
Effective volume of refrigeration room (L×W×H)	150×140×110mm					
External dimension (L×W×H)	910×510×920mm			755×555 ×950mm	1105×705 ×1110mm	710×600 ×740mm
Material of the case	Iron shell spraying moulding			stainless steels	Iron shell spraying moulding	stainless steels
Power supply	AC220V, 3Ø, 50Hz, 1.8kW	AC220V,3Ø, 50Hz, 2.3kW	AC220V, 3Ø, 50Hz, 2.5kW	AC220V, 3Ø, 50Hz, 2.5kW	AC 220V, 3Ø, 50Hz, 3.0kW	AC 220V, 3Ø, 50Hz, 100W

* For test >-20°C, **ITM-S-80** is recommended

STANDARD DELIVERY

Main unit		1 pc
Control cabinet		1 pc
Simply supported beam fixture (including jaws, anvil)		1 set
Pendulum	ITM-S150J	150J pendulum
	ITM-S300J	300J pendulum and 150J pendulum
Span aligner		1 pc
Tongs		1 pc
Safety cover		1 set
Software		1 set
Computer		1 pc
Printer		1 pc

OPTIONAL ACCESSORY

Workbench	7911-15
150J pendulum	ITM-S-PE150J
300J pendulum	ITM-S-PE300J
ASTM standard impact blade	ITM-S-ASTM-IB
Sample recovery device	ITM-S-RD
Digital display screen	ITM-S-DDS
Impact specimen notch projector (GB/T 229, ASTM E23)	ISP-Z2
Low-temperature chamber	ITM-S-40
	ITM-S-60
	ITM-S-80
	ITM-S-80S
	ITM-S-100
	ITM-S-196
Impact specimen notch broaching machine (double broaches)	ITM-U32
Impact standard sample	ITM-BR series

PLASTIC PENDULUM IMPACT TESTING MACHINES (ADVANCED TYPE)

INSPECTION CERTIFICATE

CAN BE CONFIGURED ACCORDING TO CUSTOMER REQUIREMENT

- According to GB/T 1043, GB/T 1843, GB/T 13525, ISO 179, ISO 180, ASTM D6110, ASTM D256
- For impact resistance testing of non-metallic materials including plastics, nylon, rubber, wood, fiberglass, composite plastic pipes and electrical insulating materials
- Easy adjustment and replacement of supports, with strong applicability
- Customizable microcomputer and instrumented models

ITM-G50A

SPECIFICATION

Code		ITM-G50A	
GB/T 1043 ISO 179	Charpy impact energy	1J, 2J, 4J, 5J, 7,5J, 15J, 25J, 50J	
	radius of the pendulum	230mm(≤5J)	395mm(>5J)
	impact velocity	2.9m/s	3.8m/s
	angle of the striking edge	30°±1°	
	radius of the striking edge	2±0.5mm	
	radius of the support	1±0.1mm	
	front angle of the support	5°±1°	
	rear angle of the support	10°±1°	
	pendulum pre-elevation angle	150°	
	span of the standard support	40mm, 60mm, 62mm, 70mm	
GB/T 1843 ISO 180	Izod impact energy	1J, 2.75J, 5.5J, 11J, 22J	
	radius of the pendulum	335mm	
	impact velocity	3.5m/s	
	angle of the striking edge	75°	
	radius of the striking edge	0.8±0.2mm	
	rake angle of the cutting edge	5°	
	relief angle of the cutting edge	10°	
	pendulum pre-elevation angle	150°	
Resolution of energy		1/2375FS	
Resolution of angle		0.045°	
Power supply		AC 220V, 50Hz, 0.3kW	
Dimension (LxWxH)		1000×475×780mm	
Net weight		140kg	

SPECIFICATION

Code		ITM-G50B
ASTM D6110	Charpy impact energy	2.7J, 5.4J, 10.8J, 21.6J
	radius of the pendulum	327mm
	impact velocity	3.46m/s
	angle of the striking edge	45°
	radius of the striking edge	3.17±0.12mm
	radius of the support	3.17±0.12mm
	pendulum pre-elevation angle	150°
	span of the standard support	95.3mm
ASTM D256	Izod impact energy	2.7J, 5.4J, 10.8J, 21.6J
	radius of the pendulum	335mm
	impact velocity	3.46m/s
	angle of the striking edge	80°
	radius of the striking edge	0.8mm
	pendulum pre-elevation angle	145.2°
	fillet radius of the fixture jaw	0.25°
Resolution of energy		1/2375FS
Resolution of angle		0.045°
Power supply		AC 220V, 50Hz, 0.3kW
Dimension (LxWxH)		1000×475×780mm
Net weight		140kg

*OPTION SELECTION TABLE

Name	Code	Standard	Specification of pendulum	Code	Specification of support	Code
main unit	ITM-G50C (optional model)	GB/T 1043 ISO 179	1J Charpy pendulum	ITM-G-N1	standard Charpy support (with extension block)	ITM-GA-N1
			2J Charpy pendulum	ITM-G-N2		
			4J Charpy pendulum	ITM-G-N3		
			5J Charpy pendulum	ITM-G-N4		
		GB/T 1043 ISO 179	7.5J Charpy pendulum	ITM-G-N5	standard Charpy support	ITM-GA-N2
			15J Charpy pendulum	ITM-G-N6		
			25J Charpy pendulum	ITM-G-N7		
			50J Charpy pendulum	ITM-G-N8		
		GB/T 1843	1J Izod pendulum	ITM-G-N9	standard Izod support	ITM-GA-N3
			2.75J Izod pendulum	ITM-G-N10		
			5.5J Izod pendulum	ITM-G-N11		
		ISO 180	2.75J Izod pendulum	ITM-G-N10	standard Izod support	ITM-GA-N3
			5.5J Izod pendulum	ITM-G-N11		
		GB/T 1843 ISO 180	11J Izod pendulum	ITM-G-N12	standard Izod support	ITM-GA-N3
			22J Izod pendulum	ITM-G-N13		
		ASTM D6110	2.7J Charpy pendulum	ITM-G-N14	ASTM standard Charpy support	ITM-GB-N1
			5.4J Charpy pendulum	ITM-G-N15		
			10.8J Charpy pendulum	ITM-G-N16		
			21.6J Charpy pendulum	ITM-G-N17		
		ASTM D256	2.7J Izod pendulum	ITM-G-N18	standard Izod support	ITM-GB-N2
			5.4J Izod pendulum	ITM-G-N19		
			10.8J Izod pendulum	ITM-G-N20		
			21.6J Izod pendulum	ITM-G-N21		

*Selection procedure (main unit + pendulum + support):
1.Select the test standard 2.Select the pendulum corresponding to the test standard
3.Select the support corresponding to the pendulum

VIDEO

STANDARD DELIVERY

ITM-G50A	main unit	1 pc
	Charpy pendulum	8 pcs
	Izod pendulum	5 pcs
	standard Charpy support (with extension block)	1 pc
	standard Charpy support	1 pc
	standard Izod support	1 pc
ITM-G50B	main unit	1 pc
	ASTM Charpy pendulum	4 pcs
	ASTM Izod pendulum	4 pcs
	ASTM standard Charpy support	1 pc
	standard Izod support	1 pc

FRICTION/PEEL TESTERS

VIDEO

- According to GB/T 10006, GB/T 2790, GB/T 2791, GB/T 2792, ISO 8295, ISO 8510-2, ASTM D1894, ASTM D4917
- Suitable for plastic film, foil, paper, cardboard, fabrics, communication cables and cables with metal materials composite belt, conveyor belt, paper and other related materials, dynamic and static coefficient of friction and adhesive composite products, medical patches, paper, protective film and other products, peel strength determination
- Seven-inch industrial touch screen, man-machine interface stylish, convenient
- Wide-range, high-precision temperature control device easily realises testing of specimens at different temperatures
- Infinitely variable speed, multi-speed adjustable, to meet the different needs of customers
- The standard test bench and test slider are demagnetised and tested for residual magnetism, effectively reducing systematic testing errors
- The system is controlled by a computer and a microprocessor, making it easy for the user to carry out the test quickly
- Equipped with USB interface, professional measurement and control software, you can control the instrument through the software to complete the test

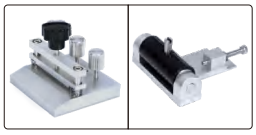
STM-A10

slider (200g) (included)

connector (included)

weight (300g) (included)

retainer block (included)



peel fixture (included)

SPECIFICATION

Code	STM-A05	STM-A10	STM-A30
Max. test force	5N	10N	30N
Accuracy of test force	±0.5%		
Resolution of test force	0.001N		
Range of test force	0.5%~100%FS		
Range of speed adjustment	1~600mm/min		
Weight of slider	200g		
Dimension (L×W×H)	850×350×290mm		
Net weight	30kg		
Power supply	AC 220V, 50Hz		

STANDARD DELIVERY

Main unit	1 pc
Slider (200g)	1 pc
Connector	1 pc
Net weight (300g)	1 pc
Retainer block	1 pc
Peel fixture	1 set
Ø6 polyurethane tube (5m)	1 pc
Fuse	3 pcs
Test board (50×125mm)	3 pcs

OPTIONAL ACCESSORY

Professional software*		STM-AF1
Communication cable		STM-AF2
Standard press roller		STM-AF3
Slider (100g)		STM-AF4
Weight (800g)		STM-AF5
Weight (1614g)		STM-AF6
Weight (1800g)		STM-AF7
Test board (40×180mm)		STM-AF8
Stainless steel sampling knives	10mm	STM-AF9
	15mm	STM-AF10
	20mm	STM-AF11
	25mm	STM-AF12
	25.4mm	STM-AF13
Stainless steel sampling blade (10 pcs)		STM-AF14
Non-standard fixture		customized, selection of specifications according to test requirements

*STM-AF2 is required when purchasing STM-AF1

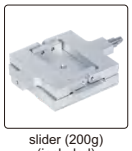
FRICTION TESTERS

VIDEO

INSPECTION CERTIFICATE

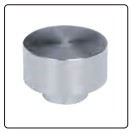
- According to GB/T 10006, ISO 8295, ASTM D1894, TAPPI T816 and HG/T 2729
- Suitable for measuring the static and dynamic friction coefficients of materials such as plastic films, sheets, rubber, paper and paperboard, fabrics, metal composite tapes for communication cables and optical cables, conveyor belts, wood, coatings, brake pads, windshield wipers, shoe materials, etc.
- Equipped with a 7-inch touch screen, featuring a stylish and convenient human-machine interface
- It enables stepless speed regulation and operates stably
- Both the test bench surface of the instrument and the test slider have undergone degaussing treatment and residual magnetism detection, effectively reducing the system test error
- Equipped with a USB communication interface

DTM-B10



slider (200g) (included)

connector (included)



weight (300g) (included)

retainer block (included)

SPECIFICATION

Code	DTM-B10	DTM-B30
Max. test force	10N	30N
Accuracy of test force	±0.5%	
Resolution of test force	0.001N	
Range of test force	0.5%~100%FS	
Range of speed adjustment	1~800mm/min	
Weight of slider	200g	
Power supply	AC 220V, 50Hz	
Dimension (L×W×H)	800×390×260mm	
Net weight	25kg	

OPTIONAL ACCESSORY

Slider (100g)	DTM-B-1
Weight (800g)	DTM-B-2
Weight (1614g)	DTM-B-3
Weight (1800g)	DTM-B-4
Non-cushioned connector	DTM-B-5
Non-standard fixture*	customized

*Selection of specifications according to test requirements

STANDARD DELIVERY

Main unit	1 pc
Slider (200g)	1 pc
Connector	1 pc
Weight (300g)	1 pc
Retainer block	1 pc

ELECTRONIC PEEL TESTERS

INSPECTION CERTIFICATE

VIDEO

DTM-CA30

DTM-CB50

- According to GB/T 4850, GB/T 7754, GB/T 8808, GB/T 13022, GB/T 7753, GB/T 17200, GB/T 2790, GB/T 2791, GB/T 2792, QB/T 2358, YYT 0507, YYT 0148, JIS-Z 0237, HG/T 2406-2002
- Suitable for the peeling, shearing and pulling off performance test of adhesive, release paper, adhesive tape, self-adhesive, composite film, artificial leather, woven bag, film, paper, electronic carrier tape and other products
- Industrial touch screen, easy operation
- Three measurement modes: maximum, real-time and average values
- Test results can be output for group statistical analysis

STANDARD DELIVERY

Main unit	1 pc
Peel fixture	1 pc

SPECIFICATION

Code	DTM-CA30	DTM-CA100	DTM-CB30	DTM-CB200
Max. test force	30N	100N	30N	200N
Accuracy of test force	±0.5%			
Resolution of test force	0.001N			
Range of test force	0.5%~100%FS			
Range of speed adjustment	1~500mm/min			
Width of specimen	30mm (included)/50mm (**optional**)			
Stroke	400mm		650mm	
Power supply	AC 220V, 50Hz			
Dimension (L×W×H)	750×300×165mm		965×390×360mm	
Net weight	18kg		27kg	

OPTIONAL ACCESSORY

Test board (50×125mm, 3pcs)		DTM-C-1
Standard press roller		DTM-C-2
Stainless steel sampling knives	10mm	DTM-C-3
	15mm	DTM-C-4
	20mm	DTM-C-5
	25mm	DTM-C-6
	25.4mm	DTM-C-7
Stainless steel sampling blade (10 pcs)		DTM-C-8
Non-standard fixture *		customized

* Selection of specifications according to test requirements

TERMINAL TENSION TESTER (BASIC TYPE) CODE DTM-PA1K

CUSTOMIZABLE

INSPECTION CERTIFICATE

- Suitable for terminal pull force testing, adapts to various wire harness terminal production and quality inspection scenarios, and is widely used in industries such as electronic manufacturing, automotive wire harnesses, communication equipment and home appliances
- One-click testing, automatic reset, flexible testing, reliable data
- Built-in 28 standard test programs and 16 modifiable programs
- The chuck is suitable for wires and terminals of various specifications, and can be customized for special requirements

DTM-PA1K

SPECIFICATION

Max. test force	1kN
Accuracy	±1%
Unit	N, kgf, lbf
Test method	retention method, pull-out method
Speed	1~600mm/min
Dimension (L×W×H)	430×180×210mm
Net weight	10kg
Power supply	AC 220V, 50Hz

STANDARD DELIVERY

Main unit	1 pc
Hexagon socket wrench	1 set

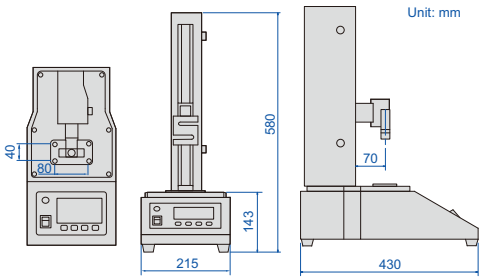
ELECTRONIC TENSILE AND COMPRESSION TESTING MACHINES

tensile fixture (included)

compression fixture (included)

VIDEO

UTM-SC1000



- Suitable for tensile, peeling and tearing tests of metal wires, metal foils, plastics, food packaging, textile fibres, wires and cables, adhesives, connectors and other industries
- Fixed force test, fixed displacement test, fixed deformation test and cycle test can be realised
- Automatically obtain the maximum force, tensile strength, compressive strength, elongation at break, average peeling strength, average peeling force and other test data
- Overload emergency shutdown protection device, up and down travel limit protection device
- Leakage automatic power-off system, automatic breakpoint stop function

test interface

SPECIFICATION

Code	UTM-SC100	UTM-SC200	UTM-SC500	UTM-SC1000
Max. test force	100N	200N	500N	1000N
Accuracy class	class 0.5			
Test force measurement range	0.4%~100%FS			
Test force measurement accuracy	±0.5% of indicating value			
Test force measurement resolution	0.01N			
Deformation measurement range	0.2%~100%FS			
Deformation measurement accuracy	±0.5% of indicating value			
Deformation measurement resolution	0.001mm			
Displacement range *	0~300mm			
Displacement accuracy	±0.5% of indicating value			
Displacement resolution	0.001mm			
Displacement speed adjustment range	0.1~500mm/min			
Effective tensile travel *	150mm			
Power supply	AC110~220V, 50/60Hz			
Dimension	430×215×580mm			
Net weight	15kg			

*Can be customized according to test requirements

STANDARD DELIVERY

Main unit	1 pc
Tensile fixture	1 set
Compression fixture	1 set

OPTIONAL ACCESSORY

Fixture	customized, selection of specifications according to test requirements

DIGITAL SPRING TESTERS

DATA OUTPUT

VIDEO

- Peak hold and automatic release function
- Set upper and lower limits, red and green indicator and buzzer alarm
- Automatic conversion of three units: N, kgf, lbf
- Built in printer
- Automatic power off

ISF-S500

SPECIFICATION

Code	ISF-S50	ISF-S100	ISF-S200	ISF-S300	ISF-S500
Maximum load	50N	100N	200N	300N	500N
Resolution	0.01N	0.02N	0.05N	0.1N	0.1N
Range of digital scale	95mm				
Resolution of digital scale	0.01mm				
Disk diameter	Ø49mm				
Maximum free length of spring	95mm				
Measuring range of force	5%~100% (maximum load)				
Accuracy of force	±1% (maximum load)				
Data output	RS232				
Power supply	220V, 50/60Hz				
Dimension	300×235×620mm				
Net weight	17.3kg	19.1kg	19.1kg	19.1kg	20.8kg

STANDARD DELIVERY

Main unit	1 pc

OPTIONAL ACCESSORY

Data output cable (keyboard format)	7302-ISF-S

DIGITAL FORCE GAUGES (STANDARD TYPE)

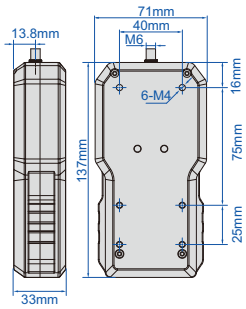
DATA OUTPUT

INSPECTION CERTIFICATE

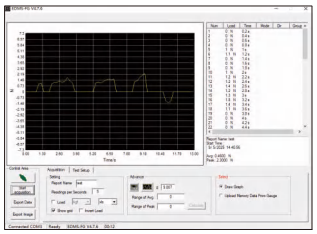
VIDEO

- Can be used for tension and pressure tests
- Peak (max.) and tracking mode
- Units for type: mN, N, gf, kgf, ozf, lbf,
- Tolerance testing
- 1000 memories
- Automatic power off, overload alarm
- Metal case, touch buttons
- LCD display with backlight
- The display flips over when the bottom faces up
- Two display modes: digital mode, chart mode
- Keyboard signal, can be transmitted to Excel

ISF-DF100A



printer (**optional**)

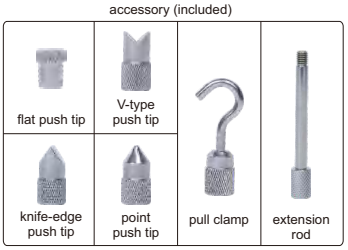


software (included)

SPECIFICATION

Code	ISF-DF50A	ISF-DF100A	ISF-DF200A	ISF-DF500A	ISF-DF1KA
Type	internal sensor				
Load capacity (N)	50	100	200	500	1000
Range	5%~100%FS				
Resolution (N)	0.005	0.01	0.05	0.05	0.1
Accuracy	±0.2%FS				
Power supply	built-in rechargeable battery				

accessory (included)



STANDARD DELIVERY

Main unit	1 pc
AC/DC adapter	1 pc
Software and USB cable	1 pc
Push/pull accessory	6 pcs (flat push tip, V-type push tip, knife-edge push tip, point push tip, pull clamp, extension rod)

OPTIONAL ACCESSORY

Printer	ISF-DF-PRINTER
Test stand	ISF-MT1K
Wireless transmitter (receiver is needed)	7315-ISF-D

DIGITAL FORCE GAUGES (BASIC TYPE)

VIDEO

INSPECTION CERTIFICATE

DATA OUTPUT

POPULAR MODEL

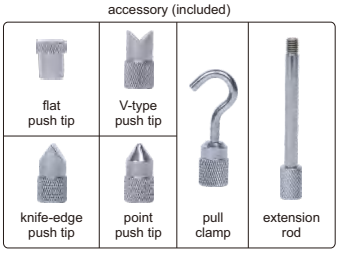
printer (**optional**)

software flash disk (included)

- Push and pull test
- Units: N, gf, kgf, ozf, lbf
- 500 memories
- Automatic power off
- Metal case
- LCD display with backlight
- The display flips over when the bottom faces up
- Overload alarm

ISF-1DF100

accessory (included)



SPECIFICATION

Code	ISF-1DF10	ISF-1DF50	ISF-1DF100	ISF-1DF500	ISF-1DF1000
Load capacity (N)	10	50	100	500	1000
Range	5%~100%FS				
Resolution (N)	0.01	0.01	0.1	0.1	1
Accuracy	±0.3%FS				
Measuring mode	tracking, peak (max.), tolerance testing				
Power supply	built-in rechargeable battery				
Dimension (L×W×H)	150×73×33mm				
Net weight	450g				

STANDARD DELIVERY

Main unit	1 pc
AC/DC adapter	1 pc
Software and USB cable	1 pc
Push/pull accessory	6 pcs (flat push tip, V-type push tip, knife-edge push tip, point push tip, pull clamp, extension rod)

OPTIONAL ACCESSORY

Printer	ISF-DF-PRINTER
Test stand	ISF-MT1K

TEST STAND FOR DIGITAL FORCE GAUGES CODE ISF-MT1K

- For digital force gauges (code **ISF-1DF□□** and **ISF-DF□□**)
- To be used in vertical and horizontal orientation

VIDEO

SPECIFICATION

Load capacity	1000N
Travel	200mm (3mm vertical movement per revolution of handwheel)
Dimension	196x250x446mm
Net weight	13kg

OPTIONAL ACCESSORY

Digital scale (range: 200mm, resolution: 0.01mm/0.0005")	**ISF-MT1K-SCALE**

force gauge is optional

horizontal orientation test

digital scale **(optional)**

FORCE GAUGES

- Push and pull test
- Peak (max.) or tracking mode

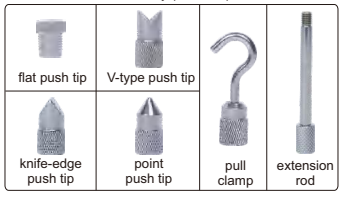
VIDEO

SPECIFICATION

Code		ISF-F10	ISF-F20	ISF-F30	ISF-F50	ISF-F100	ISF-F200	ISF-F300	ISF-F500
Capacity	(N)	10	20	30	50	100	200	300	500
	(kgf)	1	2	3	5	10	20	30	50
Graduation	(N)	0.05	0.1	0.2	0.25	0.5	1	2	2.5
	(kgf)	0.01	0.02	0.02	0.05	0.1	0.2	0.2	0.5
Accuracy		±1% (of load capacity)							

ISF-F500

accessory (included)



STANDARD DELIVERY

Main unit	1 pc
Push tip	4 pcs (flat, V type, knife-edge, point)
Pull clamp	1 pc
Extension rod	1 pc

OPTIONAL ACCESSORY

Test stand	**ISF-MT500**

TEST STAND FOR FORCE GAUGES CODE ISF-MT500

VIDEO

- For force gauges (code **ISF-F□□□**)
- To be used in vertical and horizontal orientation

horizontal orientation test

force gauge is optional

SPECIFICATION

Load capacity	500N
Travel	150mm (3mm vertical movement per revolution of handwheel)
Dimension	160×240×460mm
Net weight	12kg

FORCE GAUGE

- Push and pull test
- Peak (max.) or tracking mode

SPECIFICATION

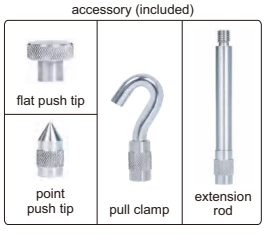
Code		ISF-KF5
Capacity	(N)	5000
	(kgf)	500
Graduation	(N)	20
	(kgf)	5
Accuracy		±2%FS
Dimension (L×W×H)		100×70×290mm
Net weight		3.2kg

ISF-KF5

STANDARD DELIVERY

Main unit	1 pc
Flat push tip	1 pc
Point push tip	1 pc
Pull clamp	1 pc
Extension rod	1 pc

accessory (included)



MANUAL HORIZONTAL TEST STAND FOR FORCE GAUGES CODE ISF-H20D

VIDEO

ATTENTION: ONLY FOR PULL TEST

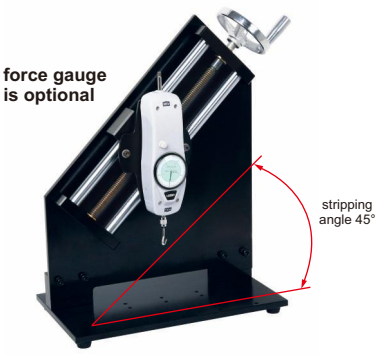
- For pull test with force gauges

SPECIFICATION

Apply to	digital force gauges (code **ISF-1DF□□□** and **ISF-DF□□□**)
Load capacity	500N
Travel	60mm
Dimension	450×185×170mm
Net weight	9kg

MANUAL STRIPPING FORCE TEST STAND CODE ISF-P30D

VIDEO



- For stripping force test with force gauges

SPECIFICATION

Apply to	digital force gauges (code **ISF-1DF□□□** and **ISF-DF□□□**)
Load capacity	500N
Horizontal travel	170mm
Dimension	420×215×480mm
Net weight	22kg

S-TYPE TENSILE/COMPRESSION SENSORS

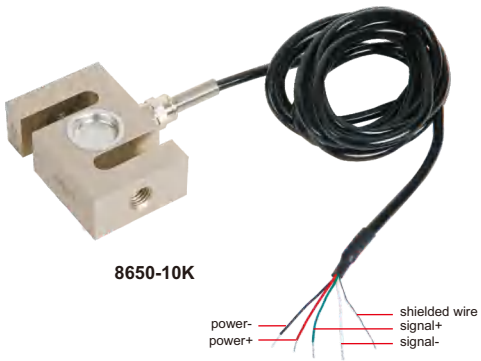
IF ONE INDICATOR IS USED FOR MULTIPLE SENSORS, CUSTOMIZATION IS REQUIRED

- Characteristic: bi-directional tension and compression, compact structure, high comprehensive precision, good long-term stability and nickel plating on the surface of high-quality alloy steel
- Application fields: universal material testing machines, hopper scales, hook scales, packaging scales, belt scales, plug-in force testers and other tension and pressure testing instruments as well as automation equipments

VIDEO

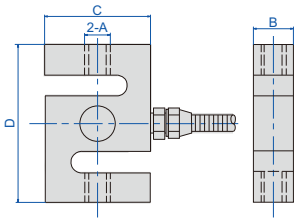
SPECIFICATION

Output sensitivity	2.0±10%mV/V
Zero output	±2%FS
Accuracy	0.15%FS
Response frequency	10kHz
Material	alloy steel
Electrical impedance	350Ω
Insulation impedance	≥5000MΩ/100VDC
Operating voltage	5~15V
Working temperature	-15~65°C
Safety overload	120%
Extreme overload	150%
Cable specification	Ø5mm: ≤1T, 2m; >1T, 5m
Extreme cable pulling force	10kg

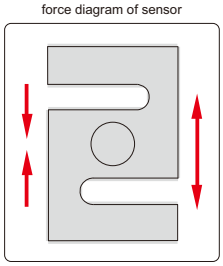


(mm)

Code	Maximum range	A	B	C	D
8650-50	50N/5kg	M18×1.25	12.7	50.8	63.5
8650-100	100N/10kg				
8650-200	200N/20kg				
8650-300	300N/30kg				
8650-500A	500N/50kg				
8650-500B	500N/50kg	M12×1.75	19	50.8	76.2
8650-1K	1000N/100kg				
8650-2K	2000N/200kg				
8650-3K	3000N/300kg				
8650-5K	5000N/500kg	M12×1.75	25.4	50.8	76.2
8650-10K	10kN/1T				
8650-15K	15kN/1.5T				
8650-20K	20kN/2T	M18×1.5	25.4	76.2	108
8650-30K	30kN/3T				
8650-50K	50kN/5T				



force diagram of sensor



connected with handheld indicator (**optional**)

OPTIONAL ACCESSORY

Handheld force/torque indicator	**ISF-DG3**

S-TYPE TENSILE/COMPRESSION SENSORS (COMPACT TYPE)

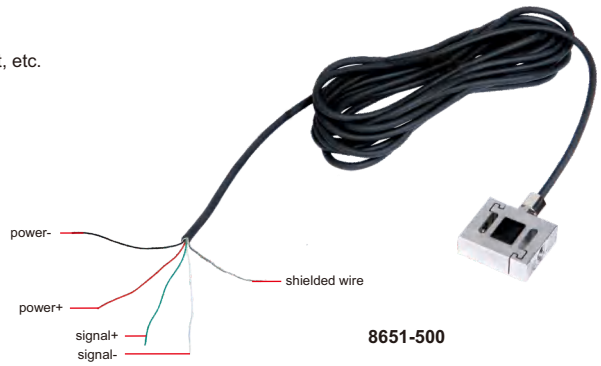
IF ONE INDICATOR IS USED FOR MULTIPLE SENSORS, CUSTOMIZATION IS REQUIRED

- Characteristic: bi-directional tension and compression, small size, high comprehensive precision, good long-term stability, nickel plating on the surface of stainless steel
- Application fields: automotive press-fit, automatic assembly, 3C industry test, hand grip force for robot, keyboard feel test, etc.

VIDEO

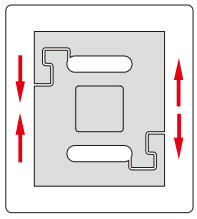
SPECIFICATION

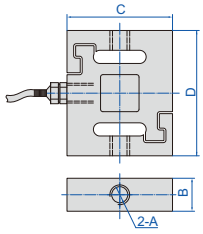
Output sensitivity	1.0~2.0mV/V
Zero output	±2%FS
Accuracy	0.15%FS
Response frequency	10kHz
Material	stainless steel
Electrical impedance	350Ω
Insulation impedance	≥5000MΩ/100VDC
Operating voltage	5~15V
Working temperature	-15~65°C
Safety overload	120%
Extreme overload	150%
Cable specification	≤1000N: Ø2mm×2m >1000N: Ø3mm×2m
Extreme cable pulling force	5kg



8651-500

force diagram of sensor





connected with handheld indicator (**optional**)

(mm)

Code	Maximum range	A	B	C	D
8651-10	10N/1kg	M3	5	16	19.1
8651-50	50N/5kg				
8651-100	100N/10kg				
8651-500	500N/50kg	M4	6	16	19.1

OPTIONAL ACCESSORY

Handheld force/torque indicator	ISF-DG3

SPOKE TYPE FORCE SENSORS

IF ONE INDICATOR IS USED FOR MULTIPLE SENSORS, CUSTOMIZATION IS REQUIRED

- Characteristic: low height, good linearity, easy installation, high resistance to partial load and lateral force
- Application fields: universal material testing machines, hopper scales, vehicle scales, rail scales, packaging scales, belt scales and other tension and pressure testing instruments, as well as in the field of automation and test equipments

VIDEO

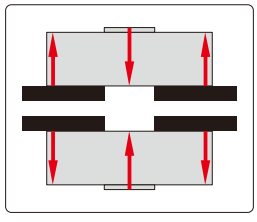
SPECIFICATION

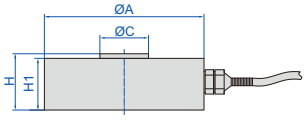
Output sensitivity	2.0±10%mV/V
Zero output	±2%FS
Response frequency	10kHz
Material	alloy steel
Electrical impedance	700/1400Ω
Insulation impedance	≥5000MΩ/100VDC
Operating voltage	5~15V
Working temperature	-15~65°C
Safety overload	120%
Extreme overload	150%
Cable specification	<1T: Ø5.5mm×3m 1T~30T: Ø5.5mm×5m >30T: Ø6.5mm×5m
Extreme cable pulling force	10kg

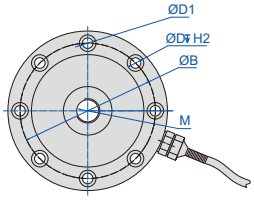
8652-30T

connected with handheld indicator (**optional**)

force diagram of sensor







(mm)

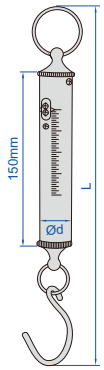
Code	Maximum range	Accuracy	ØA	ØC	H	H1	M	ØB	ØD1	ØD	ØH2
8652-1K	1kN/100kg	0.15%FS	74	24	34	30	M16×1.5	63	8×Ø6	8×Ø9	7.2
8652-5K	5kN/500kg										
8652-1T	10kN/1T		105	29	37	34	M16×1.5	89	8×Ø7	8×Ø11	7.2
8652-5T	50kN/5T										
8652-30T	300kN/30T	0.2%FS	141	50.4	57.2	50.8	M40×1.5	116.8	8×Ø11	8×Ø18	11

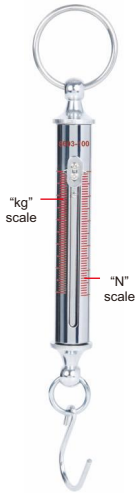
OPTIONAL ACCESSORY

Handheld force/torque indicator	ISF-DG3

TUBE FORCE GAUGES

- Suitable for measuring weight and tensile forces





8603-100

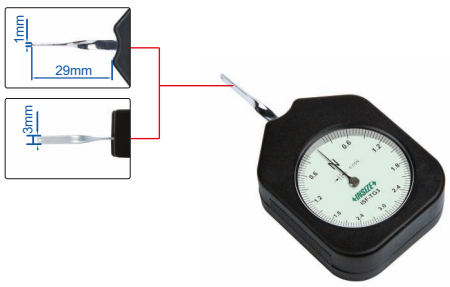
SPECIFICATION

Code	8603-10	8603-20	8603-30	8603-50	8603-100	8603-200
Max. test force	10N/1kg	20N/2kg	30N/3kg	50N/5kg	100N/10kg	200N/20kg
Resolution	0.2N/0.02kg	0.4N/0.04kg	0.5N/0.05kg	1N/0.1kg	2N/0.2kg	4N/0.4kg
Unit	kg, N					
Accuracy	±2%FS					
Tube diameter (Ød)	22mm	22mm	22mm	22mm	25mm	32mm
Overall length (L)	280mm	280mm	280mm	280mm	340mm	340mm
Net weight	280g	280g	280g	280g	480g	700g
Operation temperature	-10~40°C					
Operation humidity	30%~90%RH					
Maximum safe load	120%FS					
Limited overload	240%FS					

DIAL TENSION GAUGES

VIDEO

- Clockwise and counter-clockwise use
- For electronic and precision mechanical industry, such as test the contact pressure of relay, adjust the tension or compression of spring



ISF-TG3

SPECIFICATION (Unit: N)

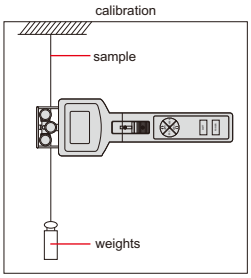
Code	ISF-TGD1	ISF-TGD3	ISF-TGD5	ISF-TG1	ISF-TG1D5	ISF-TG3	ISF-TG5
Range (N)	0.01~0.1	0.03~0.3	0.05~0.5	0.1~1	0.15~1.5	0.3~3	0.5~5
Graduation (N)	0.002	0.005	0.01	0.02	0.025	0.05	0.1
Accuracy	±2% (full scale)						
Dimension (L×W×H)	90×47×19mm						
Net weight	60g						

SPECIFICATION (Unit: gf)

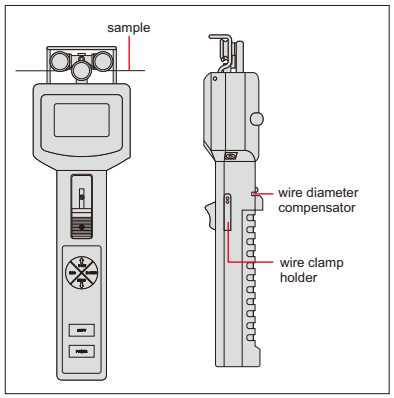
Code	ISF-TG10	ISF-TG30	ISF-TG50	ISF-TG100	ISF-TG150	ISF-TG300	ISF-TG500
Range (gf)	1~10	3~30	5~50	10~100	15~150	30~300	50~500
Graduation (gf)	0.2	0.5	1	2	2.5	5	10
Accuracy	±2% (full scale)						
Dimension (L×W×H)	90×47×19mm						
Net weight	60g						

WIRE TENSION METERS

VIDEO



ISF-DT1000



- Suitable for testing the tension of stranding machines, winding machines, wire cutting machines, carbon fibre winding equipments, fibre optic winding equipments, fibre optic cable production equipments, glass fibre winding equipments, steel cord production equipments, steel wire rope production equipments and so on
- Automatic zeroing, manual zeroing also possible
- Memory function for recording the current real-time value (up to 200 data), for recording phase data (max., min., average)
- 10 calibration channels, 6 groups of calibration points to choose from
- Fine-tunable compensation, compensation value range ±10%FS, 1% for one component
- Six units g, cN, N, lb, daN, kg are automatically converted
- 3 min no operation auto shutdown
- With wire diameter compensation, high measurement accuracy

STANDARD DELIVERY

Main unit	1 pc

SPECIFICATION

Code	ISF-DT200	ISF-DT500	ISF-DT1000	ISF-DT2000	ISF-DT2500	ISF-DT5000	ISF-DT10K	ISF-DT20K
Accuracy class	±2%FS							
Range of test force	2.0~200.0cN	5.0~500.0cN	10~1000cN	20~2000cN	25~2500cN	50~5000cN	1.0~100.0N	2.0~200.0N
Test force resolution	0.1cN	0.1cN	1cN	1cN	1cN	1cN	0.1N	0.1N
Width of measuring head	65mm	65mm	65mm	116mm	116mm	116mm	116mm	216mm
Factory calibrated wire diameter	Ø0.2mm	Ø0.2mm	Ø0.4mm	Ø0.4mm	Ø0.4mm	Ø1.2mm	Ø1.2mm	Ø1.8mm
Range of diameter	0.05~0.3mm	0.05~0.3mm	0.1~0.5mm	0.3~0.7mm	0.3~0.7mm	0.4~1.0mm	0.7~1.2mm	1.0~1.8mm
Frequency of display update	2times/sec							
Maximum line speed	2000m/min							
Power supply	built-in rechargeable battery							
Environmental requirement	temp: 10~45°C; humidity: ≤90%RH							

Code	ISF-DT30K	ISF-DT50K	ISF-DT60K	ISF-DT100K	ISF-DT200K
Accuracy class	±2%FS				
Range of test force	3.0~300.0N	5.0~500.0N	6.0~600.0N	10~1000N	20~2000N
Test force resolution	0.1N	0.1N	0.1N	1N	1N
Width of measuring head	216mm	216mm	216mm	216mm	280mm
Factory calibrated wire diameter	Ø2mm wire rope	Ø2mm wire rope	Ø2mm wire rope	Ø2mm wire rope	Ø2mm wire rope
Range of diameter	≤3mm	≤3mm	≤3mm	≤3mm	≤3mm
Frequency of display update	2times/sec				
Maximum line speed	2000m/min				
Power supply	built-in rechargeable battery				
Environmental requirement	temp: 10~45°C; humidity: ≤90%RH				

HIGH-SPEED WIRE TENSION METER
CODE ISF-DV500

INSPECTION CERTIFICATE

VIDEO

- For tension measurement of high-speed threads: textiles, chemical fibers, fine wires
- With ceramic wire post measuring head
- Unit: g, cN
- Record max, min, avg during measurement
- Built-in lithium battery, fully charged, operate for about 20h

SPECIFICATION

Accuracy class	±3%FS
Range of test force	1~500cN
Test force resolution	0.1cN
Width of measuring head	30mm
Factory calibrated wire diameter	0.20mm
Range of diameter	0.05~0.2mm
Maximum line speed	6000m/min
Power supply	built-in rechargeable battery
Dimension (L×W×H)	230×45×35mm
Net weight	255g
Environmental requirement	temp: 10~45°C; humidity: ≤90%RH

STANDARD DELIVERY

Main unit	1 pc
Power dapter	1 pc

WIRE TENSION METER
CODE ISF-DU200

INSPECTION CERTIFICATE

VIDEO

- For tension measurement of fine materials: textiles, chemical fibers, fine wires
- With ball bearing guide pulley measuring head
- Unit: g, cN
- Record max, min, avg during measurement
- Built-in rechargeable battery, fully charged, operate for about 30h

SPECIFICATION

Accuracy class	±3%FS
Range of test force	1~200cN
Test force resolution	0.1cN
Width of measuring head	43mm
Factory calibrated wire diameter	0.20mm
Range of diameter	0.05~0.2mm
Maximum line speed	900m/min
Power supply	built-in rechargeable battery
Dimension (L×W×H)	160×140×35mm
Net weight	195g
Environmental requirement	temp: 10~45°C; humidity: ≤90%RH

STANDARD DELIVERY

Main unit	1 pc
Power dapter	1 pc

INFRARED BELT TENSION METER
CODE 5900-HZ18A

INSPECTION CERTIFICATE

VIDEO

- High-precision infrared sensors enable accurate measurement
- By measuring the vibration frequency, combined with belt mass and length, calculate tension
- Two sensors: long probe is suitable for measurement in narrow spaces
- Automatic power off

SPECIFICATION

Measuring range		10~800Hz
Input parameter range		maximum free belt length: 99.99m maximum belt weight: 9.999kg/m
Digital sampling error		<1%
Display error		±1Hz
Accuracy		<5%
Unit		Hz, N, lbf
Measuring distance		3~20mm
Operation temperature		10~50°C
Power supply		1×9V battery
Dimension (L×W×H)	main unit	131×72×26mm
	long probe	1180×22×9mm
Net weight		165g

STANDARD DELIVERY

Main unit	1 pc
Long probe	1 pc
Short probe	1 pc
Reflection sticker (9220-RS)	3 pcs

SONIC BELT TENSION METER
CODE 5910-HZ5K

- The sonic belt tension meter uses a microphone probe to capture the sound waves generated by the belt vibration, and can measure the waveform period, and then calculate the tension value by the frequency of the weekly wave
- Can store 500 sets of measurement data, comes with 48 sets of belt data, no need to manually input every time
- Automatic filtering of noise interference, suitable for measurement in small spaces
- Easy operation, one-handed operation
- Lightweight and portable

hammer (included)

SPECIFICATION

Frequency range	10~5000Hz
Tension range	0.01~99900N
Input parameter range	belt mass: 0~999.9g/m
	belt width: 0~999.9mm/R
	belt span: 0~9999mm
Unit	N
Accuracy	±1%
Operation temperature	10~50°C
Dimension	160×59×27mm
Power supply	2×1.5V AAA batteries
Net weight	150g

STANDARD DELIVERY

Main unit	1 pc
Standard sensor	1 pc
Hammer	1 pc

DIGITAL TORQUE TESTERS

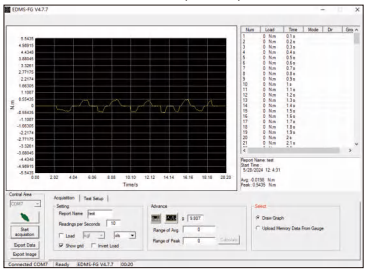
DATA OUTPUT

- External sensor
- Metal case, touch buttons
- Clockwise and counter-clockwise operation
- Test mode: track, peak, first peak, preset tolerance
- Unit: lbf.in, lbf.ft, N.m, N.cm, kgf.cm
- Set tolerance with judgement
- 1000 memories
- LCD display with backlight, can automatically turn 180°
- Overload alarm
- Automatic power off

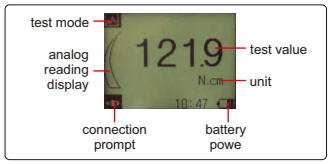
IST-DTT5
type A

IST-DTT5S
type B

software (included)



digit mode



graph mode

printer (**optional**)

SPECIFICATION

Code	IST-DTT1	IST-DTT5	IST-DTT10	IST-DTT1S	IST-DTT5S	IST-DTT10S
Load capacity	0.05~1N.m	0.25~5N.m	0.5~10N.m	0.05-1N.m	0.25-5N.m	0.5-10N.m
Resolution	0.0001N.m	0.0005N.m	0.001N.m	0.0001N.m	0.0005N.m	0.001N.m
Max. clamping diameter	Ø10mm	Ø10mm	Ø13mm	Ø50mm	Ø50mm	Ø50mm
Type	A			B		
Sampling frequency	2000Hz					
Accuracy	±0.3% (of load capacity)					
Output	USB, RS232, alarm signal					
Power supply	built-in rechargeable battery					
Dimension	145×73×34mm					
Net weight	1.4kg					

STANDARD DELIVERY

Main unit	1 pc
External sensor	1 pc
AC/DC adapter	1 pc
Transmission cable (keyboard signal)	1 pc
Software and USB cable	1 set

OPTIONAL ACCESSORY

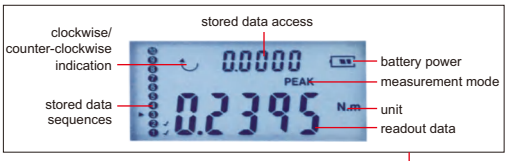
Printer	ISF-DF-PRINTER
RS232 cable	IST-DTT-CABLE
Wireless transmitter (receiver is needed)	7315-ISF-D

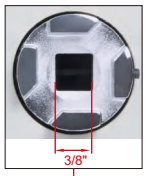
TORQUE TESTERS

VIDEO

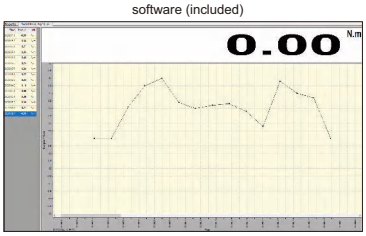
INSPECTION CERTIFICATE

- For testing electric, pneumatic and manual torque screwdrivers and torque wrenches and other torque tools
- Clockwise and counter-clockwise operation
- Peak and track working modes
- High-definition display, backlighting available
- High sampling frequency for accurate peak capture
- Unit: N.m, lb.in, kgf.cm
- Upper and lower limits can be set, automatic audible and visual alarm with red and green indicator lights and buzzer
- Store 10 sets of data and calculate the average value
- Serial RS232 output, connect to PC to view torque curves by test software
- Automatic zero setting, automatic shutdown





software (included)



IST-HP1

SPECIFICATION

Code	IST-HP1	IST-HP2	IST-HP5	IST-HP10	IST-HP20
Maximum range	1N.m	2N.m	5N.m	10N.m	20N.m
Resolution	0.0005N.m	0.001N.m	0.002N.m	0.005N.m	0.01N.m
Accuracy	±1%				
Maximum test speed	3000rpm				
Number of memory	10 groups				
Power supply	built-in rechargeable battery				
Dimension	230×110×50mm				
Net weight	2.4kg				

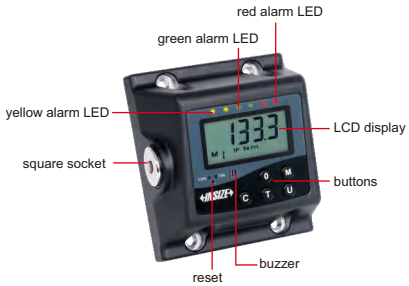
STANDARD DELIVERY

Main unit	1 pc
Buffer	1 pc
Adaptor	4 pcs
Power adapter	1 pc
Software and RS232 cable	1 pc

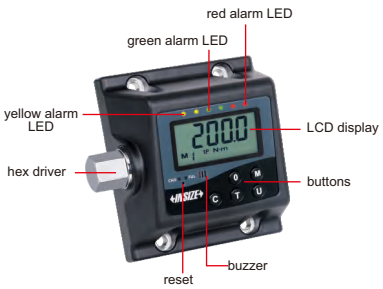
DIGITAL TORQUE TESTERS

ATTENTION: NOT SUITABLE FOR ELECTRIC WRENCHES, IMPACT WRENCHES OR PNEUMATIC WRENCHES

VIDEO



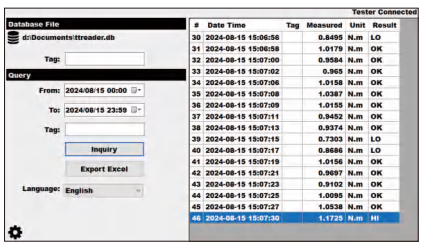
IST-04TT350
type A



IST-04TT815
type B

- Test torque wrenches, torque screwdrivers and other torque tools
- Clockwise operation
- Peak, track and first peak working modes
- Tolerance testing
- LED indicator for target torque alarm:
  - Yellow LED light on when the value is below the low tolerance; green LED light on when the value is within tolerance; red LED light on when the value is above the high tolerance
  - The buzzer alarms when the maximum torque value is captured in the first peak mode
- Ability to upload data in real time, save data and export data to EXCEL
- Power off automatically in 2 minutes without any operations
- Supplied with manufacturer inspection certificate

adaptor
(type A included)



software (included)

SPECIFICATION

Code	IST-04TT5	IST-04TT28	IST-04TT68	IST-04TT350	IST-04TT815	IST-04TT1000
Type	A				B	
Range	0.5~5N.m	2.8~28N.m	6.8~68N.m	35~350N.m	81.5~815N.m	100~1000N.m
Accuracy	±1% of indicated value (clockwise)					
Resolution	0.001N.m	0.01N.m	0.01N.m	0.1N.m	0.1N.m	1N.m
Unit	N.m, in.lb, ft.lb, kg.cm				N.m, ft.lb	
Square socket/hex driver	1/4"	3/8"	3/8"	1/2"	27mm	27mm
Adaptor	no	3/8" to 1/4"	3/8" to 1/4"	1/2" to 3/8" 3/8" to 1/4"	no	
Power supply	AC 100~240V,50/60Hz					
Net weight	0.75kg	0.75kg	1.1kg	1.1kg	5.1kg	5.1kg

STANDARD DELIVERY

Main unit	1 pc
Software and transmission cable	1 pc
AC/DC adapter	1 pc
Adaptor	refer to details

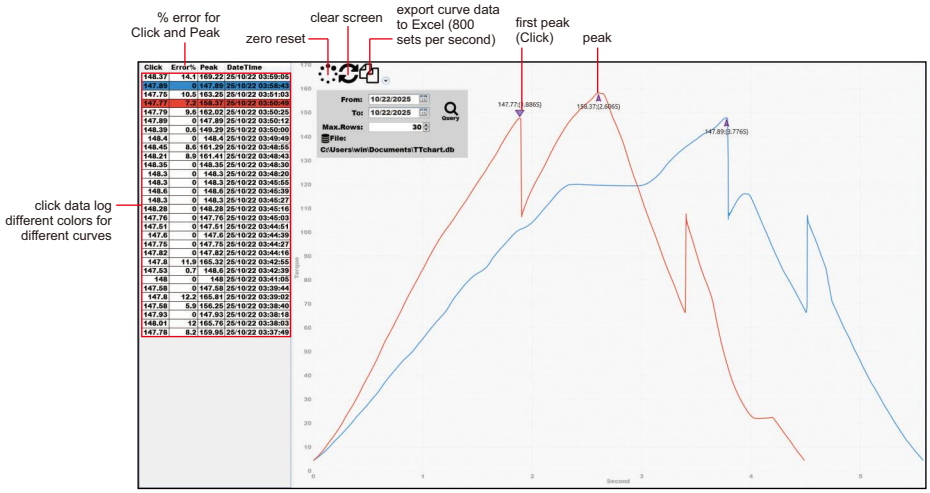
OPTIONAL ACCESSORY

Curve analysis software	IST-TT-CURVE

To be continued

Continued from previous page

- Over-torque analysis when Click signal is insufficient
- Real-time data tracking and recording



curve analysis software (**optional**)

DIGITAL TORQUE TESTERS

ATTENTION: NOT SUITABLE FOR HIGH SPEED SHOCK TORQUE MEASUREMENT

INSPECTION CERTIFICATE

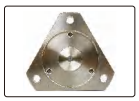
VIDEO

IST-TT550

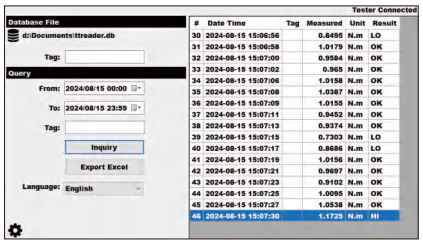
- With external sensor, to test torque wrenches, torque screwdrivers and other torque tools
- Clockwise and counter-clockwise operation
- Peak, track and first peak working modes
- Tolerance testing
- LED indicator for target torque alarm:
  - Yellow LED light on when the value is below the low tolerance; green LED light on when the value is within tolerance; red LED light on when the value is above the high tolerance
  - The buzzer alarms when the maximum torque value is captured in the first peak mode
- Ability to upload data in real time, save data and export data to EXCEL
- Automatic power off
- Supplied with manufacturer inspection certificate

extension cable (included)

adaptor (included)



with 3 mounting holes on the bottom



software (included)

SPECIFICATION

Code	IST-TT05	IST-TT5	IST-TT30	IST-TT50	IST-TT220	IST-TT550	IST-TT1000	IST-TT2200	IST-TT3000
Range	0.1~0.5N.m	0.5~5N.m	3~30N.m	5~50N.m	20~220N.m	50~550N.m	100~1000N.m	200~2200N.m	300~3000N.m
Accuracy	±0.7% of indicated value	±0.5% of indicated value							
Resolution	0.0001N.m	0.0001N.m	0.001N.m	0.001N.m	0.01N.m	0.01N.m	0.1N.m	0.1N.m	0.1N.m
Unit	in.lb, ft.lb, kg.cm, N.m						N.m, ft.lb		
Square socket (L)	1/4"	1/4"	3/8"	3/8"	1/2"	3/4"	1"	1"	1"
Power supply	AC 100~240V, 50/60Hz								
Adaptor	no	no	3/8" to 1/4"	3/8" to 1/4"	1/2" to 3/8" 3/8" to 1/4"	3/4" to 1/2" 1/2" to 3/8"	1" to 3/4" 3/4" to 1/2" 1/2" to 3/8"	1" to 3/4" 3/4" to 1/2"	1" to 3/4" 3/4" to 1/2"
Transducer dimension	63×63 ×65mm	63×63 ×65mm	89×89 ×75mm	89×89 ×75mm	109×109 ×83mm	140×140 ×107mm	160×160 ×126mm	160×160 ×126mm	160×160 ×126mm
Net weight	0.75kg	0.75kg	1.1kg	1.1kg	1.4kg	2.9kg	5.0kg	5.1kg	5.2kg

STANDARD DELIVERY

Main unit	1 pc
Transducer with 1.5m cable	1 pc
Software and transmission cable	1 pc
Extension cable (1.2m)	1 pc
AC/DC adapter	1 pc
Adaptor	refer to details

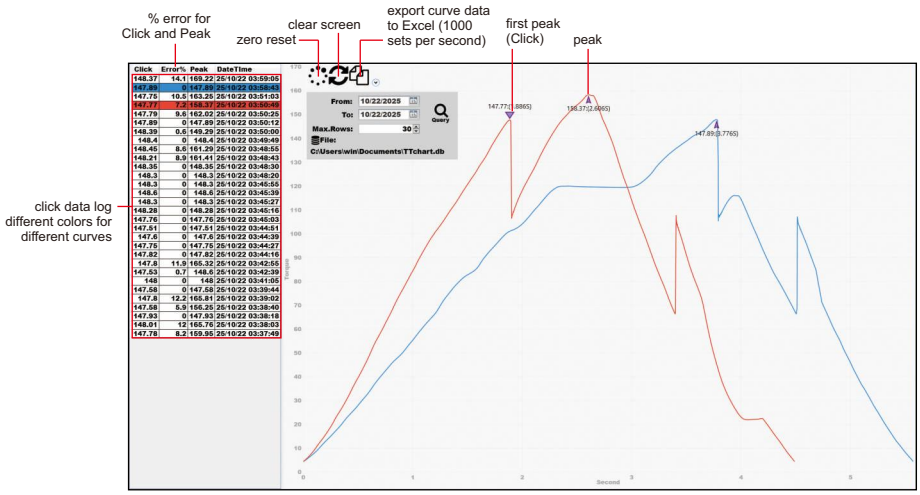
OPTIONAL ACCESSORY

Curve analysis software	IST-TT-CURVE

To be continued

Continued from previous page

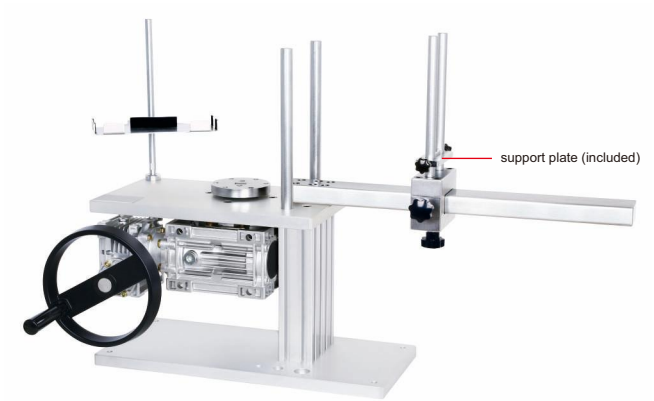
- Over-torque analysis when Click signal is insufficient
- Real-time data tracking and recording



curve analysis software (**optional**)

TORQUE WRENCH TEST STANDARDS

VIDEO



IST-06TS350

application

support plate (**optional**) suitable for short wrenches

digital torque tester (**optional**)

- Rotate the wheel to apply force, rotary speed is adjustable
- Easy operation due to the gear box
- Used with digital torque testers (**IST-TT** series)

SPECIFICATION

Code	IST-06TS350	IST-06TS1100	IST-06TS2000
Max. torque value	350N.m	1100N.m	2000N.m
Arm length	195~620mm	380~1350mm	420~1690mm
Dimension	860×290×590mm	1760×350×590mm	2090×350×590mm
Net weight	32.5kg	76kg	80kg

Can be customized according to test requirements

OPTIONAL ACCESSORY

Digital torque tester	**IST-TT** series
Adaptor	**IST-06TS-BLOCK1** (suitable for **IST-06TS350**, necessary for **IST-TT** series, connectable for **IST-TT05**, **IST-TT5**, **IST-TT30**, **IST-TT50**, **IST-TT220**)
	IST-06TS-BLOCK2 (suitable for **IST-06TS1100**, **IST-06TS2000**, necessary for **IST-TT** series, connectable for **IST-TT1000**, **IST-TT2200**)
Support plate	**IST-06TS-PLATE** (suitable for **IST-06TS350**)

DYNAMIC TORQUE SENSORS (COMPACT TYPE)

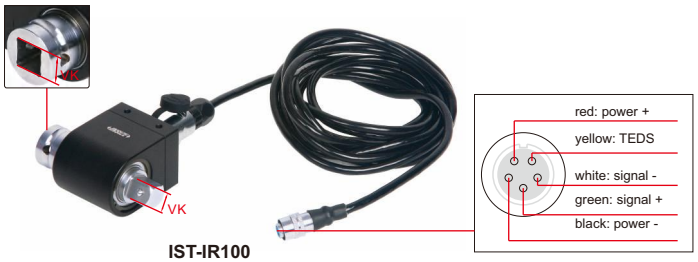
INSPECTION CERTIFICATE

ATTENTION: NOT SUITABLE FOR HIGH SPEED SHOCK TORQUE MEASUREMENT

ANGLE ENCODER CAN BE CUSTOMIZED

VIDEO

- Applications for testing electric, pneumatic and manual torque screwdrivers and torque wrenches and other torque tools and torque monitoring
- Clockwise and counter-clockwise operation
- High overall accuracy, good long-term stability



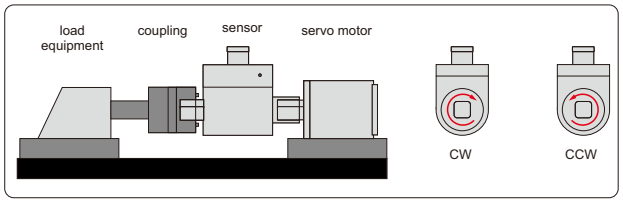
IST-IR100

SPECIFICATION

RPM range	≤3000rpm
Torque signal	0.8~1.5mV/V
Zero output	±2%FS
Accuracy	±0.2%FS
Response time	1.0ms (50% response)
Response frequency	1kHz
Max. torsion angle	2.6×10rad (0.149°)
Inertial torque	0.38kg.cm
Intrinsic frequency of rotor vibration	19.4kHz
Torque constant	3.85×10N.m/rad
Material	alloy steel
Annual stability	0.3%/year
load resistance	>2kΩ
Power supply	DC5~15V
Working environment	-10~50°C ≤85%RH
Safety overload	150%
Extreme overload	200%
Cable specification	Ø5mm×3m
Extreme cable pulling force	10kg

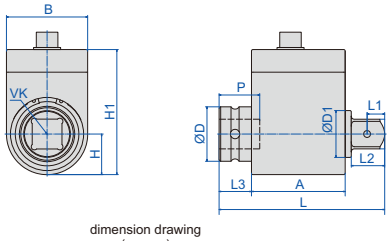
example of torque test

example of torque monitoring



OPTIONAL ACCESSORY

Handheld force/torque indicator	ISF-DG4



dimension drawing
(square)

(mm)

Code	Maximum range	VK	A	B	L	L1	L2	L3	H	H1	ØD	ØD1	P
IST-IR10	10N.m	1/4"	56	30	71.5	3.3	7.3	5.2	15	54.5	15	10	10.5
IST-IR20	20N.m												
IST-IR30	30N.m	3/8"	56	30	77	5	10.5	8.1	15	58.6	17	17	13
IST-IR50	50N.m												
IST-IR100	100N.m	1/2"	58	42	87	6.7	14.7	12	21	69.5	24.9	20	17
IST-IR200	200N.m		60	52	106	11.2	21.4	20.7	26	80.1	34.9	30	26

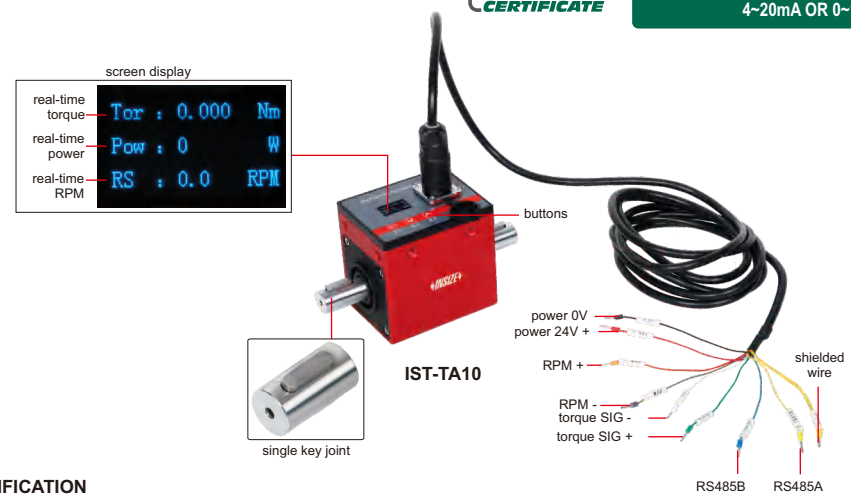
DYNAMIC TORQUE SENSORS

INSPECTION CERTIFICATE

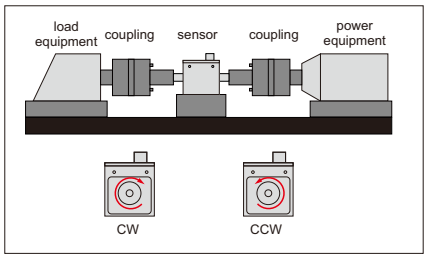
CUSTOMIZABLE TORQUE SIGNAL OUTPUT: 4~20mA OR 0~10V

ATTENTION: CUSTOMIZATION IS REQUIRED FOR RPM EXCEEDING THE RATED RPM

VIDEO



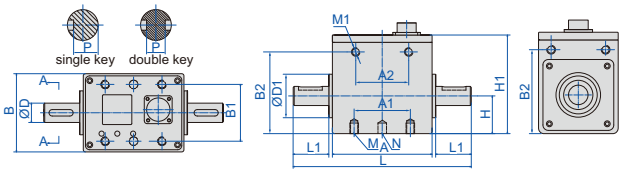
example of sensor usage



SPECIFICATION

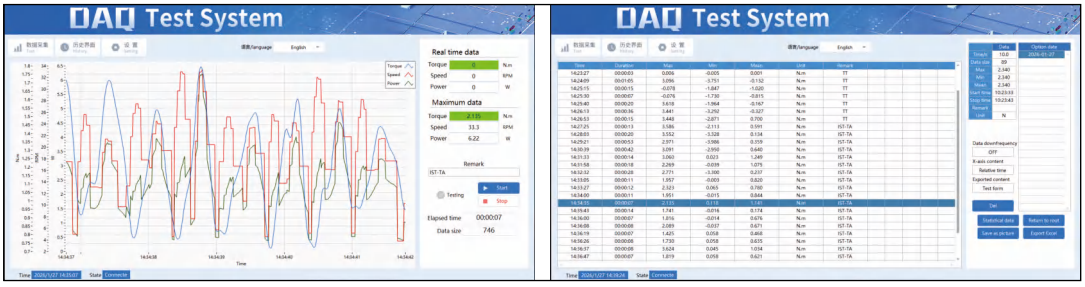
RPM signal	120/60/10 pulses/rev.
Zero output	±0.5%FS
Overall accuracy	±0.2%FS
Linearity	0.1%FS
Hysteresis	0.1%FS
Repeatability	0.1%FS
Creep (30 minutes)	0.1%FS
Temperature sensitivity drift	0.1%FS/10°C
Zero temperature drift	0.1%FS/10°C
Response time	0.6ms (50% response)
Response frequency	2kHz
Max. torsion angle	2.6×10rad (0.149°)
Inertial torque	0.38kg.cm
Intrinsic frequency of rotor vibration	19.4kHz
Torque constant	3.85×10N.m/rad
Material	stainless steel
Annual stability	0.3%/year
load resistance	>2kΩ
Power supply	DC24V 0.2A
Working environment	-10~50°C, ≤85%RH
Safety overload	150%
Extreme overload	200%
Cable specification	Ø5mm×3m
Extreme cable pulling force	10kg

- Non-contact digital signal transmission guarantee wear-free and maintenance-free operation
- Real-time display of torque, RPM and power values
- Support RS485 communication, support active uploading protocols
- Communication rate up to 1000 Hz
- Torque signal is ±5V transformed voltage output
- OLED display, resolution 128*64
- Simple calibration, zeroing, filtering, etc. can be performed



(mm)

Code	Maximum range	Rated RPM	ØD	B	L	L1	H	H1	A1	A2	B1	B2	ØD1	M	M1	N	Key size (L×W)	P
IST-TA2S	2N.m	8000rpm	10	51	108	18	25.5	68	58	/	43	/	12	4-M3 depth 6	/	/	single key 15×3	8.2
IST-TA5S	5N.m																	
IST-TA10	10N.m	8000rpm	18	73	168	33.6	35.5	93	53	50	53	77	41	4-M8 depth 10	8-M8 depth 6	2-Ø8 depth 10	single key 22×6	14.5
IST-TA100	100N.m																	
IST-TA500	500N.m	6000rpm	38	90	238	65.5	44	107.5	60	60	60	91	61	4-M8 depth 12	8-M8 depth 12	2-Ø8 depth 10	double key 45×10	28



computer software (**optional**)

- Real-time data tracking and recording and tolerance limits can be set to determine pass or fail
- Historical measurement data can be viewed in two formats: curves and tabular statistics
- Curve data supports click-to-view analysis, with export options for images and detailed data to Excel

OPTIONAL ACCESSORY

Computer software	IST-TF-DAQ

STATIC TORQUE SENSORS

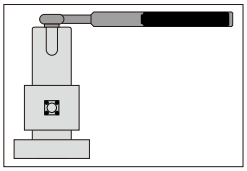
VIDEO

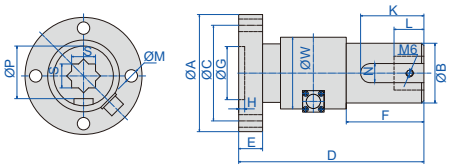
- Wide range of applications: for testing electric, pneumatic and manual torque screwdrivers and torque wrenches and other torque tools and torque monitoring
- Clockwise and counter-clockwise operation
- High overall accuracy, good long-term stability

SPECIFICATION

Output sensitivity	1.0~2.0mV/V
Zero output	±1%FS
Accuracy	±0.2%FS
Repeatability	±0.2%FS
Hysteresis	±0.5%FS
Creep (30 minutes)	±0.1%FS
Temperature sensitivity drift	±0.1%FS/10°C
Zero temperature drift	±0.1%FS/10°C
Response frequency	10kHz
Material	alloy steel/stainless steel
Electrical impedance	350±5/700±5Ω
Insulation impedance	≥5000MΩ/100VDC
Operation voltage	5~15V
Working temperature	-20~80°C
Safety overload	120%
Extreme overload	150%
Cable specification	Ø5mm×3m
Extreme cable pulling force	10kg

application





(mm)

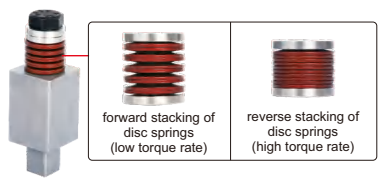
Code	Maximum range	ØA	ØB	ØC	ØW	D	E	F	K	L	N	S	ØP	ØM	ØG	H
IST-NJ10S	10N.m	98	50	80	58	90	15	33	33	25	16	20	44	4×Ø10.5	/	/
IST-NJ20S	20N.m															
IST-NJ30S	30N.m															
IST-NJ50S	50N.m															
IST-NJ100S	100N.m															
IST-NJ200S	200N.m															
IST-NJ300S	300N.m															
IST-NJ500S	500N.m															
IST-NJ1000S	1000N.m															
IST-NJ10L	10N.m	98	50	80	58	155	20	65	53	25	16	20	44	4×Ø10.5	/	/
IST-NJ20L	20N.m															
IST-NJ30L	30N.m															
IST-NJ50L	50N.m															
IST-NJ100L	100N.m															
IST-NJ200L	200N.m															
IST-NJ300L	300N.m															
IST-NJ500L	500N.m															
IST-NJ1000L	1000N.m															
IST-NJ2000*	2000N.m	125	75	105	83	150	20	65	60	30	20	25.5	67.5	8×Ø12	60	6
IST-NJ3000*	3000N.m											40.5				
IST-NJ5000*	5000N.m															

*Without M6 hole

BUFFER (OPTIONAL) SPECIFICATION

Code	Screw diameter	Torque capacity	Dimension	Net weight
IST-NJ-BF1*	6mm	5N.m	20×20×63mm	135g
IST-NJ-BF2*	8mm	20N.m	20×20×67mm	150g
IST-NJ-BF3*	10mm	50N.m	20×20×70mm	170g
IST-NJ-BF4*	12mm	100N.m	40×40×125mm	920g
IST-NJ-BF5*	16mm	350N.m	40×40×133mm	1000g
IST-NJ-BF6*	20mm	700N.m	40×40×145mm	1185g

* Not suitable for **IST-NJ2000**, **IST-NJ3000**, **IST-NJ5000**



buffer (**optional**)
IST-NJ-BF5

buffer test example

OPTIONAL ACCESSORY

Handheld force/torque Indicator	ISF-DG4

HANDHELD FORCE/TORQUE INDICATORS

VIDEO

- For use with force sensors and torque sensors
- Three modes of real-time value display, peak value display and valley value display
- Force unit: N, kN, kg, lb, t
- Torque unit: N.m, kg.cm, in.lb, ft.lb
- High sampling rate captures peak value accurately
- Select to display the real-time curve and the last historical curve
- Real-time automatic capture of peak value and valley value
- Parameter backup and restoration, even if the parameters are messed up, you can restore them with a single click
- Weightless calibration, just enter the sensor parameters and you are ready for calibration
- A variety of alarm options: upper limit alarm, lower limit alarm, peak and valley alarm, over 1.2 times of the range alarm
- Analog signal input range -15~15mV

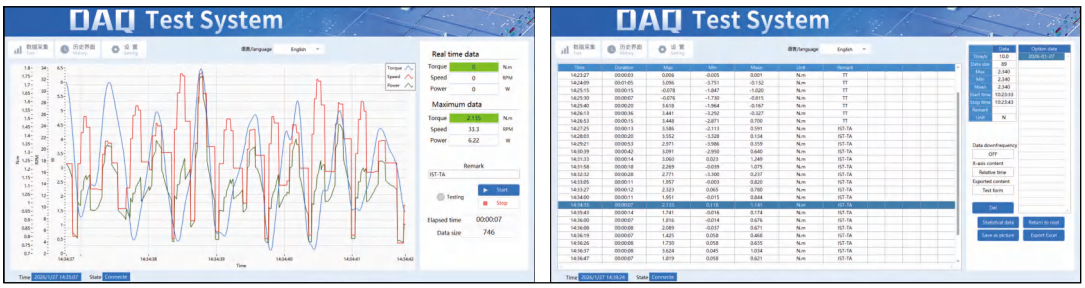
ISF-DG1

SPECIFICATION

Code	ISF-DG1*	ISF-DG2*	ISF-DG3	ISF-DG4
Number of channels	7 channels		single channel	
Max. sampling frequency	3200Hz	12800Hz	3200Hz	3200Hz
Type	force+torque		force	torque
Unit switch	initially set to the international system of units, switching units requires recalibration		units can be switched in real time	
Accuracy	±0.1% (of load capacity)			
Output	TYPE-C			
Number of memory	200 groups			
Power supply	built-in rechargeable battery			
Dimension	132×76×20mm			
Net weight	300g			

*Calibration parameters (range, coefficient, unit, decimal places, etc.) can be modified, but recalibration is required after modification.

graph mode



computer software (**optional**)

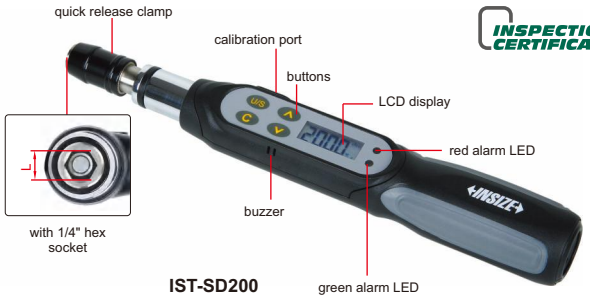
- Real-time data tracking and recording and tolerance limits can be set to determine pass or fail
- Historical measurement data can be viewed in two formats: curves and tabular statistics
- Curve data supports click-to-view analysis, with export options for images and detailed data to Excel

OPTIONAL ACCESSORY

Computer software	IST-TF-DAQ

DIGITAL TORQUE SCREWDRIVERS

- Clockwise and counter-clockwise operation
- Unit: cN.m, in.lb, kg.cm
- Peak and track working modes
- Target torque value can be set, with audible and visible alarm:
  – Green LED light on and buzzer sounds when target torque value is 90%~100% of target torque
  – Red LED light on and buzzer sounds when target torque value is reached
- Power off automatically in 5 minutes without any operations



IST-SD200

INSPECTION CERTIFICATE

VIDEO

SPECIFICATION

Code		IST-SD50	IST-SD200
Range		10~50cN.m	40~200cN.m
Accuracy	clockwise	±3%	±2.5%
	counter-clockwise	±4%	±3.5%
Resolution		0.1cN.m	0.1cN.m
Size of hex socket (L)		1/4"	1/4"
Power supply		1×AAA battery	
Length		193mm	203mm
Net weight		190g	200g

phillips screwdriver bits (included)

hex screwdriver bits (included)

STANDARD DELIVERY

Torque screwdriver	1 pc
Phillips screwdriver bits	1 pc
Hex screwdriver bits	1 pc

OPTIONAL ACCESSORY

Calibration cable	IST-SD-CABLE

TORQUE SCREWDRIVERS

T-bar wrench (included)

ATTENTION: CLOCKWISE OPERATION ONLY

IST-MG600

SPECIFICATION

Code	IST-MG250	IST-MG360	IST-MG600
Range (clockwise)	50~250cN.m	60~360cN.m	1.0~6.0N.m
Graduation	5cN.m	5cN.m	0.1N.m
Head	1/4" hex socket		
Accuracy	±6%		
Length	172mm		
Net weight	0.26kg		

STANDARD DELIVERY

Torque screwdriver	1 pc
T-bar wrench	1 pc

INTELLIGENT ELECTRIC SCREWDRIVERS (CURRENT CONTROL)

VIDEO

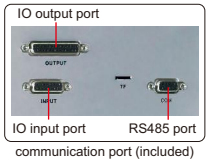
ATTENTION: SPEED SHOULD BE BELOW 100RPM WHEN TIGHTENING IS ENDED

ATTENTION: TORQUE TESTERS ARE NEEDED FOR CALIBRATION

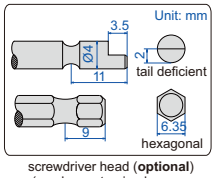
HES-E152 HES-E403 HES-E901A

controller **type A**

controller **type B**



communication port (included)



screwdriver head (**optional**)
(can be customized: cross, flathead, hexagonal, star-shaped)

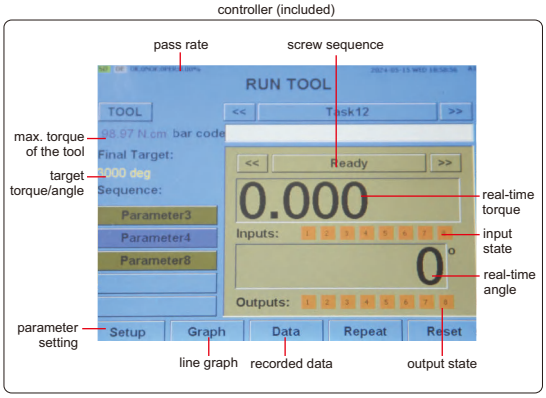
balance arm (**optional**)

- Highly efficient heat dissipation setting, ultra-low noise handling
- Permanent magnet synchronous servo motor and high-precision reducer power transmission mechanism
- High-precision angle sensor (resolution 1°) and two-color LED indication of locking status
- The safety level conforms to the relevant provisions of GB3883/IEC60745 and other standards
- 12 task modes, each task can be configured with 8 different torque parameters
- Locked data is stored in EXCEL on the hard disk for 600 days
- Built-in servo drive for precise control of torque, angle and speed
- Provide graphical tool for process optimization and diagnostic
- Provide programmable IO and RS485 communication port for process control and data transmission
- Physical buttons for assisted operation and they are monitored by LED lights

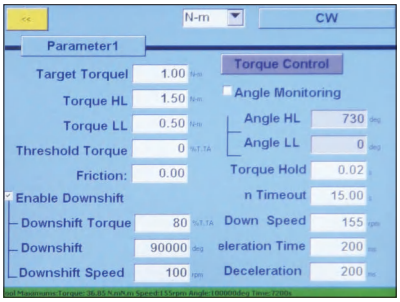
To be continued

Continued from previous page

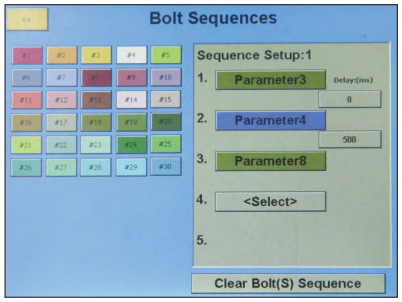
controller (included)



interface of tightening parameter setting



interface of screw sequence matching parameters



SPECIFICATION

Code		HES-E151	HES-E152	HES-E401	HES-E402	HES-E403	HES-E404
Torque range		0.01~0.13N.m	0.06~0.55N.m	0.02~0.23N.m	0.15~0.90N.m	0.20~1.20N.m	0.50~1.60N.m
Motor power		DC15W		DC40W			
Max. speed		5000rpm	1200rpm	5000rpm	1200rpm	1000rpm	800rpm
Applicable screw outside diameter		1.0~1.7mm	1.4~2.5mm	1.0~2.0mm	2.0~3.0mm	2.0~3.5mm	2.5~4.0mm
Applicable screwdriver head		Ø4mm tail deficient				6.35mm hexagonal	
Controller		type A					
Power supply		AC 85~264V, 47~63Hz					
Display operation interface		touch screen menu operation mode, 3 function buttons+3 LED indicators					
Torque accuracy		±5% at 30%~80% of maximum output torque, ±8% in other range					
Dimension	electric screwdriver	242×53×35mm		214×64.4×38mm	231×64.4×38mm		
	controller	151.5×185.8×221mm					
Net weight	electric screwdriver	300g		400g	500g		600g
	controller	3500g					

Code		HES-E901A	HES-E902A	HES-E903A	HES-E901B	HES-E902B	HES-E903B
Torque range		0.10~0.70N.m	0.60~2.40N.m	0.60~3.00N.m	0.20~1.20N.m	0.80~4.30N.m	1.00~5.50N.m
Motor power		DC90W			AC90W		
Max. speed		5000rpm	1200rpm	1000rpm	5000rpm	1500rpm	1200rpm
Applicable screw outside diameter		2.0~2.5mm	3.5~4.5mm	3.5~5.0mm	2.0~3.5mm	3.5~5.5mm	4.0~6.0mm
Applicable screwdriver head		6.35mm hexagonal					
Controller		type B					
Power supply		AC 200~230V±10%, 50~60Hz					
Display operation interface		touch screen menu operation mode, 3 function buttons+3 LED indicators					
Torque accuracy		±5% at 30%~80% of maximum output torque, ±8% in other range					
Dimension	electric screwdriver	317×59.5×47.5mm					
	controller	210×160×345mm			235×160×345mm		
Net weight	electric screwdriver	900g	1060g		900g	1060g	
	controller	5500g					

STANDARD DELIVERY

Electric screwdriver	1 pc
Controller	1 pc
Cross screwdriver head	1 pc
Tool connection cable	1 pc
USB transmission cable	1 pc

OPTIONAL ACCESSORY

Ø4mm tail deficient screwdriver head	
6.35mm hexagonal screwdriver head	
Balance arm	HES-E-X *
QR code scanner	7328-SCAN

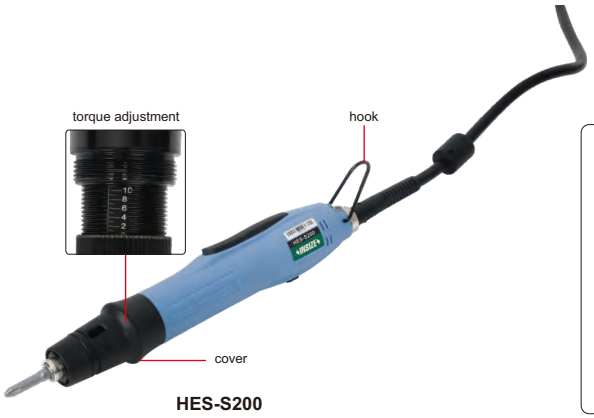
* Not suitable for **HES-E151**, **HES-E152**

INVERTER BRUSHLESS ELECTRIC SCREWDRIVERS

ATTENTION: TORQUE TESTERS ARE NEEDED TO SET TORQUE

VIDEO

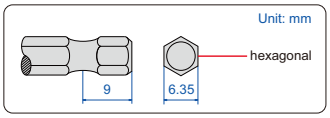
- Adopting high performance, low inertia, low loosening, low power consumption, low impact brushless servo motor components, with ultra-long life and durability
- Frequency conversion and constant voltage function for stable torque, temperature and speed, low temperature rise
- Ergonomic design, small size and light weight, wider range torque, can be applied to a variety of screw locking requirements, reduce procurement cost
- The safety and durability of low-voltage frequency conversion and the convenience and stability of high-voltage direct plug-in, more flexible and economical in operation
- No toner spillage design, meets the requirements of the 3C industry and environmental protection



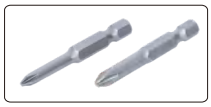
HES-S200

spring loaded balancer (**optional**)

screwdriver head (**optional**)
(can be customized: cross, flathead, hexagonal, star-shaped)



cross screwdriver head (included)



SPECIFICATION

Code		HES-S020	HES-S050	HES-S120	HES-S160	HES-S200	HES-S250
Torque range		0.03~0.20N.m	0.05~0.50N.m	0.20~1.20N.m	0.20~1.60N.m	0.40~2.00N.m	0.50~2.50N.m
		0.3~2.0kgf.cm	0.5~5.0kgf.cm	2.0~12.0kgf.cm	2.0~16.0kgf.cm	4.0~20.0kgf.cm	5.0~25.0kgf.cm
Torque repeatability		5% (at 30%~80% of maximum output torque)					
Rated power		DC60W					DC75W
Speed range		700~1000rpm	700~1000rpm	1400~2000rpm	700~1000rpm	700~1000rpm	500~750rpm
Applicable screw outside diameter	mechanical	1.0~2.2mm	1.0~2.6mm	1.4~3.0mm	2.2~4.2mm	2.6~4.5mm	3.0~5.0mm
	self-tapping	1.0~2.0mm	1.0~2.3mm	1.4~2.6mm	2.0~3.2mm	2.3~3.5mm	2.6~4.0mm
Applicable screwdriver head		6.35mm hexagonal					
Power supply		AC100~240V, 50/60Hz					
Electric screwdriver dimension		238×45×40mm					
Electric screwdriver weight		450g					

STANDARD DELIVERY

Electric screwdriver	1 pc
AC adapter	1 pc
Cross screwdriver head	2 pcs

OPTIONAL ACCESSORY

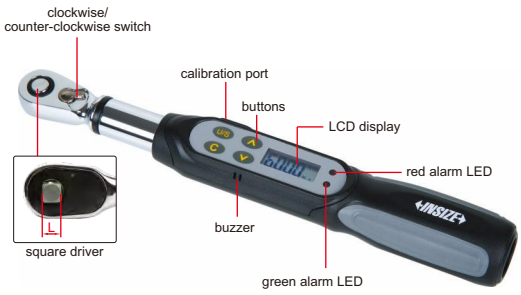
6.35mm hexagonal screwdriver head	
Spring loaded balancer	HES-S-X

SMALL RANGE DIGITAL TORQUE WRENCHES

INSPECTION CERTIFICATE

VIDEO

- Ratchet head
- Clockwise and counter-clockwise operation
- Unit: N.m, in.lb, ft.lb, kg.cm
- Peak and track working modes
- Target torque value can be set, with audible and visible alarm:
  – Green LED light on and buzzer sounds when target torque value is 90%~100% of target torque
  – Red LED light on and buzzer sounds when target torque value is reached
- Power off automatically in 5 minutes without any operations
- Non-slip grip handle
- With overload record
  (once the torque reaches 110% of the maximum range)



IST-WP6

SPECIFICATION

Code		IST-WP6	IST-WP12	IST-WP20
Range		1.2~6N.m	2.4~12N.m	4~20N.m
Accuracy	clockwise	±3%		
	counter-clockwise	±4%		
Resolution		0.001N.m	0.01N.m	0.01N.m
Square driver (L)		1/4"		
Power supply		1×AAA battery		
Length		260mm		
Net weight		430g		

OPTIONAL ACCESSORY

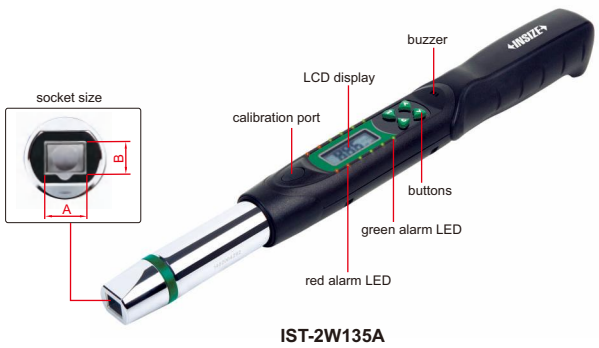
Calibration cable	IST-SD-CABLE

INTERCHANGEABLE HEAD DIGITAL TORQUE WRENCHES

INSPECTION CERTIFICATE

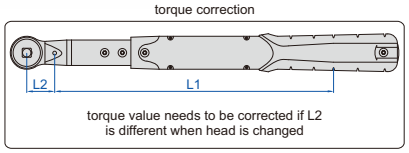
OPTIONAL ACCURACY:
CLOCKWISE: ±1%
COUNTER-CLOCKWISE: ±2%

VIDEO



IST-2W135A

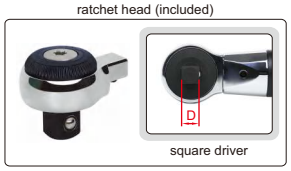
- Clockwise and counter-clockwise operation
- Unit: N.m, in.lb, ft.lb, kg.cm
- Peak and track working modes
- Target torque value can be set, with audible and visible alarm:
  - Green LED light on and buzzer sounds when torque value is 90%~100% of target torque
  - Both green and red LED light on and buzzer sounds when target torque value is reached
- Power off in 5 minutes automatically without any operations
- Non-slip grip handle
- With damp record
- With overload record
  (once the torque reaches 110% of the maximum range)



SPECIFICATION

Code		IST-2W30A	IST-2W135A	IST-2W200A	IST-2W340A
Range		6~30N.m	27~135N.m	40~200N.m	68~340N.m
Accuracy	clockwise	±2%			
	counter-clockwise	±3%			
Socket size (A×B)		0.01N.m	0.1N.m	0.1N.m	0.1N.m
Resolution		12×9mm	12×9mm	18×14mm	18×14mm
Arm length (L1)		272.7mm	287.7mm	381.2mm	501.2mm
Power supply		2xAA batteries, for 110 hours working			
Net weight		1400g	1570g	2170g	2320g

ratchet head (included)



STANDARD DELIVERY

Torque wrench	1 pc
Ratchet head	1 pc

OPTIONAL ACCESSORY

Calibration cable	IST-W-CABLE
Interchangeable head	refer to details

RATCHET HEAD (INCLUDED) SPECIFICATION

For torque wrench	IST-2W30A	IST-2W135A	IST-2W200A	IST-2W340A
Square driver (D)	1/4"	3/8"	1/2"	1/2"
Length (L2)	29mm	29mm	40mm	40mm

RATCHET HEAD (optional)

Code	Square driver (D)	Applicable wrenches
IST-2W-R1	1/4"	IST-2W30A
IST-2W-R2	3/8"	IST-2W135A
IST-2W-R3	1/2"	IST-2W135A
IST-2W-R4	1/2"	IST-2W200A IST-2W340A

ADJUSTABLE SPANNER HEAD (optional)

Code	Open size	Applicable wrenches
IST-2W-A1	5~27mm	IST-2W30A IST-2W135A
IST-2W-A2	5-30mm	IST-2W200A
IST-2W-A3	10-41mm	IST-2W340A

To be continued

Continued from previous page

OPEN END HEAD (optional)

Code	Open size	Applicable wrenches
IST-2W-K7	7mm	IST-2W30A IST-2W135A
IST-2W-K8	8mm	
IST-2W-K9	9mm	
IST-2W-K10	10mm	
IST-2W-K11	11mm	
IST-2W-K12	12mm	
IST-2W-K13	13mm	
IST-2W-K14	14mm	
IST-2W-K15	15mm	
IST-2W-K16	16mm	
IST-2W-K17	17mm	
IST-2W-K18	18mm	
IST-2W-K19	19mm	
IST-2W-K13A	13mm	IST-2W200A IST-2W340A
IST-2W-K14A	14mm	
IST-2W-K15A	15mm	
IST-2W-K16A	16mm	
IST-2W-K17A	17mm	
IST-2W-K18A	18mm	
IST-2W-K19A	19mm	
IST-2W-K21A	21mm	
IST-2W-K22A	22mm	
IST-2W-K24A	24mm	
IST-2W-K27A	27mm	

BOX END HEAD (optional)

Code	Open size	Applicable wrenches
IST-2W-M7	7mm	IST-2W30A IST-2W135A
IST-2W-M8	8mm	
IST-2W-M10	10mm	
IST-2W-M11	11mm	
IST-2W-M12	12mm	
IST-2W-M13	13mm	
IST-2W-M14	14mm	
IST-2W-M15	15mm	
IST-2W-M16	16mm	
IST-2W-M17	17mm	
IST-2W-M18	18mm	
IST-2W-M19	19mm	
IST-2W-M21	21mm	
IST-2W-M22	22mm	
IST-2W-M13A	13mm	IST-2W200A IST-2W340A
IST-2W-M14A	14mm	
IST-2W-M15A	15mm	
IST-2W-M16A	16mm	
IST-2W-M17A	17mm	
IST-2W-M18A	18mm	
IST-2W-M19A	19mm	
IST-2W-M21A	21mm	

DIGITAL TORQUE WRENCHES

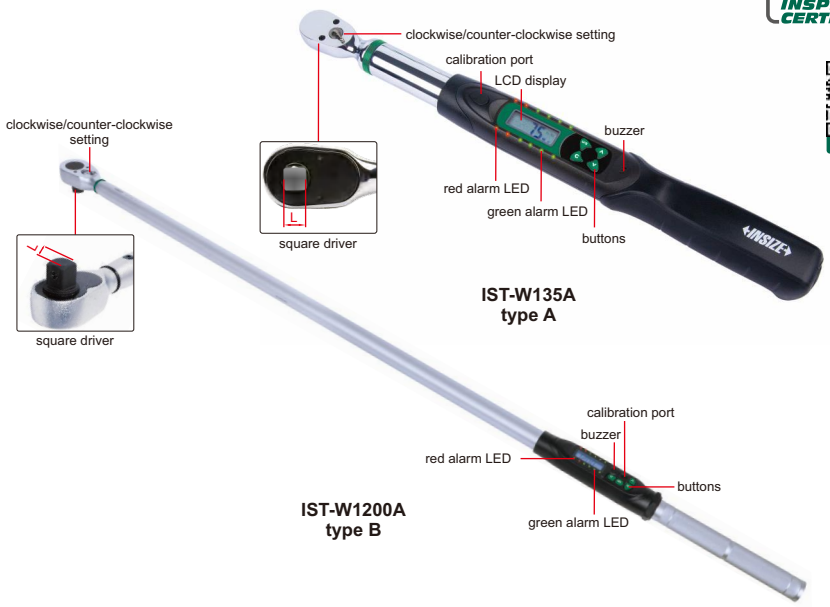
INSPECTION CERTIFICATE

OPTIONAL ACCURACY:
CLOCKWISE: ±1%
COUNTER-CLOCKWISE: ±2%
ONLY FOR RANGE 6~850N.m

POPULAR MODEL

VIDEO

- Ratchet head
- Clockwise and counter-clockwise operation
- Unit: N.m, in.lb, ft.lb, kg.cm
- Peak and track working mode
- Target torque value can be set, with audible and visible alarm:
  - Green LED light on and buzzer sounds when torque value is 90%~100% of target torque
  - Both green and red LED light on and buzzer sounds when target torque value is reached
- Power off automatically in 5 minutes without any operations
- Non-slip grip handle
- With damp record
- With overload record (once the torque reaches 110% of the maximum range)



OPTIONAL ACCESSORY

Calibration cable	IST-W-CABLE

SPECIFICATION

Code	Type	Range	Accuracy	Resolution	Square driver (L)	Power supply	Length	Net weight
IST-W30A	A	6~30N.m	clockwise: ±2% counter-clock wise: ±3%	0.01N.m	1/4"	2×AA batteries, for 110 hours working	390mm	760g
IST-W135A		27~135N.m		0.1N.m	3/8"		415mm	940g
IST-W200A		40~200N.m		0.1N.m	1/2"		530mm	1340g
IST-W340A		68~340N.m		0.1N.m	1/2"		650mm	1540g
IST-W500A	B	100~500N.m	clockwise: ±2.5% counter-clock wise: ±3.5%	0.1N.m	3/4"		950mm	2950g
IST-W850A		170~850N.m		0.1N.m	3/4"		1220mm	4260g
IST-W1200A*		240~1200N.m		1N.m	1"		1785mm	9000g
IST-W1500A*		300~1500N.m		1N.m	1"		1785mm	9000g
IST-W2000A*		400~2000N.m		1N.m	1"		1785mm	10420g

*Without torque units: in.lb, kg.cm

MECHANICAL TORQUE WRENCHES (DIGITAL SETTING)

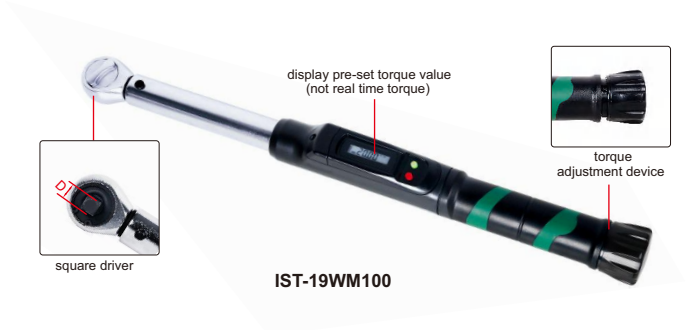
INSPECTION CERTIFICATE

VIDEO

ATTENTION: DISPLAY PRE-SET TORQUE VALUE (NOT REAL TIME TORQUE)

ATTENTION: CLOCKWISE OPERATION ONLY

- Ratchet head
- Unit: N.m, in.lb, ft.lb, kg.cm
- Mechanical “click” torque wrench, the pre-set torque value is shown on the display



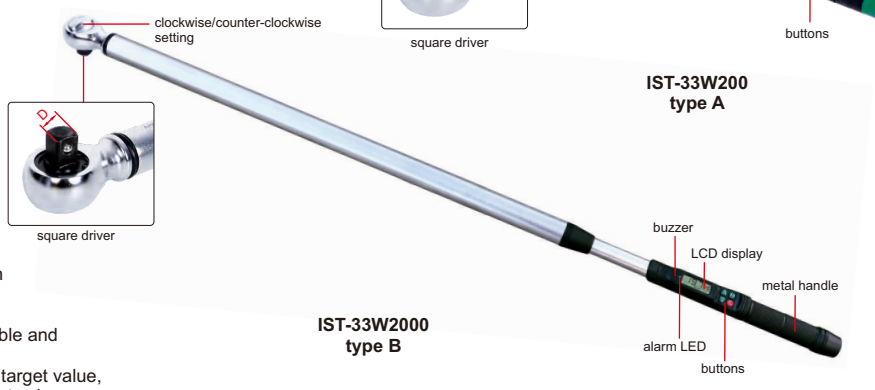
SPECIFICATION

Code	IST-19WM60	IST-19WM100	IST-19WM140	IST-19WM200	IST-19WM300
Range (clockwise)	12~60N.m	20~100N.m	28~140N.m	40~200N.m	60~300N.m
Accuracy	±3%	±3%	±3%	±3%	±3%
Resolution	0.1N.m	0.1N.m	0.1N.m	0.1N.m	0.1N.m
Square driver (D)	3/8"	3/8"	1/2"	1/2"	1/2"
Length	382mm	450mm	481mm	520mm	585mm
Net weight	1.3kg	1.4kg	1.45kg	1.6kg	1.8kg

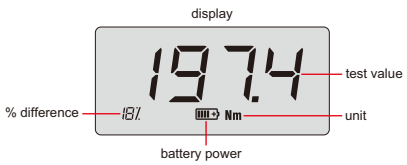
DIGITAL TORQUE WRENCHES (BASIC TYPE)

INSPECTION CERTIFICATE

VIDEO



- Clockwise and count-clockwise operation
- Unit: N.m, lb.in, lb.ft
- Peak and track working mode
- Target torque value can be set, with audible and visible alarm (alarm LED and buzzer):
  - Yellow LED light on when approaching target value, green LED light on when reaching target value, red LED light on when exceeding target value
  - Intermittent alarm when approaching target value, rapid alarm when reaching target value, long-lasting alarm when exceeding target value
- Real-time display of % difference from target value when approaching
- Power off automatically in 2 minutes without any operations



SPECIFICATION

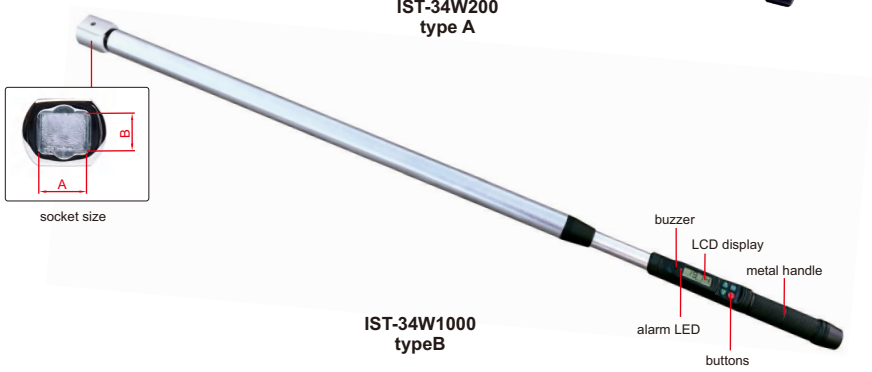
Code	Type	Range	Accuracy	Resolution	Square driver (D)	Power supply	Length	Net weight
IST-33W20	A	2~20N.m	clockwise: ±2% counter-clockwise: ±3%	0.01N.m	1/4"	3×AAA batteries	393mm	800g
IST-33W30		3~30N.m		0.01N.m	3/8"		405mm	830g
IST-33W50		5~50N.m		0.01N.m	3/8"		445mm	920g
IST-33W100		10~100N.m		0.1N.m	3/8"		475mm	980g
IST-33W200		20~200N.m		0.1N.m	1/2"		515mm	1100g
IST-33W300		30~300N.m		0.1N.m	1/2"		583mm	1250g
IST-33W400	B	40~400N.m		0.1N.m	3/4"		800mm	3300g
IST-33W600		60~600N.m		0.1N.m	3/4"		1050mm	4600g
IST-33W800		80~800N.m		0.1N.m	3/4"		1250mm	5200g
IST-33W1000		100~1000N.m		0.1N.m	3/4"		1250mm	5200g
IST-33W1500		150~1500N.m		1N.m	1"		1265mm	6100g
IST-33W2000		200~2000N.m		1N.m	1"		1265mm	6500g

INTERCHANGEABLE HEAD DIGITAL TORQUE WRENCHES (BASIC TYPE)

INSPECTION CERTIFICATE

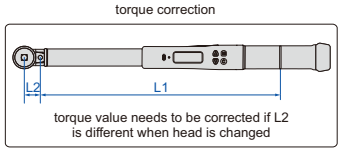
VIDEO

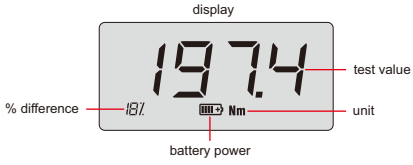
IST-34W200
type A



IST-34W1000
typeB

- Clockwise and count-clockwise operation
- Unit: N.m, lb.in, lb.ft
- Peak and track working mode
- Target torque value can be set, with audible and visible alarm (alarm LED and buzzer):
  – Yellow LED light on when approaching target value, green LED light on when reaching target value, red LED light on when exceeding target value
  – Intermittent alarm when approaching target value, rapid alarm when reaching target value, long-lasting alarm when exceeding target value
- Real-time display of % difference from target value when approaching
- Power off automatically in 2 minutes without any operations





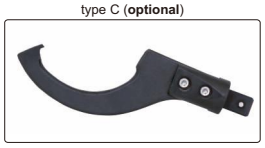
SPECIFICATION

Code	Type	Range	Accuracy	Resolution	Socket size (A×B)	Power supply	Length	Net weight
IST-34W20	A	2~20N.m	clockwise: ±2% counter-clockwise: ±3%	0.01N.m	12×9mm	3×AAA batteries	377mm	770g
IST-34W30		3~30N.m		0.01N.m	12×9mm		377mm	770g
IST-34W50		5~50N.m		0.01N.m	12×9mm		417mm	850g
IST-34W100		10~100N.m		0.1N.m	12×9mm		447mm	920g
IST-34W200		20~200N.m		0.1N.m	18×14mm		493mm	1050g
IST-34W300		30~300N.m		0.1N.m	18×14mm		561mm	1220g
IST-34W400	B	40~400N.m		0.1N.m	18×14mm		780mm	3000g
IST-34W600		60~600N.m		0.1N.m	32×24mm		1050mm	4500g
IST-34W800		80~800N.m		0.1N.m	32×24mm		1250mm	5000g
IST-34W1000		100~1000N.m		0.1N.m	32×24mm		1250mm	5100g

To be continued

Continued from previous page

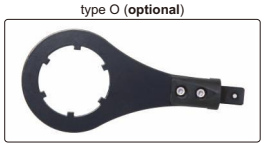
type C (**optional**)



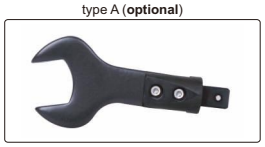
type UM (**optional**)

type M (**optional**)

type O (**optional**)



type A (**optional**)



RATCHET HEAD (optional)

Code	Square driver	Applicable wrenches
IST-11WM-R1	1/4"	IST-34W20, IST-34W30
IST-11WM-R2	3/8"	IST-34W20, IST-34W30, IST-34W50, IST-34W100
IST-11WM-R3	1/2"	IST-34W200, IST-34W300, IST-34W400
IST-11WM-R4	3/4"	IST-34W200, IST-34W300, IST-34W400
IST-11WM-R5	3/4"	IST-34W600, IST-34W800, IST-34W1000

OPEN END HEAD (optional)

Code	Open size	Applicable wrenches
IST-11WM-K8	8mm	IST-34W20 IST-34W30 IST-34W50 IST-34W100
IST-11WM-K10	10mm	
IST-11WM-K13	13mm	
IST-11WM-K14	14mm	
IST-11WM-K15	15mm	
IST-11WM-K17	17mm	
IST-11WM-K19*	19mm	
IST-11WM-K13A	13mm	IST-34W200 IST-34W300 IST-34W400
IST-11WM-K14A	14mm	
IST-11WM-K15A	15mm	
IST-11WM-K17A	17mm	
IST-11WM-K19A	19mm	
IST-11WM-K22A	22mm	
IST-11WM-K24A	24mm	
IST-11WM-K27A*	27mm	
IST-11WM-K30A*	30mm	
IST-11WM-K32A*	32mm	
IST-11WM-K22B	22mm	IST-34W600 IST-34W800 IST-34W1000
IST-11WM-K24B	24mm	
IST-11WM-K27B	27mm	
IST-11WM-K28B	28mm	
IST-11WM-K30B	30mm	
IST-11WM-K32B	32mm	
IST-11WM-K33B*	33mm	
IST-11WM-K36B*	36mm	
IST-11WM-K38B*	38mm	
IST-11WM-K40B*	40mm	

BOX END HEAD (optional)

Code	Open size	Applicable wrenches
IST-11WM-M8	8mm	IST-34W20 IST-34W30 IST-34W50 IST-34W100
IST-11WM-M10	10mm	
IST-11WM-M13	13mm	
IST-11WM-M14	14mm	
IST-11WM-M15	15mm	
IST-11WM-M17	17mm	
IST-11WM-M19	19mm	
IST-11WM-M13A	13mm	IST-34W200 IST-34W300 IST-34W400
IST-11WM-M14A	14mm	
IST-11WM-M15A	15mm	
IST-11WM-M17A	17mm	
IST-11WM-M19A	19mm	
IST-11WM-M22A	22mm	
IST-11WM-M24A	24mm	
IST-11WM-M27A*	27mm	
IST-11WM-M30A*	30mm	
IST-11WM-M32A*	32mm	
IST-11WM-M22B	22mm	IST-34W600 IST-34W800 IST-34W1000
IST-11WM-M24B	24mm	
IST-11WM-K27B	27mm	
IST-11WM-M28B	28mm	
IST-11WM-M30B	30mm	
IST-11WM-M32B	32mm	
IST-11WM-M33B	33mm	
IST-11WM-M36B*	36mm	
IST-11WM-M38B*	38mm	
IST-11WM-M40B*	40mm	

ER WRENCH HEAD (optional)

Type C*	customized according to customer requirements
Type UM*	
Type M*	
Type O*	
Type A*	

*Torque value needs to be corrected for these heads

INTERCHANGEABLE HEAD PRESET DIGITAL “CLICK” TORQUE WRENCHES (WIFI LAN)

INSPECTION CERTIFICATE

DATA OUTPUT

VIDEO

IST-WPE100

Torque wrench:

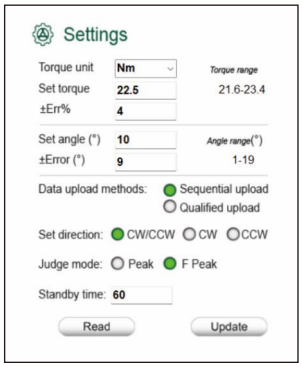
- Clockwise and counter-clockwise operation
- Unit: N.m, cN.m, lb.in, lb.ft, kg.cm, kg.m, oz.in
- Peak and first peak working modes
- Maintain the click audible alarm feature of mechanical wrench
- Mechanical structure adjusts torque value, digital sensor displays real torque value, wrench can be used without torque tester
- Set the angle range to strictly monitor angle of the screw from fitting surface to tightening
  Interval display of curved interface and main interface after unloading, upper and lower tolerance limits can be set to determine pass or fail by LED lights
- Provide torque graph for analyzing and adjusting the tightening strategy
- Scanning module and scanning windows to match corresponding screws
- Open communication protocols for users to develop and interface with factory MES, PLC and other systems
- Automatic zeroing during continuous operation
- Memory of 1000 results and 100 historical review curves
- Auto power off time can be set
- 2 high capacity rechargeable lithium batteries for alternate use

curved interface

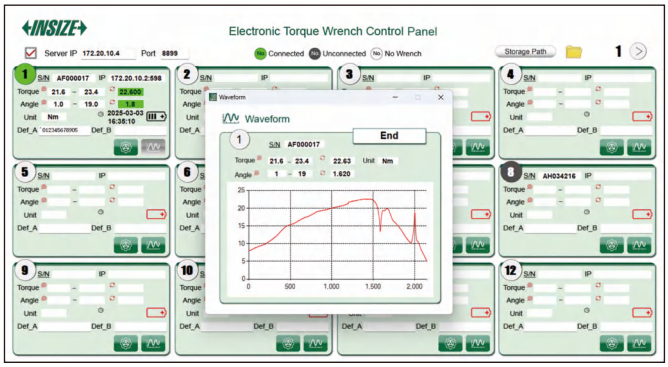
main interface

ratchet head (included)

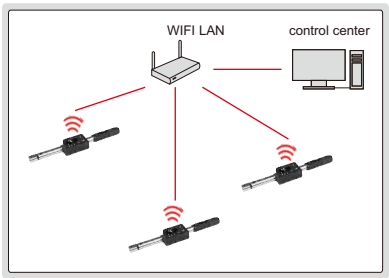
torque adjustment tool (included)



parameter setting software (included)



work display software (included)



application

Software:

- WIFI LAN real-time communication can receive and monitor 24 wrenches at the same time, data can be automatically sent to the centralized control center software
- Parameters can be set and matched directly to the wrench via USB connection to the software
- Can select whether the wrench only sends qualified data after operation (in accordance with the tolerance)
- The data is stored in the wrench when the wrench is disconnected, and the data is automatically uploaded to the computer after wireless connection, or can be uploaded manually through USB connection
- The data in the software is stored in a file with Txt and can be copied and exported to Excel

SPECIFICATION

Code	Range	Accuracy		Resolution	Socket size (A×B)	Square driver (D)	Standard effective length (L)	Length	Net weight
		Torque	Angle						
IST-WPE10	2~10N.m	±3%	±1% of indicated value + ±1° (speed 10°~180°/s) + ±1° (clamping error)	0.001N.m	12×9mm	1/4"	210mm	234mm	520g
IST-WPE30	6~30N.m			0.01N.m	12×9mm	1/4"	225mm	249mm	550g
IST-WPE100	20~100N.m			0.01N.m	12×9mm	3/8"	324mm	363mm	1000g
IST-WPE200	40~200N.m			0.1N.m	18×14mm	1/2"	453mm	485mm	1340g
IST-WPE400	80~400N.m			0.1N.m	18×14mm	3/4"	668mm	700mm	1850g

To be continued

Continued from previous page

OPEN END HEAD (optional)

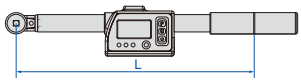
Code	Open size	Applicable wrenches	Code	Open size	Applicable wrenches
IST-11WM-K6	6mm	IST-WPE10 IST-WPE20 IST-WPE30 IST-WPE60 IST-WPE100	IST-11WM-K13A	13mm	IST-WPE200 IST-WPE300 IST-WPE400
IST-11WM-K7	7mm		IST-11WM-K14A	14mm	
IST-11WM-K8	8mm		IST-11WM-K15A	15mm	
IST-11WM-K9	9mm		IST-11WM-K16A	16mm	
IST-11WM-K10	10mm		IST-11WM-K17A	17mm	
IST-11WM-K11	11mm		IST-11WM-K18A	18mm	
IST-11WM-K12	12mm		IST-11WM-K19A	19mm	
IST-11WM-K13	13mm		IST-11WM-K20A	20mm	
IST-11WM-K14	14mm		IST-11WM-K21A	21mm	
IST-11WM-K15	15mm		IST-11WM-K22A	22mm	
IST-11WM-K16	16mm		IST-11WM-K23A	23mm	
IST-11WM-K17	17mm		IST-11WM-K24A	24mm	
IST-11WM-K18*	18mm		IST-11WM-K27A*	27mm	
IST-11WM-K19*	19mm		IST-11WM-K30A*	30mm	
IST-11WM-K20*	20mm		IST-11WM-K32A*	32mm	

*Torque value needs to be corrected for these heads

BOX END HEAD (optional)

Code	Open size	Applicable wrenches
IST-11WM-M8	8mm	IST-WPE10 IST-WPE20 IST-WPE30 IST-WPE60 IST-WPE100
IST-11WM-M10	10mm	
IST-11WM-M13	13mm	
IST-11WM-M14	14mm	
IST-11WM-M15	15mm	
IST-11WM-M17	17mm	
IST-11WM-M19	19mm	
IST-11WM-M13A	13mm	IST-WPE200 IST-WPE300 IST-WPE400
IST-11WM-M14A	14mm	
IST-11WM-M15A	15mm	
IST-11WM-M17A	17mm	
IST-11WM-M19A	19mm	
IST-11WM-M22A	22mm	
IST-11WM-M24A	24mm	
IST-11WM-M27A*	27mm	
IST-11WM-M30A*	30mm	
IST-11WM-M32A*	32mm	

torque correction



torque value needs to be corrected if L is different when head is changed,
correction factor is the ratio of standard effective length to actual effective length

STANDARD DELIVERY

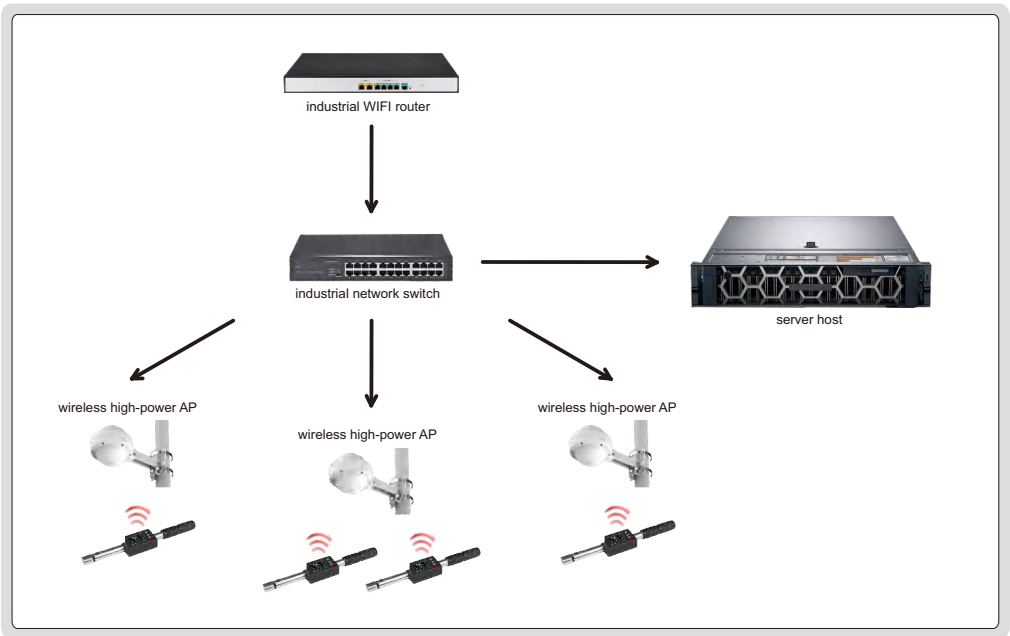
Digital torque wrench	1 pc
Ratchet head	1 pc
Torque adjustment tool	1 pc
Type-C transmission cable	1 pc
Centralized control center software	1 set
Rechargeable lithium battery	2 pcs
Lithium battery charger	1 pc

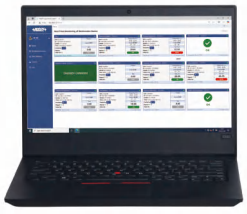
OPTIONAL ACCESSORY

Non-standard wrench heads	customized according to customer requirements
Web framework extension software system	IST-WPE-TS (refer to details)

Web framework extension software system (optional)

- Sample framework for usage (all hardware devices are not included)





backend administration console
example: access 192.168.31.2: 9005
server host IPv4 address

operator console
example: access 192.168.31.2: 8080
server host IPv4 address

TORQUE WRENCHES

ATTENTION: CLOCKWISE OPERATION ONLY

INSPECTION CERTIFICATE

VIDEO

POPULAR MODEL

IST-28WM200

- According to DIN ISO 6789, ASME B107.300
- Ratchet head
- Dual window design with clear scale
- Non-slip grip handle
- Push-pull locking device, easy to operate

SPECIFICATION

Code	IST-28WM25	IST-28WM50	IST-28WM60	IST-28WM100	IST-28WM150
Range (clockwise)	5~25N.m	10~50N.m	10~60N.m	20~100N.m	30~150N.m
Accuracy	±3%	±3%	±3%	±3%	±3%
Graduation	0.2N.m	0.5N.m	0.5N.m	0.5N.m	1N.m
Square driver (D)	1/4"	3/8"	3/8"	1/2"	1/2"
Length	321mm	387mm	387mm	433mm	463mm
Net weight	820g	1000g	1000g	1100g	1200g

Code	IST-28WM200	IST-28WM300	IST-28WM340	IST-28WM400
Range (clockwise)	40~200N.m	60~300N.m	60~340N.m	80~400N.m
Accuracy	±3%	±3%	±3%	±3%
Graduation	1N.m	1.5N.m	2N.m	2N.m
Square driver (D)	1/2"	1/2"	1/2"	1/2"
Length	491mm	551mm	551mm	700mm
Net weight	1250g	1400g	1400g	1650g

Code	IST-28WM550	IST-28WM750	IST-28WM1000	IST-28WM1500
Range (clockwise)	100~550N.m	150~750N.m	200~1000N.m	300~1500N.m
Accuracy	±3% (≤500N.m) ±4% (>500N.m)	±3% (≤500N.m) ±4% (>500N.m)	±3% (≤500N.m) ±4% (>500N.m)	±3% (≤500N.m) ±4% (>500N.m)
Graduation	3N.m	5N.m	5N.m	10N.m
Square driver (D)	3/4"	3/4"	3/4"	1"
Length	807mm	1105mm	1105mm	1260mm
Net weight	3100g	4000g	4000g	4500g

INTERCHANGEABLE HEAD TORQUE WRENCHES

INSPECTION CERTIFICATE

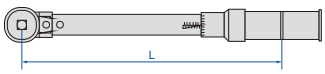
ATTENTION: CLOCKWISE OPERATION ONLY

VIDEO

IST-29WM200

- According to DIN ISO 6789, ASME B107.300
- Non-slip grip handle
- Push-pull locking device, easy to operate
- Dual window design with clear scale

torque correction



torque value needs to be corrected if L is different when head is changed, correction factor is the ratio of standard effective length to actual effective length

SPECIFICATION

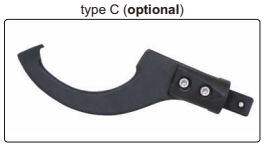
Code	Range (clockwise)	Accuracy	Graduation	Socket Size (A×B)	Standard effective length (L)	Length	Net weight
IST-29WM25	5~25N.m	±3%	0.2N.m	12×9mm	266mm	315mm	700g
IST-29WM50	10~50N.m	±3%	0.5N.m	12×9mm	326mm	376mm	820g
IST-29WM60	10~60N.m	±3%	0.5N.m	12×9mm	326mm	376mm	820g
IST-29WM100	20~100N.m	±3%	0.5N.m	12×9mm	368mm	417mm	900g
IST-29WM150	30~150N.m	±3%	1N.m	18×14mm	418mm	460mm	1150g
IST-29WM200	40~200N.m	±3%	1N.m	18×14mm	436mm	478mm	1200g
IST-29WM300	60~300N.m	±3%	1.5N.m	18×14mm	496mm	538mm	1200g
IST-29WM400	80~400N.m	±3%	2N.m	18×14mm	652mm	694mm	1600g
IST-29WM550	100~550N.m	±3% (≤500N.m) ±4% (>500N.m)	3N.m	32×24mm	887mm	919mm	2000g
IST-29WM750	150~750N.m	±3% (≤500N.m) ±4% (>500N.m)	5N.m	32×24mm	1038mm	1070mm	4000g
IST-29WM850	200~850N.m	±3% (≤500N.m) ±4% (>500N.m)	5N.m	32×24mm	1105mm	1137mm	4200g

RATCHET HEAD (optional)

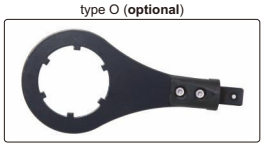
Code	Square driver	Applicable wrenches
IST-11WM-R1	1/4"	**IST-29WM25**
IST-11WM-R2	3/8"	**IST-29WM25, IST-29WM50, IST-29WM60, IST-29WM100**
IST-11WM-R3	1/2"	**IST-29WM150, IST-29WM200, IST-29WM300, IST-29WM400**
IST-11WM-R4	3/4"	**IST-29WM150, IST-29WM200, IST-29WM300, IST-29WM400**
IST-11WM-R5	3/4"	**IST-29WM550, IST-29WM750, IST-29WM850**

type A (**optional**)

type C (**optional**)



type O (**optional**)

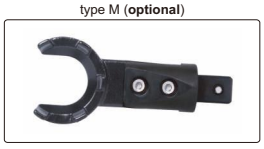


ER WRENCH HEAD (optional)

Type C*	customized according to customer requirements
Type UM*	
Type M*	
Type O*	
Type A*	

type UM (**optional**)

type M (**optional**)



To be continued

Continued from previous page

OPEN END HEAD (optional)

Code	Open size	Applicable wrenches
IST-11WM-K8	8mm	IST-29WM25 IST-29WM50 IST-29WM60 IST-29WM100
IST-11WM-K10	10mm	
IST-11WM-K13	13mm	
IST-11WM-K14	14mm	
IST-11WM-K15	15mm	
IST-11WM-K17	17mm	
IST-11WM-K19*	19mm	
IST-11WM-K13A	13mm	IST-29WM150 IST-29WM200 IST-29WM300 IST-29WM400
IST-11WM-K14A	14mm	
IST-11WM-K15A	15mm	
IST-11WM-K17A	17mm	
IST-11WM-K19A	19mm	
IST-11WM-K22A	22mm	
IST-11WM-K24A	24mm	
IST-11WM-K27A*	27mm	
IST-11WM-K30A*	30mm	
IST-11WM-K32A*	32mm	
IST-11WM-K22B	22mm	IST-29WM550 IST-29WM750 IST-29WM850
IST-11WM-K24B	24mm	
IST-11WM-K27B	27mm	
IST-11WM-K28B	28mm	
IST-11WM-K30B	30mm	
IST-11WM-K32B	32mm	
IST-11WM-K33B*	33mm	
IST-11WM-K36B*	36mm	
IST-11WM-K38B*	38mm	
IST-11WM-K40B*	40mm	

*Torque value needs to be corrected for these heads

BOX END HEAD (optional)

Code	Open size	Applicable wrenches
IST-11WM-M8	8mm	IST-29WM25 IST-29WM50 IST-29WM60 IST-29WM100
IST-11WM-M10	10mm	
IST-11WM-M13	13mm	
IST-11WM-M14	14mm	
IST-11WM-M15	15mm	
IST-11WM-M17	17mm	
IST-11WM-M19	19mm	
IST-11WM-M13A	13mm	IST-29WM150 IST-29WM200 IST-29WM300 IST-29WM400
IST-11WM-M14A	14mm	
IST-11WM-M15A	15mm	
IST-11WM-M17A	17mm	
IST-11WM-M19A	19mm	
IST-11WM-M22A	22mm	
IST-11WM-M24A	24mm	
IST-11WM-M27A*	27mm	
IST-11WM-M30A*	30mm	
IST-11WM-M32A*	32mm	
IST-11WM-M22B	22mm	IST-29WM550 IST-29WM750 IST-29WM850
IST-11WM-M24B	24mm	
IST-11WM-K27B	27mm	
IST-11WM-M28B	28mm	
IST-11WM-M30B	30mm	
IST-11WM-M32B	32mm	
IST-11WM-M33B	33mm	
IST-11WM-M36B*	36mm	
IST-11WM-M38B*	38mm	
IST-11WM-M40B*	40mm	

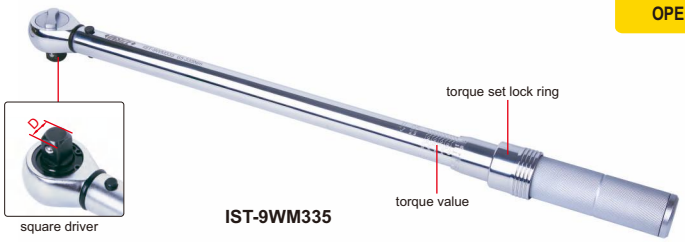
TORQUE WRENCHES

ATTENTION: CLOCKWISE OPERATION ONLY

INSPECTION CERTIFICATE

VIDEO

- Ratchet head
- According to DIN ISO 6789, ASME B107.300
- All-metal construction, sturdy and durable



IST-9WM335

SPECIFICATION

Code	Range (clockwise)	Accuracy	Graduation	Square driver (D)	Length	Net weight
IST-9WM5S	1~5N.m	±3%	0.05N.m	1/4"	183mm	300g
IST-9WM10S	2~10N.m		0.1N.m	1/4"	195mm	320g
IST-9WM12	2.5~12N.m		0.05N.m	1/4"	290mm	680g
IST-9WM20	4~20N.m		0.1N.m	1/4"	290mm	680g
IST-9WM30	6~30N.m		0.2N.m	3/8"	318mm	820g
IST-9WM60	10~60N.m		0.5N.m	3/8"	388mm	960g
IST-9WM100	20~100N.m		0.5N.m	1/2"	443mm	1040g
IST-9WM125	25~125N.m		0.5N.m	1/2"	443mm	1040g
IST-9WM200	40~200N.m		1N.m	1/2"	468mm	1160g
IST-9WM335	65~335N.m		1N.m	1/2"	528mm	1300g
IST-9WM500	100~500N.m		2.5N.m	3/4"	855mm	5000g
IST-9WM800	160~800N.m	±3% (≤500N.m) ±4% (>500N.m)	4N.m	3/4"	1055mm	5900g
IST-9WM1000	200~1000N.m		5N.m	3/4"	1055mm	5900g
IST-9WM1500	300~1500N.m	±3% (≤500N.m) ±4% (>500N.m)	5N.m	1"	1260mm	9200g
IST-9WM2000	400~2000N.m		10N.m	1"	1260mm	9200g
IST-9WM3000	600~3000N.m	±4%	15N.m	1"	1260mm	10500g
IST-9WM1500L	300~1500N.m	±3% (≤500N.m) ±4% (>500N.m)	5N.m	1"	1600mm	13000g
IST-9WM2000L	400~2000N.m		10N.m	1"	1600mm	13000g
IST-9WM3000L	600~3000N.m	±4%	15N.m	1"	1840mm	15200g

INTERCHANGEABLE HEAD TORQUE WRENCHES

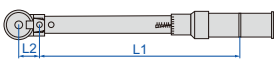
ATTENTION: CLOCKWISE OPERATION ONLY

INSPECTION CERTIFICATE

VIDEO

IST-11WM200

torque correction



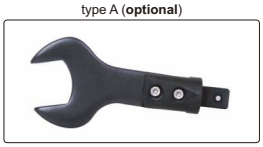
torque value needs to be corrected if L2 is different when head is changed

- According to DIN ISO 6789, ASME B107.300
- All-metal construction, sturdy and durable

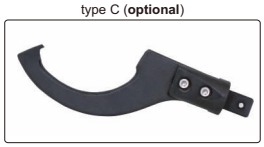
SPECIFICATION

Code	Range (clockwise)	Accuracy	Graduation	Socket size (A×B)	Arm length (L1)	Length (L2)	Net weight
IST-11WM12	2.5~12N.m	±3%	0.05N.m	12×9mm	225mm	28.42mm	580g
IST-11WM30	6.0~30N.m	±3%	0.1N.m	12×9mm	243mm	28.42mm	720g
IST-11WM60	10~60N.m	±3%	0.5N.m	12×9mm	314mm	28.42mm	860g
IST-11WM125	25~125N.m	±3%	0.5N.m	12×9mm	367mm	28.42mm	940g
IST-11WM200	40~200N.m	±3%	1N.m	18×14mm	402mm	38.97mm	1060g
IST-11WM335	65~335N.m	±3%	1N.m	18×14mm	458mm	38.97mm	1200g

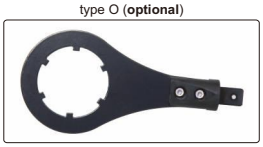
type A (**optional**)



type C (**optional**)



type O (**optional**)

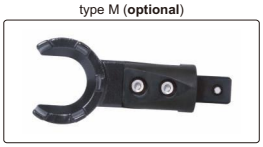


ER WRENCH HEAD (optional)

Type C *	customized according to customer requirements
Type UM *	
Type M *	
Type O *	
Type A *	

type UM (**optional**)

type M (**optional**)



To be continued

Continued from previous page

RATCHET HEAD (optional)

Code	Square driver	Applicable wrenches
IST-11WM-R1	1/4"	IST-11WM12, IST-11WM30
IST-11WM-R2	3/8"	IST-11WM12, IST-11WM30, IST-11WM60, IST-11WM125
IST-11WM-R3	1/2"	IST-11WM200, IST-11WM335
IST-11WM-R4	3/4"	IST-11WM200, IST-11WM335

OPEN END HEAD (optional)

Code	Open size	Applicable wrenches
IST-11WM-K8	8mm	IST-11WM12 IST-11WM30 IST-11WM60 IST-11WM125
IST-11WM-K10	10mm	
IST-11WM-K13	13mm	
IST-11WM-K14	14mm	
IST-11WM-K15	15mm	
IST-11WM-K17	17mm	
IST-11WM-K19 *	19mm	
IST-11WM-K13A	13mm	IST-11WM200 IST-11WM335
IST-11WM-K14A	14mm	
IST-11WM-K15A	15mm	
IST-11WM-K17A	17mm	
IST-11WM-K19A	19mm	
IST-11WM-K22A	22mm	
IST-11WM-K24A	24mm	
IST-11WM-K27A*	27mm	
IST-11WM-K30A*	30mm	
IST-11WM-K32A*	32mm	

BOX END HEAD (optional)

Code	Open size	Applicable wrenches
IST-11WM-M8	8mm	IST-11WM12 IST-11WM30 IST-11WM60 IST-11WM125
IST-11WM-M10	10mm	
IST-11WM-M13	13mm	
IST-11WM-M14	14mm	
IST-11WM-M15	15mm	
IST-11WM-M17	17mm	
IST-11WM-M19	19mm	
IST-11WM-M13A	13mm	IST-11WM200 IST-11WM335
IST-11WM-M14A	14mm	
IST-11WM-M15A	15mm	
IST-11WM-M17A	17mm	
IST-11WM-M19A	19mm	
IST-11WM-M22A	22mm	
IST-11WM-M24A	24mm	
IST-11WM-M27A*	27mm	
IST-11WM-M30A*	30mm	
IST-11WM-M32A*	32mm	

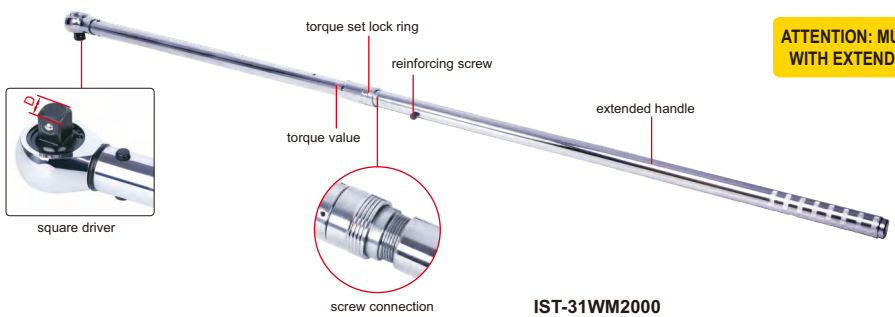
*Torque value needs to be corrected for these heads

EXTENDED HANDLE TORQUE WRENCHE

INSPECTION CERTIFICATE

ATTENTION: CLOCKWISE OPERATION ONLY

ATTENTION: MUST BE USED WITH EXTENDED HANDLE



VIDEO

IST-31WM2000

- Ratchet head
- According to DIN ISO 6789, ASME B107.300
- All-metal construction, sturdy and durable
- Extended handle for less force

SPECIFICATION

Code	Range (clockwise)	Accuracy	Graduation	Square driver (D)	Length	Net weight
IST-31WM2000	400~2000N.m	±4%	10N.m	1"	2200mm	12100g

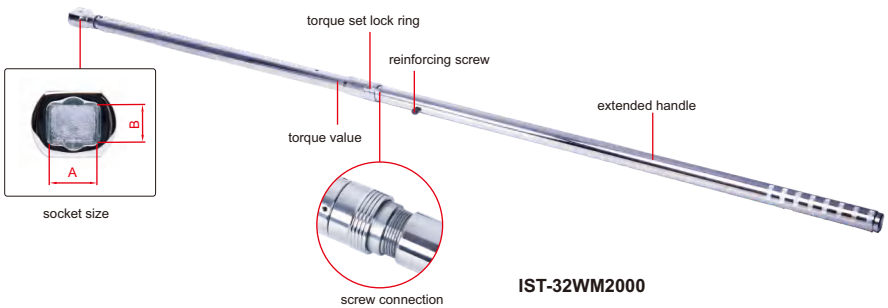
EXTENDED HANDLE INTERCHANGEABLE HEAD TORQUE WRENCHE

ATTENTION: CLOCKWISE OPERATION ONLY

ATTENTION: MUST BE USED WITH EXTENDED HANDLE

INSPECTION CERTIFICATE

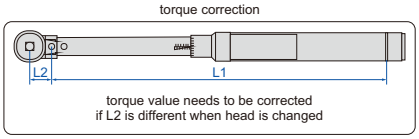
VIDEO



IST-32WM2000

- According to DIN ISO 6789, ASME B107.300
- All-metal construction, sturdy and durable
- Extended handle for less force

torque correction

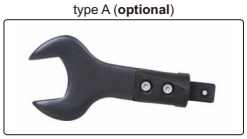


torque value needs to be corrected if L2 is different when head is changed

SPECIFICATION

Code	Range (clockwise)	Accuracy	Graduation	Socket size (A×B)	Length	Net weight
IST-32WM2000	400~2000N.m	±4%	10N.m	36×27mm	2200mm	12500g

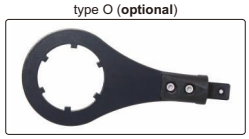
type A (**optional**)



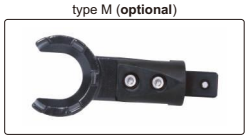
type C (**optional**)

type UM (**optional**)

type O (**optional**)



type M (**optional**)



ER WRENCH HEAD (optional)

Type C *	customized according to customer requirements
Type UM *	
Type M *	
Type O *	
Type A *	

RATCHET HEAD (optional)

Code	Square driver
IST-11WM-R6	1"

OPEN END HEAD (optional)

Code	Open size
IST-11WM-K30C	30mm
IST-11WM-K32C	32mm
IST-11WM-K34C	34mm
IST-11WM-K36C	36mm
IST-11WM-K38C	38mm
IST-11WM-K41C	41mm
IST-11WM-K45C	45mm
IST-11WM-K50C*	50mm
IST-11WM-K55C*	55mm
IST-11WM-K60C*	60mm

*Torque value needs to be corrected for these heads

BOX END HEAD (optional)

Code	Open size
IST-11WM-M30C	30mm
IST-11WM-M32C	32mm
IST-11WM-M34C	34mm
IST-11WM-M36C	36mm
IST-11WM-M38C	38mm
IST-11WM-M41C	41mm
IST-11WM-M45C	45mm
IST-11WM-M50C	50mm
IST-11WM-M55C*	55mm
IST-11WM-M60C*	60mm

PRESET TORQUE WRENCHES

INSPECTION CERTIFICATE

ATTENTION: CLOCKWISE OPERATION ONLY

- Ratchet head
- Torque is preset, to prevent adjustment by mistake during use
- The torque is set at the factory before delivery. Customers can also set the torque with torque adjustment tool (**optional**) and digital torque testers (**IST-TT□□□**, **optional**)
- Clockwise operation only

IST-PW125

torque adjustment tool (**optional**)

SPECIFICATION

Code	IST-PW12	IST-PW20	IST-PW30	IST-PW60	IST-PW125	IST-PW200
Adjustable range*	2.5~12N.m 20~105lb.in	4~20N.m 30~180lb.in	6~30N.m 50~250lb.in	10~60N.m 9.0~45lb.f	25~125N.m 20~90lb.ft	40~200N.m 30~150lb.ft
Accuracy	±3%	±3%	±3%	±3%	±3%	±3%
Square driver (D)	1/4"	1/4"	3/8"	3/8"	3/8"	1/2"
Length	184mm	184mm	214mm	255mm	366mm	457mm
Net weight	450g	450g	500g	560g	790g	1200g

Code	IST-PW340	IST-PW500	IST-PW650	IST-PW800	IST-PW1000A	IST-PW1000B
Adjustable range*	65~340N.m 50~250lb.ft	100~500N.m 80~400lb.ft	150~650N.m 100~500lb.ft	160~800N.m 120~600lb.ft	200~1000N.m 150~750lb.ft	200~1000N.m 150~750lb.ft
Accuracy	±3%	±3%	±4%	±4%	±4%	±4%
Square driver (D)	1/2"	3/4"	3/4"	3/4"	3/4"	1"
Length	691mm	915mm	915mm	1030mm	1260mm	1260mm
Net weight	1960g	2800g	2800g	5000g	6000g	6000g

OPTIONAL ACCESSORY

Torque adjustment tool	IST-PW-TOOL

*Adjust to a fixed torque value according to customer requirements before delivery

SLIP TYPE PRESET TORQUE WRENCHES

INSPECTION CERTIFICATE

ATTENTION: CLOCKWISE OPERATION ONLY

VIDEO

- Ratchet head
- Once set torque is achieved, even if more force is applied, wrench does not add additional torque and prevent over-torque
- Torque is preset, to prevent adjustment by mistake during use
- The torque is set at the factory before delivery, customers can also set the torque with torque adjustment tool

IST-36WM60

SPECIFICATION

Code	IST-36WM6	IST-36WM25	IST-36WM60
Adjustable range*	1~6N.m	5~25N.m	10~60N.m
Accuracy	±6%		
Square driver (D)	1/4"	1/4"	3/8"
Length	200mm	220mm	330mm
Net weight	410g	510g	820g

OPTIONAL ACCESSORY

Torque adjustment tool	**IST-36WM-TOOL1** (suitable for **IST-36WM6**)
	IST-36WM-TOOL2 (suitable for **IST-36WM25**)
	IST-PW-TOOL (suitable for **IST-36WM60**)

*Adjust to a fixed torque value according to customer requirements before delivery

torque adjustment tool (**optional**)

DIAL TORQUE WRENCHES

INSPECTION CERTIFICATE

VIDEO

- Clockwise and counter-clockwise operation
- According to DIN ISO 6789, ASME B107.300

IST-DW70

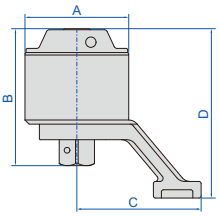
SPECIFICATION

Code	IST-DW18	IST-DW35	IST-DW70	IST-DW140
Range	3.6~18N.m 30~150in.lb	7~35N.m 60~300in.lb	14~70N.m 120~600in.lb	28~140N.m 20~100ft.lb
Accuracy	±4%	±4%	±4%	±4%
Graduation	0.2N.m 2in.lb	0.5N.m 5in.lb	1N.m 10in.lb	2N.m 1ft.lb
Square driver (D)	3/8"	3/8"	3/8"	1/2"
Length	254mm	254mm	378mm	546mm
Net weight	480g	480g	820g	1300g

TORQUE MULTIPLIERS

VIDEO

IST-TM2000



bevel type

IST-TM3500P

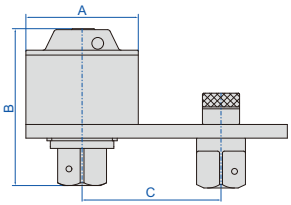
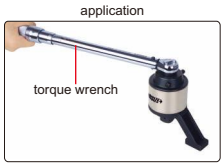
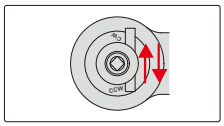


plate type

- Input to output accuracy: ±5%





after tightening, toggle the anti-bounce reversing dowel, turn the wrench in the anticlockwise direction, then remove the wrench from torque multiplier

Z TYPE (BEVEL TYPE) TORQUE MULTIPLIER

Code	Capacity	Torque ratio	Square socket	Square driver	Dimension (A×B×C×D)	For bolt	For nut	Net weight
IST-TM1000	1000N.m	1:4.5	1/2"	1"	82×91×98×123mm	M20~30	S30~46	2.1kg
IST-TM2000	2000N.m	1:12	1/2"	1"	82×120×98×147mm	M22~35	S32~55	3.15kg
IST-TM3500	3500N.m	1:15	1/2"	1"	98×128×120×163mm	M30~45	S46~70	4.9kg
IST-TM5500	5500N.m	1:18.5	1/2"	1 1/2"	115×157×137×199mm	M38~52	S55~80	8.1kg
IST-TM7500	7500N.m	1:20	1/2"	1 1/2"	127×168×146×215mm	M42~60	S65~90	10.6kg
IST-TM10000	10000N.m	1:28.5	1/2"	1 1/2"	141×186×164×238mm	M52~72	S80~105	14kg

L TYPE (PLATE TYPE) TORQUE MULTIPLIER

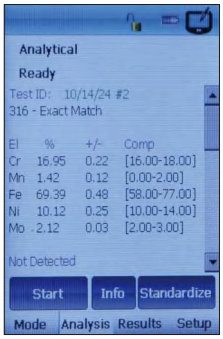
Code	Capacity	Torque ratio	Square socket	Square driver	Dimension (A×B×C)	For bolt	For nut	Net weight
IST-TM1000P	1000N.m	1:5	1/2"	1"	82×91×(72~132)mm	M20~30	S30~46	2.4kg
IST-TM2000P	2000N.m	1:13.3	1/2"	1"	82×120×(80~142)mm	M22~35	S32~55	3.5kg
IST-TM3500P	3500N.m	1:16	1/2"	1"	98×128×(90~158)mm	M30~45	S46~70	5.0kg
IST-TM5500P	5500N.m	1:21.5	1/2"	1 1/2"	115×157×(115~185)mm	M38~52	S55~80	8.7kg
IST-TM7500P	7500N.m	1:24	1/2"	1 1/2"	127×168×(120~210)mm	M42~60	S65~90	11.7kg
IST-TM10000P	10000N.m	1:32	1/2"	1 1/2"	141×186×(125~235)mm	M52~72	S80~105	15.2kg
IST-TM15000P	15000N.m	1:50	1/2"	2 1/2"	156×246×(140~260)mm	M60~85	S80~120	24.1kg
IST-TM20000P	20000N.m	1:72	1/2"	2 1/2"	170×264×(150~290)mm	M72~100	S105~145	27.8kg

HANDHELD XRF ALLOY ANALYZER (BASIC TYPE)
CODE HSM-A310

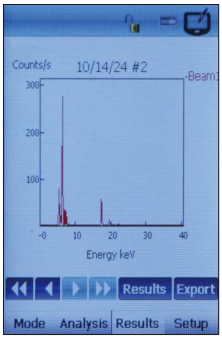
VIDEO

POPULAR MODEL

test interface



spectral analysis



- Fast and non-destructive test to identify alloy grade and composition
- For iron-based alloys (stainless steels, chromium/molybdenum alloys, low alloy steels, tool steels, seamless steels), nickel-based alloys, cobalt-based alloys, titanium-based alloys, copper-based alloys, high-temperature alloys (molybdenum/tungsten alloys), aluminium-based alloys

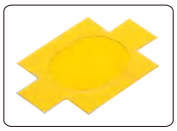
SPECIFICATION

Excitation source	35kV/200μA, Ag target, integrated end window, micro X-ray tube and high voltage, power supply matching power ≥4W
Detector	Si-PIN, window area 25mm²
Elemental analysis range	K, Ca, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As, Se, Rb, Sr, Zr, Nb, Mo, Ru, Rh, Pd, Ag, Cd, Sn, Sb, Ba, Ta, Hf, W, Re, Ir, Pt, Au, Hg, Pb, Bi
Alloy analysis mode	1. iron-based alloys (stainless steels, chromium/molybdenum alloys, low alloy steels, tool steels, seamless steels), nickel-based alloys, cobalt-based alloys, titanium-based alloys, copper-based alloys, molybdenum/tungsten-based alloys, aluminium-based alloys 2. comes with 288 commonly used alloy grades 3. can create your own grade database
Display	3.5-inch LCD touch screen, clearly visible in all light conditions
Memory	built-in 8G, storage data, >40000 groups
Data transmission	data transmission via mobile phone shared WIFI with mobile phone app
Battery	6600mAh lithium battery, for 4 hours working time
System	Windows
Security protection	air-test protection against untargeted operation
Work environment	temperature: -20~40°C, relative humidity: 10%~80%
Dimension (L×W×H)	250×265×85mm
Net weight	1.3kg

STANDARD DELIVERY

Main unit	1 pc
Power adapter	1 pc
Charger	1 pc
Battery	2 pcs
Window protection film (HSM-A310-FILM)	5 pcs
316 stainless steel standard block	1 pc

316 stainless steel standard block (included)



window protection film (included)

HANDHELD XRF ALLOY ANALYZER (ADVANCED TYPE)
CODE HSM-S110

DATA OUTPUT

CAN BE CUSTOMIZED

VIDEO

316 reference sample (included)

window protective film (included)

- Widely used in alloy identification, metal scrap recycling, and quality assurance/control processes within the metal manufacturing industry
- Analyzable alloy series: cobalt-based alloys, titanium-based alloys, molybdenum/tungsten alloys, nickel-based alloys, copper-based alloys, iron-based alloys (stainless steels, chromium/ molybdenum alloys, low alloy steels, tool steels, seamless steels)
- High accuracy, fast measurement speed, and intuitive display of alloy grades, element percentages (with up to 0.001% resolution), and ppmlevel concentrations
- The analysis cycle is completed in seconds with one-touch operation
- Non-Destructive Testing (NDT), which ensures no damage to the sample during the testing process
- No sample preparation is required; direct measurement can be performed on the sample surface
- Built-in 380 alloy grades, expandable with 2 user-defined grade libraries

SPECIFICATION

Analysis mode*	alloy analysis
Detector	Si-PIN
Elemental analysis range	Ti~U
Target material	Ag targe
Excitation source	50kV/200μA Max.
Heat dissipation	dedicated T-slot heat sink enhances thermal dissipation performance of the instrument
Display	4.3-inch industrial-grade resistive touchscreen
Operation system	Android
Safety	air-test protection against untargeted operation
Memory module	32G
Data interface	mini-USB
Data processing	reports can be generated in EXCEL and PDF formats, and users can customize the content
Battery	6600mAh
Working environment	-35~60°C
Dimension (L×W×H)	254×79×280mm
Net weight	1.6kg

* can be customized according to user requirements: RoHS analysis mode, ore analysis mode

STANDARD DELIVERY

Main unit	1 pc
Battery	2 pcs
Power adapter	1 pc
316 reference sample	1 pc
Window protective film (HSM-S110-FILM)	10 pcs

OPTIONAL ACCESSORY

Bluetooth printer	HSM-S110-BP
Stand	HSM-S110-STAND
Testing cup	HSM-S110-CUP

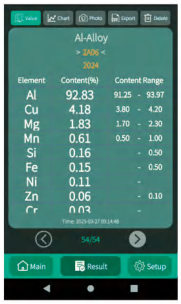
HANDHELD LIBS SPECTROMETER
CODE HLS-B410

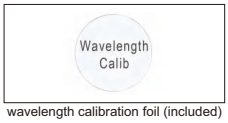
LASER CLASS CLASS I | EYE SAFE LASER | IP54 WATERPROOF | NO RADIATION

VIDEO

POPULAR MODEL

test interface

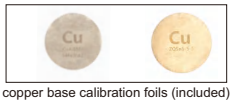




wavelength calibration foil (included)

iron base calibration foils (included)

aluminum base calibration foils (included)


copper base calibration foils (included)

- Widely used in metallurgy, casting, steel, non-ferrous metals and scrap metal recycling, etc.
- LIBS is a technique that uses laser light on the sample's surface to excite outer electrons and generate a plasma, analyzing its elemental composition
- Ability to quickly analyze the metal elements of materials for quantitative characterization and grade differentiation
- Ability to accurately analyse light elements such as Al, Si, Mg, etc.
- No radiation, faster, more accurate, eye-safe handheld spectrometer
- The instrument includes standard metal grade database, ability to create user-owned metal grade database
- Compact size, lightweight, replaceable batteries, long battery life
- IP54 dust/waterproof

SPECIFICATION

Application	alloy analysis	can be used for almost all alloys, including scrap metal, high temperature alloys, alloy steel, stainless steel, tool steel, chromium molybdenum steel, aluminum alloys, nickel alloys, titanium alloys, cobalt alloys, copper alloys, precious metals, zinc alloys, anomalous alloys, zirconium alloys, mixed alloys, etc.
	material properties identification (PMI)	can be used for quality control in the metal fabrication and processing industry to analyze material composition and identify alloy grades for a wide range of materials including critical components, raw materials, and welded seams
Operative system		android
Touch panel		5", 720×1280, multi-touch, adjustable brightness
Light source		pulsed laser
Wavelength		1535nm
Laser life		1 billion times
Laser class		class I
Detection limit		0.05%
Repeatability		major element RSD<1%, nonmajor element RSD<5%
Analysis time		<5s
Work distance		fit to probe plane
Analysis environment		no protective gas required, direct analysis in ambient air
View window material		sapphire
Memory		16G
Data export format		PDF, xlsx (photos available, can add report content: company information, material information, etc.)
Data transmission		USB, flash drive (type C)
Protection class		IP54
Battery		3300mAh lithium battery
Work time		8h
Operation temperature		0~40°C
Dimension (L×W×H)		290×300×90mm
Net weight		1750g

STANDARD DELIVERY

Main unit	1 pc
Battery	2 pcs
Charger	1 pc
Sanding paper (HLS-B410-SP30)	20 pcs
Iron base calibration foil	2 pcs
Aluminum base calibration foil	2 pcs
Copper base calibration foil	2 pcs
Wavelength base calibration foil	1 pc

OPTIONAL DATABASE

Alloy type	Database number	Elemental range
Nickel Alloy	A1	Ni, Cr, Fe, Nb, Mo, Ti, Al, Mn, Cu, etc.
Titanium Alloy	A2	Ti, Al, V, Fe, Cr, Mo, Sn, Mn, Zr, Nb, Si, Cu, etc.
Magnesium Alloy	A3	Mg, Si, Cu, Mn, Zn, Zr, Al, Y, Be, Ni, Fe, etc.
Au	A4	Au, Ag, Zn, Ni, Pd, Cu, Co, In, etc.
Ag	A5	Ag, Cu, Zn, Cd, Ni, etc.
Pt	A6	Pt, Pd, Ag, Cu, Ni, Zn, Co, Ru, Pb, Cr, Au, etc.
Pd	A7	Pd, Cu, Ni, Zn, Fe, Co, Ag, As, Pb, Cr, etc.

STANDARD DATABASE

Alloy type	Elemental range
Iron Alloy	Fe, Cr, Ni, Mn, Cu, V, Mo, Si, Ti, Co, etc.
Aluminum Alloy	Al, Cr, Ni, Si, Mg, Ti, Fe, Cu, Sn, Pb, Zn, Zr, Be, Sr, Sc, etc.
Copper Alloy	Cu, Fe, Al, Mn, Sn, Pb, Zn, Ni, etc.

XRF PLATING THICKNESS INSTRUMENT
CODE XRF-PT230

MANUAL ZOOM

VIDEO

- According to DIN ISO 3497, DIN 50987, and ASTM B568
- Application fields: electroplating plating thickness analysis, inspection of electronic components such as connectors, fastener industry, automotive parts, hardware industry (household equipment and accessories, such as Cr/Ni/CuZn(ABS)), new energy industry (photovoltaic welding wire, etc.), thickness analysis of accessories, Ni/Cu/Ni/NdFeB on rubidium iron boron magnets, metal cation detection in electroplating solution, etc.
- It can detect 90 plating elements
- Equipped with a micro-focus X-ray generator and an advanced light path conversion focusing system, the minimum measurable area is up to 0.03mm²
- It has non-destructive manual zoom detection technology, which can perform non-destructive testing on various shaped and irregular grooved parts from 0 to 30mm
- Equipped with Si-PIN semiconductor detector, high resolution, fast testing speed,stable data, equipped with micro-light focusing technology, ranging spot diffusion less than 10%
- The core EFP algorithm allows for the simultaneous analysis of 23 plating and 24 elements. It can quickly, accurately, and stably analyze multiple layers and multiple elements, including the same element in different layers
- User-friendly closed software, automatically identifies faults, provides calibration and operation steps, and avoids misoperations

SPECIFICATION

Plating analysis	elemental analysis range	Li(3)-U(92)
	detection limit	0.005μm
	analysis thickness	0.01-80μm
EFP alaorithm		standard configuration
Measuring time		5~300s
Detector		Si-PIN semiconductor detector
X-ray source		micro-focusing X-ray tube
Collimator		standard: Ø0.3mm (optional: Ø0.5mm, Ø0.2mm, 0.1×0.3mm)
Nearest ranging spot diffusion		<10%
Camera		1/2.7" color CCD, zoom function
Measuring distance		zoom lens 0~30mm
Focus method		high-sensitivity lens, manual focus
Max. sample height		180mm
XY stage		manual high-precision XY stage
Available moving range		45mm×45mm
Operation environment		15~30°C, <70%RH
Power supply		AC110/220V, 50/60Hz, 95W
Dimension (L×W×H)		380×545×435mm
Net weight		41kg

STANDARD DELIVERY

Main unit	1 pc
Computer	1 pc
Printer	1 pc
Accessory box	1 pc
Twelve element plate	1 set
Ni standard tablet	1 pc
Ag standard tablet	1 pc

OPTIONAL ACCESSORY

Plating solution measuring cup	XRF-PT230-MC
Solution test membrane	XRF-PT230-SF
Au standard tablet	MSS-P01
Cr standard tablet	MSS-P02
Cu standard tablet	MSS-P03
Zn standard tablet	MSS-P04

XRF PRECIOUS METALS ANALYZER
CODE XRF-FM480

VIDEO

- Used in precious metal jewelry processing and manufacturing, gold retail stores, pawnshops, recycling department, and testing laboratories
- Quickly analyze the components of precious metals (Au/Ag/Pt/Pd, etc.), detect the purity grade of gold (0~24K), and achieve a detection accuracy of ppm level
- Non-destructive testing with no sample preparation required
- Large-cavity sample chamber suitable for detecting various sample forms
- Equipped with high-definition cameras, it can monitor the test area in real time, take photos automatically and generate reports
- Integrated design with 11.6" capacitive touch screen, intuitive and convenient operation
- The high-voltage safety lock, software-controlled cover, leak-proof switch, and all-metal enclosure ensure operator safety

SPECIFICATION

Excitation source	Max. 50kV/1mA
Detector	Si-PIN
Optical structure	vertical
Collimator	Ø2.5mm
Detection range	Ti-U
Accuracy	±0.01%
Sample object	solid, liquid, powder
Data output	bluetooth, reports can be generated in EXCEL and PDF formats
Work temperature	-20~50°C
Power supply	AC100~240V, 50/60Hz
Sample chamber dimension (L×W×H)	320×480×130mm
External dimension (L×W×H)	330×580×360mm
Net weight	38.6kg

STANDARD DELIVERY

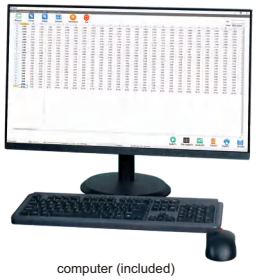
Main unit	1 pc
Bluetooth printer	1 pc
316 calibration sample	1 pc
Small parts fixed tool	1 pc
Window test film (XRF-FM480-FILM)	10 pcs
Wireless keyboard and mouse	1 set

OPTIONAL ACCESSORY

External display	XRF-FM480-DISPLAY
Sample cup	XRF-FM480-CPU

SPARK DIRECT READING SPECTROMETERS (STANDARD TYPE)

VIDEO



computer (included)

OES-R420

- Widely used in metallurgy, casting, machinery, iron and steel and non-ferrous metal industries, etc.
- Can be used for sample analysis of metals and their alloys such as Fe, Al, Cu, Ni, Co, Mg, Ti, Zn, Pb, Sn, Mn, etc.
- It can automatically calibrate the pixel drift to ensure the stability of the optical system
- Fractional exposure is used to lower the detection limit of trace elements
- Equipped with a coaxial spinning air excitation stage, pressurized self-purge, excitation for thousands of times without cleaning
- Supports intelligent grade recognition, automatic carbon equivalent calculation, etc.
- The software is available in multiple languages (Chinese, English, German, Spanish)

SPECIFICATION

Code		OES-R420	OES-R530
Optical system	spectral range	160~500nm	130~800nm*
	lightroom material	cast aluminum	cast iron
	detector	multiple CCD detectors, unlimited maximum number of detection channels	
	optical system construction	paschen-runge construction, grating focal length 500mm, roland circle diameter: 500mm	
	raster scribing	2700 lines/mm	
	resolution	better than 0.01nm (line resolution 0.7407nm/mm, pixel resolution 0.005926nm)	
	pixel dimension	8μm	
	dispersion	class I: 0.74nm/mm, class II: 0.37nm/mm	
Curve	standard curve	carbon steel/low and medium alloy steel (**A1**), plain stainless steel (**A2**), Al-Si-Cu alloy (**B1**)	
	customized curve	curves can be added or customized for special base materials (Mg, Ti, Pb, Sn, Mn, etc.)	
Excitation source	excitation frequency	20~1000Hz	
	excitation current	90A	
	excitation voltage	190V	
Spark stand	discharge parameter	inductance: 120μH, resistance: 3.5Ω, capacitance: 5μF, voltage: 380V	
	dimension	125×95mm, max. load 50kg	
	lens	one-piece lens isolation valve	
	excitation electrode	tungsten electrode	
Gas supply	argon quality	purity: 99.999%, pressure: ≥0.6MPa	
	flow rate	tidal flushing mode, excitation: 8L/min, standby: 60ml/min	
General analysis time		<40s	
Data processing		after instrument excitation, acquisition and countback to independently control the integration exposure time of different CCDs	
Work environment		20~25°C, <70%RH	
Power supply		AC220V, 50Hz, 1Ø, 16A, 2.5KW, ground resistance <4Ω	
Dimension (L×W×H)		470×872×435mm	
Net weight		80kg	100kg

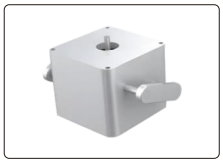
*The instrument can be optionally equipped to analyze elements N, Li, Na, and K

To be continued

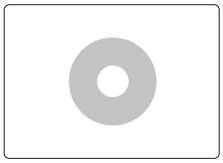
Continued from previous page

spectral sample grinder (**optional**)

lathe (**optional**)



small sample fixture (**optional**)



gasket (**optional**)

STANDARD DELIVERY

Main unit	1 pc
Computer	1 set
Printer	1 pc
Voltage regulator	1 pc
Calibration sample	1 set
Electrode brush (OES-T350-BR)	1 set
Analysis and calibration software	1 set
Consumable and spare parts	1 set*

* Including polarimeter, pressure reducing valve, electrode brush and other consumable and spare parts

OPTIONAL ACCESSORY

Spectral standard sample	**MSS** series	select standard sample based on the test material
Spectral sample grinder	**OES-MY100**	Ø350mm, 380V
Lathe	**OES-R420-LATHE**	220×300mm, 220V
Small sample fixture	**OES-R420-RODLIKE**	Ø3.1~7mm regular bar sample
	OES-R420-FILIFORM	Ø0.5~3mm filament sample
Gasket	**OES-R420-GASKET1**	copper, ID6mm
	OES-R420-GASKET2	copper, ID8mm
	OES-R420-GASKET3	boron nitride, ID4mm
	OES-R420-GASKET4	boron nitride, ID6mm
N analysis module	**OES-R530-MC-N**	the measurement range can be customized, used with **OES-R530**
Na analysis module	**OES-R530-MC-NA**	
K analysis module	**OES-R530-MC-K**	
Li analysis module	**OES-R530-MC-LI**	

IRON BASE CURVES

Curve number	**A1**	**A2**	**A3**	**A4**	**A5**
Elemental content (%)	Medium and* low alloy steel	Plain stainless steel	High speed tool steel	Cr-Mn stainless steel	Nodular iron**
C	0.0015-1.5	0.005-2.0	0.08-2.5	0.006-2.0	0.9-4.5
Si	0.005-2.0	0.005-2.0	0.005-2.0	0.003-2.0	0.1-5.5
Mn	0.005-2.5	0.002-2.5	0.005-2.0	2.0-25	0.005-2.5
P	0.001-0.1	0.002-0.1	0.003-0.1	0.003-0.2	0.003-1.0
S	0.001-0.1	0.001-0.1	0.001-0.1	0.003-0.1	0.003-0.2
Cr	0.001-5.0	5-35	0.01-7.9	0.005-30	0.005-5.0
Ni	0.002-5.0	0.004-30***	0.005-2.5	0.005-7	0.002-5.0
Mo	0.003-2.0	0.005-4.0	0.01-10.0	0.006-2.5	0.003-2.0
Cu	0.002-1.5	0.005-4.0	0.005-1.5	0.006-2.0	0.005-2.0
W	0.001-2.0	0.002-1.0	1.0-20.0	0.006-0.5	0.006-1.0
V	0.002-1.5	0.002-0.5	0.01-6.0	0.006-1.5	0.001-1.0
Ti	0.001-1.0	0.003-1.0	0.004-0.5	0.003-1.0	0.001-0.5
Nb	0.001-0.5	0.005-3.0	0.002-1.0	0.006-3.0	0.002-1.0
Al	0.001-1.5	0.004-1.5	0.005-0.2	0.004-0.5	0.001-0.4
Mg	–	–	–	–	0.001-0.1
Ce	–	–	–	–	0.001-0.1
Zr	0.004-0.5	–	–	–	0.003-0.1
Co	0.001-0.5	0.003-0.5	0.006-10	0.003-0.5	0.001-0.2
B	0.0008-0.02	0.002-0.02	–	0.002-0.02	0.003-0.2
Fe	REF	REF	REF	REF	REF
Description	La, As, Pb, Sn, Sb, Bi, Ca, Zn, Se, etc. in iron base can be customized				

* Including carbon steel curve
** Nodular iron samples are required to be whitening treated samples
*** Stainless steel in the nickel content of the standard configuration for the 0.004-30%, can be extended up to 40% according to requirements

To be continued

Continued from previous page

ALUMINUM BASE CURVES

Curve number	B1	B2	B3	B4
Elemental content (%)	Al-Si-Cu	Low-Al	Al-Mg-Si	Al-Zn
Cd	0.002-0.25	0.001-0.2	0.002-0.2	0.002-0.2
Cr	0.002-0.5	0.002-0.4	0.002-0.5	0.005-0.5
Cu	0.5-8.0	0.002-1.0	0.002-2.0	0.01-3.0
Fe	0.005-2.0	0.002-1.5	0.005-1.5	0.03-1.5
Mg	0.005-2.0	0.002-1.5	0.005-15.0	0.01-4.5
Mn	0.005-1.0	0.001-0.5	0.005-1.0	0.01-1.0
Ni	0.005-1.5	0.003-0.5	0.005-1.0	0.01-1.0
P	0.005-0.02	0.005-0.02	0.005-0.02	0.005-0.02
Pb	0.005-0.4	0.002-0.2	0.005-0.5	0.005-0.2
Si	1.0-16.0	0.005-1.5	0.01-25.0	0.01-1.0
Sn	0.0005-1.0	0.003-0.2	0.005-0.5	0.005-0.2
Ti	0.003-0.5	0.003-0.3	0.003-0.5	0.003-0.5
Zn	0.005-3.0	0.005-1.5	0.01-3.0	0.01-10.0
Al	REF	REF	REF	REF
Description	Sb, Sr, V, Zr, Ag, As, B, Be, Ca, Ce,Ga, Co, etc. in aluminum base can be customized			

NICKEL BASE CURVES

Curve number	D1	D2	D3	D4
Elemental content (%)	Nimonic alloy	Inconel alloy	Monel alloy	Hartz alloy
Al	0.005-6.0	0.005-6.0	0.005-4.5	0.005-1.0
C	0.005-0.3	0.005-0.2	0.005-0.5	0.005-0.25
Co	0.01-20.0	0.005-1.0	0.005-0.5	0.005-3.0
Cr	8.0-25.0	10.0-25.0	0.005-0.5	15.0-25.0
Cu	0.005-0.5	0.005-0.5	20.0-32.0	0.005-1.5
Fe	0.015-3.5	0.01-20.0	0.005-4.0	0.5-20.0
Mg	0.005-0.05	0.005-0.05	0.005-0.1	–
Mn	0.005-1.2	0.005-1.2	0.005-3.0	0.005-1.5
Mo	0.01-10.0	0.01-10.0	0.005-0.1	5.0-23.0
Nb	0.005-0.5	0.005-7.0	0.005-0.5	–
Si	0.005-1.0	0.005-0.5	0.005-4.5	0.005-1.3
Ti	0.005-6.0	0.005-3.0	0.005-1.5	0.005-0.5
V	0.005-0.6	0.005-0.5	–	0.005-0.5
W	0.002-4.5	0.005-0.5	–	0.5-6.0
Zr	0.005-0.15	0.005-0.05	0.005-0.1	–
Ni	REF	REF	REF	REF
Description	P, S, Pb, Ce, B, etc. in nickel base can be customized			

COPPER BASE CURVES

Curve number	C1	C2	C3	C4	C5	C6	C7
Elemental content (%)	Zn-Brass	Pb-Brass	Sn-Bronze	P-Bronze	Al-Bronze	Cu-Ni alloy	Cu-Ni-Zn alloy
Al	0.001-0.5	0.05-1.0	0.001-0.2	0.001-0.1	0.5-12.0	0.001-0.5	0.001-0.1
As	0.003-0.2	0.003-0.3	0.003-0.2	0.003-0.2	0.003-0.1	0.003-0.05	0.003-0.1
Bi	0.002-0.01	0.002-0.01	0.002-0.1	–	–	0.001-0.02	0.001-0.01
Cd	0.001-0.15	–	0.001-0.01	–	–	–	–
Co	–	–	0.003-0.15	–	–	0.006-0.2	0.006-0.25
Fe	0.003-0.5	0.003-1.0	0.003-0.35	0.003-0.35	0.005-6.5	0.03-1.0	0.03-1.0
Mg	–	–	–	0.005-0.01	0.005-0.1	0.003-0.15	0.003-0.15
Mn	–	0.001-0.2	0.003-0.2	0.005-0.5	0.005-3.0	0.005-1.5	0.005-1.0
Ni	0.005-0.5	0.01-1.0	0.005-2.0	0.005-1.5	0.01-7.0	0.5-35.0	5.0-20.0
P	0.003-0.05	0.003-0.1	0.003-0.6	0.01-1.0	0.003-0.05	0.003-0.05	0.01-0.1
Pb	0.005-0.5	0.2-5.0	0.005-10.0	0.005-1.5	0.002-0.2	0.002-0.05	0.002-2.0
S	0.001-0.01	0.001-0.01	–	0.002-0.1	–	0.002-0.1	0.002-0.1
Sb	0.001-0.1	0.001-0.1	0.001-0.6	0.001-0.5	–	0.001-0.02	0.001-0.02
Si	0.001-0.2	0.001-0.2	0.004-0.15	0.004-0.15	0.004-0.5	0.002-0.2	0.002-1.0
Sn	0.005-0.1	0.005-1.0	0.01-12.0	0.1-12.0	0.005-0.3	0.005-0.1	0.005-0.2
Zn	0.5-42.0	0.5-42.0	0.005-12.0	0.002-1.5	0.003-2.0	0.005-1.0	10.0-35.0
Cr	–	–	–	–	0.001-0.1	–	–
Cu	REF	REF	REF	REF	REF	REF	REF
Description	Be, Ti, Te, Se, C, B, Au, Ag, etc. in copper base can be customized						

COBALT BASE CURVES

Curve number	E1	E2	E3	E4
Elemental content (%)	Co-Cr-W alloy	Co-Cr-Ni-W alloy	Co-Ni-Cr-Mo alloy	Co-Cr-Mo alloy
Al	0.005-0.48	0.005-0.48	0.005-0.48	0.005-0.48
C	0.005-1.0	0.005-1.0	0.005-0.5	0.005-0.5
Cr	18.0-31.0	18.0-31.0	18.0-31.0	18.0-31.0
Cu	0.005-0.3	0.005-0.3	0.005-0.05	0.005-0.05
Fe	0.005-9.0	0.005-3.0	0.03-1.0	0.005-3.0
Mn	0.005-2.0	0.005-2.0	0.005-0.3	0.005-1.0
Mo	0.005-1.5	0.005-1.0	1.0-10.0	1.0-8.5
Nb	0.005-4.2	0.005-0.5	0.005-0.5	0.005-0.5
Ni	0.005-3.0	8.0-25.0	10.0-36.0	0.005-5.0
Si	0.005-1.0	0.005-1.0	0.005-1.0	0.005-1.0
Ti	0.005-3.0	0.005-0.05	–	0.005-0.05
W	3.0-16.0	3.0-16.0	0.005-0.1	0.005-0.1
Co	REF	REF	REF	REF
Description	V, P, S, Ta, Sn, B, etc. in cobalt base can be customized			

ZINC BASE CURVES

Curve number	F1	F2
Elemental content (%)	Die-casting zinc alloy	Zinc-Aluminum alloy
Al	0.05-6.0	6.0-30.0
Cd	0.005-0.04	0.005-0.04
Cu	0.005-3.0	0.005-3.0
Fe	0.005-0.1	0.005-0.1
Mg	0.005-0.1	0.005-0.1
Ni	0.005-0.05	0.005-0.05
Pb	0.005-0.03	0.005-0.03
Si	0.005-0.05	0.005-0.05
Sn	0.005-0.01	0.005-0.02
Ti	0.005-0.3	0.005-0.3
Zn	REF	REF
Description	Sb, etc. in zinc base can be customized	

STANDARD SAMPLES FOR SPECTRAL INSTRUMENT

INSPECTION CERTIFICATE

- Used for establishing working curves and calibrating spectrometers
- Supplied with manufacturer inspection certificate

MSS-CS01

MSS-AP01

MSS-CUA01

CARBON STEEL
(Elemental content*: %)

Code	MSS-CS01
Name	C10
C	0.100
Si	0.063
Mn	0.280
P	0.014
S	0.016
Cr	0.020
Ni	0.0072
Mo	-
V	-
Al	-
Cu	0.018
Co	-
Ti	-

*The actual value of the content may be slightly different when delivered, it is detailed in the inspection certificate

1XXX, 8XXX ALUMINUM ALLOY
(Elemental content*: %)

Code	MSS-AP01
Name	1080
Si	0.090
Fe	0.119
Cu	0.0029
Mn	0.0023
Mg	0.012
Cr	-
Ni	-
Zn	0.0063
Ti	0.0044
Pb	0.0013
Zr	-
V	0.016
Cd	0.0045

COPPER ALLOY
(Elemental content*: %)

Code	MSS-CUA01
Name	CuZn37
Cu	61.05
Pb	0.0045
Zn	38.86
P	0.012
Fe	0.027
Sn	0.00013
Sb	0.00016
Bi	0.0001
As	0.00013
Al	0.00017
Mn	-
Ni	0.0004
Si	0.0005

HANDHELD RAMAN SPECTROMETER (BASIC TYPE) CODE HHL-R240

VIDEO

- One-touch operation, non-destructive, fast detection and identification
- Equipped with raman spectral recognition algorithms, including standard spectra of up to 10,000 kinds of substances
- Supports analysis of pure substances and mixtures, with the ability to create user-owned database
- 5.5" screen and dual cameras to record the inspection site at all times
- Test results support export PDF reports
- Ultra-light weight, suitable for one-handed operation, easy to carry, built-in lithium battery
- 4-6 hours of long battery life

SPECIFICATION

Operative system	Android
Excitation wavelength	785±0.5nm
Wavenumber range	200~4000cm^{-1}
Resolution	10cm^{-1}
Touch panel	5.5", 1920×1080, Multi-Touch
Communication Interface	USB type-C
Fields of application	drugs: heroin, methamphetamine, cocaine, ketamine, etc.
	predisposition to manufacture: ephedrine, trichloromethane, ether, etc.
	explosives: TNT, RDX, TATP, ammonium nitrate, etc.
	hazardous chemicals: sulphuric acid, petrol, nitric acid, toluene, etc.
	food and drugs: illegal additives, pharmaceutical excipients, etc.
Report output	supports export of multi-information test reports (test results, mapping information, photo forensics, etc.)
Work hours	4-6h
Battery	5200mAh lithium battery
Operation temperature	-20~50°C
Dimension (L×W×H)	172×85×30mm
Net weight	500g

STANDARD DELIVERY

Main unit	1 pc
Power cable	1 pc
Solid probe	1 pc
Liquid cuvette	1 pc

HANDHELD RAMAN SPECTROMETER (ADVANCED TYPE)
CODE HHL-S360

VIDEO

push probe (included) | probe for solid material (included) | probe for solid material (included) | vertical liquid cuvette (included) | horizontal liquid cuvette (included)

- Widely used in industry, medicine, environmental protection, food, public security, defense, etc.
- For the qualitative identification of inorganic and organic substances in various forms
- The 1064nm wavelength has the unique advantage of avoiding fluorescence interference
- Plastic types can be clearly distinguished, with the ability to create user-owned database
- Different sizes of probes and lenses to meet the testing of various samples
- Account privileges can be set to prevent unauthorized disclosure of data
- Compact size, lightweight, replaceable batteries, long battery life

SPECIFICATION

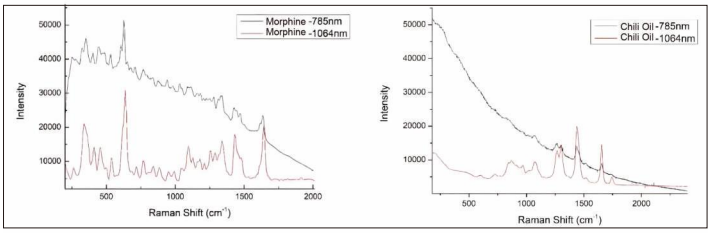
Operative system	android
Wavelength	1064nm
Wavenumber range	200~2500cm^{-1}
Laser power	0~500mW adjustable
Resolution	14cm^{-1}
Focus length	f=10mm*
Touch panel	6.5", 1600×720, multi-touch
Laser class	class 3B
Fields of application	plastics: PP, PS, PVC, PA, ABS, etc.
	drugs: heroin, methamphetamine, cocaine, ketamine, fentanyl, alprazolam, etc.
	food safety: food additives, pesticide and veterinary drug residues, illegal additives, etc.
	gemstones and minerals: authenticity of gemstones, color identification, inclusions analysis, etc.
	petrochemicals: oil quality analysis, chemical raw materials, intermediate by-products, etc.
	pharmaceutical industry: identification of raw materials and excipients, identification of Chinese medicine additives, qualitative identification of drugs, etc.
	others: scientific archaeology, biomedical diagnostics, environmental protection, etc.
Report output	supports export of multi-information test reports (test results, mapping information, photo forensics, etc.)
Communication Interface	bluetooth, WIFI
Battery	5800mAh lithium battery
Work hours	4-6h
Operation temperature	0~40°C
Dimension (L×W×H)	209×95×55mm
Net weight	1350g

*Interchangeable focus lens with a focal length of 15mm

STANDARD DELIVERY

Main unit	1 pc
Battery	2 pcs
Charger	1 pc
Sample spoon	1 pc
Disposable droppers	5 pcs
Focus lens (f=15mm)	1 pc
Vertical liquid cuvette (Ø12mm)	1 pc
Horizontal liquid cuvette (Ø12mm)	1 pc
Push probe (WD=0.2mm)	1 pc
Probe for solid material (WD=0.2mm)	1 pc
Probe for solid material (WD=5mm)	1 pc

The red curve is the 1064nm Raman spectrum, the peaks are clearly visible, and it is highly resistant to fluorescence interference.
The black curve is the 785nm Raman spectrum, with large fluorescence interference.



CARBON AND SULFUR ANALYZER
CODE CSA-R300

CAN BE CUSTOMIZED FOR HIGH SULPHUR CHANNEL ACCORDING TO REQUIREMENTS

VIDEO

- Widely used in iron and steel metallurgy, powder metallurgy, magnetic materials, new energy, third-party testing, research institutes, etc.
- Analysis of carbon and sulfur in steel, cast iron, alloys, cement, sand, glass, lime, rubber, catalysts, soil, semiconductors, electronic materials, metal ores, ceramics and other solid materials
- Adoption of high-end infrared detection system and the core components of the air circuit system ensures the stability and accuracy of detection
- The high-frequency heating system adopts special high-frequency capacitors to ensure the long-term reliability of high-frequency work
- Adopt German imported special external metal dust filter, easy to dismantle, easy to clean
- Electronic balance for accurate weighing, auto-matic tare of crucible mass, auto-matic input of sample weight
- The software can monitor solenoid status, signal acquisition status, high frequency status, baseline status, etc.
- With data management and storage, query and statistics, printing projects, generating reports

SPECIFICATION

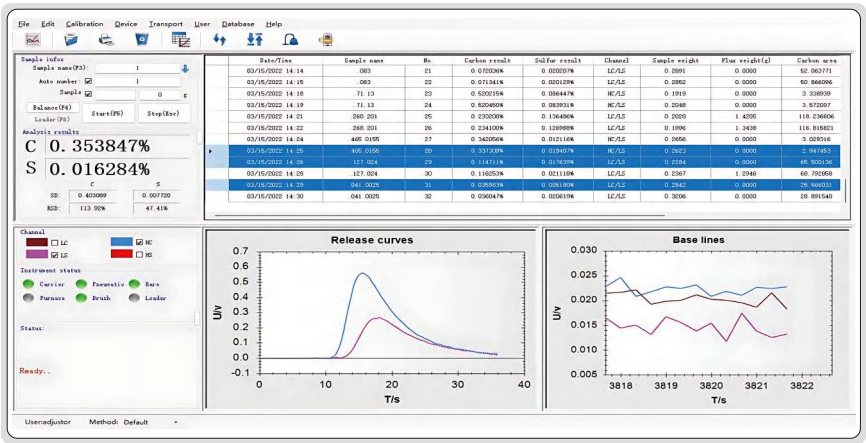
Detector	pyroelectric solid state infrared detectors
Light source	infrared light source
Channel configuration	standard with high carbon, low carbon, low sulfur
Thermostatic	gas chamber thermostat control
Analysis range	low carbon: 0.6ppm~0.1%, high carbon: 0.1%~50%, low sulfur: 0.6ppm~0.3% *
Analysis accuracy	carbon: 1ppm or RSD≤0.5%, Sulfur: 1ppm or RSD≤1.0%
Sensitivity	0.01ppm
Analysis time	30s~40s
Sample weighing	recommended range 0.1g~0.5g, can be changed according to the sample content
Combustion furnace	18MHz, 2.7kVA
Carrier gas	oxygen concentration ≥99.5%
Motive gas	nitrogen concentration ≥99.5%
Power supply	AC220V±10%, 50Hz, 16A
Dimensions (L×W×H)	550×760×770mm
Net weight	100kg

* Changing the weighing volume can extend the analysis range up to 100%, can be customized for high sulfur channel with 0.3-30% analysis range

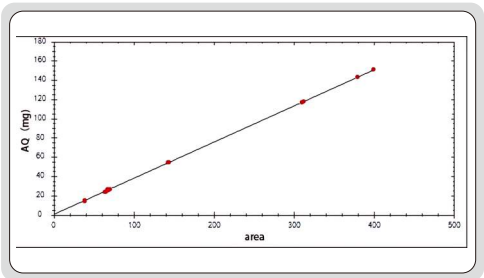
STANDARD DELIVERY

Main unit	1 pc
Computer	1 pc
Software	1 pc
Dust catcher	1 pc
Electronic balance (8311-60)	1 pc
Printer	1 pc
Pressure valve	1 pc
Standard sample	3 pcs
Soda lime (CSA-R300-SL)	1 pc
Tungsten flux (CSA-R300-TF)	1 pc
Desiccant (CSA-R300-DE)	1 pc
Crucible (CSA-R300-CR)	1000 pcs
Tool	1 set

ANALYSIS SOFTWARE (INCLUDED)



ANALYSIS CURVE



COATING THICKNESS GAUGE (STANDARD TYPE)
CODE 9501-1200

VIDEO

BLUETOOTH | FOR MAGNETIC AND NON-MAGNETIC SUBSTRATES | DATA OUTPUT

INSPECTION CERTIFICATE

POPULAR MODEL

eddy current probe **NFE** with zero calibration block (**9501-1200N** included)

magnetic induction probe **FE90** for bores and grooves (**optional**)

calibration foils (included)

magnetic induction probe **FE10** for large range (**optional**)

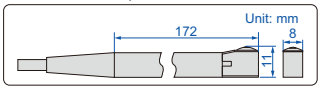
zero calibration block (included)

receiver (**optional**)

9501-1200

- Magnetic induction probe (FE) measures the thickness of non-magnetic coating and non-metallic coating on magnetic metal substrate.
  Substrate: iron, steel, magnetic stainless steel (not for non-magnetic stainless steel)
  Coating: zinc, copper, chrome, tin, plastic, powder, paint (not for nickel)
- Eddy current probe (NFE) measures the thickness of non-conductive coating on non-magnetic metal substrate.
  Substrate: copper, aluminum, zinc, non-magnetic stainless steel
  Coating: plastic, powder, paint, anodizing (not for chrome and zinc plating)
- Tolerance measurement
- Data statistic, including average, variance, maximum and minimum values
- Data can be sent to Excel by connecting to computers via bluetooth or cable of receiver
- Support bluetooth printer
- Automatic power off

FE90 probe dimension



SPECIFICATION

Probe	magnetic induction probe
Measuring range	refer to the specification of probes
Accuracy	±(3%L+1)μm (range≤1250μm) ±(3%L+10)μm (range>1250μm) L is measuring thickness in μm
Resolution	0.1μm (range<100μm) 1μm (range≥100μm)
Measuring mode	continuous and single
Storage capacity	600
Output	Type-C
Power supply	2×1.5V AA batteries
Dimension	135×77×32mm
Net weight	172g

STANDARD DELIVERY

Magnetic induction probe (9501-1200-FE)	1 pc
Zero calibration block for FE probe	1 pc
Main unit	1 pc
Software and USB cable	1 pc
Calibration foils (50/100/250/500/1000μm)	5 pcs
1.5V AA battery	2 pcs

OPTIONAL ACCESSORY

Probe	**9501-1200-NFE, 9501-1200-FE90, 9501-1200-FE10**
Receiver	**ISR-C300-RECEIVER**
Cable of receiver	**9501-1200-CABLE**
Bluetooth printer	**ISR-C002-PRINTER**

SPECIFICATION OF PROBES

Code	Range	Minimum substrate thickness	Minimum measuring area	Minimum curvature radius of convex workpiece	Probe type
9501-1200-FE	0~1250μm	0.5mm	Ø7mm	1.5mm	magnetic induction probe (**FE**)
9501-1200-NFE	0~1250μm	0.3mm	Ø15mm	3mm	eddy current probe (**NFE**)
9501-1200-FE90	0~1250μm	0.5mm	Ø7mm	–	magnetic induction probe (**FE90**) for bores and grooves
9501-1200-FE10	500μm~10000μm	2mm	Ø40mm	10mm	magnetic induction probe (**FE10**) for large range

COATING THICKNESS GAUGE
CODE ISO-8000FN

VIDEO

SUITABLE FOR THIN COATING BELOW 10μm

FOR MAGNETIC AND NON-MAGNETIC SUBSTRATES

calibration foils (included)

zero calibration plate (included)

stand (**optional**)

eddy current probe **N2000** (**optional**)

eddy current probe **N1500** (**optional**)

magnetic induction probe **F500** (included)

- Can measure thickness of thin coating below 10μm
- High repeatability
- Magnetic induction probe measures the thickness of non-magnetic coating and non-metallic coating on magnetic metal substrate
  Substrate: iron, steel, magnetic stainless steel (not for non-magnetic stainless steel)
- Coating: zinc, aluminum, copper, chrome, tin, plastic, powder, paint (not for nickel)
  Eddy current probe measures the thickness of non-conductive coating on non-magnetic metal substrate
  Substrate: copper, aluminum, zinc, non-magnetic stainless steel
- Coating: plastic, powder, paint, anodizing (not for chrome and zinc plating)
  Maximum, minimum, average and variance values can be calculated automatically

SPECIFICATION

Probe		**F500** (included) magnetic induction probe	**N1500 (optional)** eddy current probe	**N2000 (optional)** eddy current probe
Measuring range		0~500μm	0~1500μm	0~2000μm
Resolution		0.1μm (range<100μm) 1μm (100μm≤range≤500μm)	0.1μm (range<100μm) 1μm (100μm≤range<1000μm) 0.01mm (1.00mm≤range≤1.50mm)	0.1μm (range<100μm) 1μm (100μm≤range<1000μm) 0.01mm (1.00mm≤range≤2.00mm)
Accuracy*		±(0.5μm+2%L)		
Repeatability*		≤(0.2μm+0.8%L)		≤(0.2μm+1%L)
Measuring mode		single and continuous		
Measuring interval	single mode	1.5s	0.8s	
	continuous mode	0.4s	0.4s	
Calibration mode		zero calibration and multi-points calibration (1~5 points)		
Minimum substrate thickness		0.1mm	0.05mm	
Minimum measuring area		Ø7mm		Ø25mm
Minimum radius of curvature workpieces	convex surface	1.5mm		
	concave surface	10mm		
Unit		μm/mil		
Power supply		4×1.5V AAA batteries		
Dimension		148×76×26mm		
Net weight		148g		

*L is measuring thickness in μm

STANDARD DELIVERY

Main unit	1 pc
Magnetic induction probe	1 pc
Zero calibration plate	1 pc
Calibration foils (5.6μm, 11.6μm, 24.6μm, 50.0μm,100μm, 252μm, 390μm)	1 set
1.5V AAA battery	4 pcs

OPTIONAL ACCESSORY

Eddy current probe (with zero calibration plate and standard foil)	ISO-8000FN-N1500**
	ISO-8000FN-N2000
Stand	ISO-8000FN-STAND

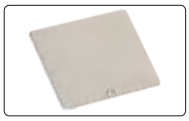
**For precision measurement of thin coating below 10μm, please use the stand for eddy current probe

COATING THICKNESS GAUGE (STANDARD TYPE)
CODE 5405-QM21

VIDEO

- Suitable for both magnetic and non-magnetic metal substrates
- Can measure the thickness of non-magnetic coating and non-metallic coating on magnetic metal substrate
  Substrate: iron, steel, magnetic stainless steel
  Coating: zinc, aluminum, copper, chrome, tin, plastic, powder, paint (not for nickel)
- Can measure the thickness of non-conductive coating on non-magnetic metal substrate
  Substrate: copper, aluminum, zinc, non-magnetic stainless steel
  Coating: plastic, powder, paint, anodizing (not for chrome and zinc plating)
- Upper and lower limits can be set, over-limit alarm alert
- Data statistics and chart analysis
- 2.4-inch rotatable color screen

ruby probe


Fe zero calibration plate (included)

standard foil (included)

Nfe zero calibration plate (included)

paint inspection

film thickness measurement

antirust paint layer measurement

SPECIFICATION

Measuring range	0~2000μm
Measuring principle	FE mode: magnetic induction NFE mode: eddy current effect
Calibration mode	zero calibration, multi-point calibration
Accuracy	±(2%L+1μm), L is measuring thickness in μm
Resolution	0.1μm (<100μm), 1μm (≥100μm)
Minimum curvature radius	convex: 5mm; concave: 25mm
Minimum measuring area	Ø15mm
Minimum substrate thickness	FE: 0.20mm; NFE: 0.03mm
Storage	1300
Operation environment	temperature: -10°C~50°C; humidity: 20%~90% (non-condensing)
Unit	μm, mm, mil, inch
Language	English, Chinese
Power supply	2×1.5V AA batteries
Dimension (L×W×H)	147×77×33mm
Net weight	135g (exclude battery)

STANDARD DELIVERY

Probe	1 pc
Fe zero calibration plate	1 pc
NFe zero calibration plate	1 pc
Standard foil	1 set
1.5V AA battery	2 pcs

COATING THICKNESS GAUGE (STANDARD TYPE)
CODE 5407-QM25

VIDEO

FOR MAGNETIC AND NON-MAGNETIC SUBSTRATES

INSPECTION CERTIFICATE

- Separate probe, suitable for both magnetic and non-magnetic metal substrates
- Can measure the thickness of non-magnetic coating and non-metallic coating on magnetic metal substrate
  Substrate: iron, steel, magnetic stainless steel
  Coating: zinc, aluminum, copper, chrome, tin, plastic, powder, paint (not for nickel)
- Can measure the thickness of non-conductive coating on non-magnetic metal substrate
  Substrate: copper, aluminum, zinc, non-magnetic stainless steel
  Coating: plastic, powder, paint, anodizing (not for chrome and zinc plating)
- Upper and lower limits can be set, over-limit alarm alert
- Data statistics and chart analysis 2.4-inch rotatable color screen

ruby probe

Fe zero calibration plate (included)

standard foil (included)

Nfe zero calibration plate (included)

paint inspection

film thickness measurement

antirust paint layer measurement

SPECIFICATION

Measuring range	0~2000μm
Measuring principle	FE mode: magnetic induction NFE mode: eddy current effect
Calibration mode	zero calibration, multi-point calibration
Accuracy	±(2%L+1μm), L is measuring thickness in μm
Resolution	0.1μm (<100μm), 1μm (≥100μm)
Minimum curvature radius	convex: 5mm; concave: 25mm
Minimum measuring area	Ø15mm
Minimum substrate thickness	FE: 0.20mm; NFE: 0.03mm
Storage	1300
Operation environment	temperature: -10°C~50°C; humidity: 20%~90% (non-condensing)
Unit	μm, mm, mil, inch
Language	English, Chinese
Power supply	2×1.5V AA batteries
Dimension (L×W×H)	main unit: 147×77×33mm, probe: Ø17×67mm
Net weight	main unit: 135g (exclude battery), probe: 63g

STANDARD DELIVERY

Main unit	1 pc
Probe	1 pc
Fe zero calibration plate	1 pc
NFe zero calibration plate	1 pc
Standard foil	1 set
1.5V AA battery	2 pcs

COATING THICKNESS GAUGES (ADVANCED TYPE)

VIDEO

INSPECTION CERTIFICATE

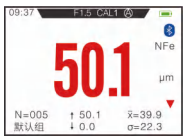
- Can measure the thickness of non-magnetic coating and non-metallic coating on magnetic metal substrate
  Substrate: iron, steel, magnetic stainless steel
  Coating: zinc, aluminum, copper, chrome, tin, plastic, powder, paint (not for nickel)
- Can measure the thickness of non-conductive coating on non-magnetic metal substrate
  Substrate: copper, aluminum, zinc, non-magnetic stainless steel
  Coating: plastic, powder, paint, anodizing (not for chrome and zinc plating)
- Zinc coating weight mode displays zinc layer thickness and weight
- Upper and lower limits can be set, over-limit alarm alert
- Data statistics and chart analysis
- Color LCD screen automatically rotates for different angles

Fe zero calibration plate (included)

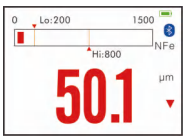
Nfe zero calibration plate (included)

standard foil (included)

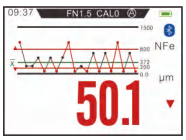
reading only



reading and statistics



reading and bar graph



reading and run chart

SPECIFICATION

Code	5411-TC15	5411-TC30	5411-TF50
Measuring range	FE/NFE (auto recognition): 0~1500μm	FE/NFE (auto recognition): 0~3000μm	FE: 0~5000μm
Accuracy	±(2%L+1μm): ≤1500μm ±(3%L+1.5μm): >1500μm, L is measuring thickness in μm		
Resolution	0.1μm (0~99.9μm), 1μm (100μm~3000μm)		0.1μm (0~99.9μm), 1μm (100~999μm), 0.01mm (1.00~5.00mm)
Measuring principle	FE mode: magnetic induction, NFE mode: eddy current effect		FE mode: magnetic induction
Calibration mode	zero calibration, one point calibration, two-point calibration, five-point calibration		
Measuring mode	single mode, continous mode, average mode, zinc coating weight mode (for FE mode only)		
Minimum curvature radius	convex: 5mm; concave: 25mm		
Minimum measuring area	Ø6mm		
Minimum substrate thickness	0.3mm		
Storage	1600 (100×16 groups)		
Operation environment	temperature: -10°C~50°C; humidity: <80% (non-condensing)		
Unit	μm, mil		
Language	English, Chinese		
Power supply	2×1.5V AA batteries or USB		
Dimensions (L×W×H)	134×67×38mm		
Net weight	135g		

STANDARD DELIVERY

Code	5411-TC15	5411-TC30	5411-TF50
Main unit	1 pc	1 pc	1 pc
Fe zero calibration plate	1 pc	1 pc	1 pc
NFe zero calibration plate	1 pc	1 pc	-
Standard foil	1 set	1 set	1 set
1.5V AA battery	2 pcs	2 pcs	2 pcs
Protective case	1 pc	1 pc	1 pc

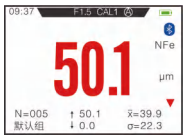
COATING THICKNESS GAUGE (ADVANCED TYPE)
CODE 5413-TC31

VIDEO

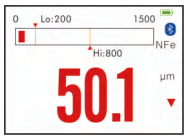
INSPECTION CERTIFICATE

- Can measure the thickness of non-magnetic coating and non-metallic coating on magnetic metal substrate
  Substrate: iron, steel, magnetic stainless steel
  Coating: zinc, aluminum, copper, chrome, tin, plastic, powder, paint (not for nickel)
- Can measure the thickness of non-conductive coating on non-magnetic metal substrate
  Substrate: copper, aluminum, zinc, non-magnetic stainless steel
  Coating: plastic, powder, paint, anodizing (not for chrome and zinc plating)
- Zinc coating weight mode displays zinc layer thickness and weight
- Upper and lower limits can be set, over-limit alarm alert
- Data statistics and chart analysis
- Color LCD screen automatically rotates for different angles

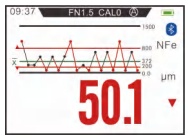
reading only



reading and statistics



reading and bar graph



reading and run chart

5413-TC31

5413-TC31-FN15
probe (included)

SPECIFICATION

Measuring range	refer to the specification of probes
Accuracy	±(2%L+1μm): ≤1500μm ±(3%L+1.5μm): >1500μm, L is measuring thickness in μm
Resolution	range<3000μm: 0.1μm (0~99.9μm), 1μm (100~3000μm) range>3000μm: 0.1μm (0~99.9μm), 1μm (100~999μm), 0.01mm (≥1.00mm)
Measuring principle	FE mode: magnetic induction, NFE mode: eddy current effect
Calibration mode	zero calibration, one point calibration, two-point calibration, five-point calibration
Measuring mode	single mode, continous mode, average mode, zinc coating weight mode (for FE mode only)
Storage	1600 (100×16 groups)
Operation environment	temperature: -10°C~50°C; humidity: <80% (non-condensing)
Unit	μm, mil
Language	English, Chinese
Power supply	2×1.5V AA batteries or USB
Dimensions (L×W×H)	main unit: 134×67×38mm, probe: Ø14mm×850mm (cable included)
Net weight	185g

STANDARD DELIVERY

Main unit	1 pc
Probe (5413-TC31-FN15)	1 pc
Fe zero calibration plate	1 pc
NFe zero calibration plate	1 pc
Standard foil	1 set
1.5V AA battery	2 pcs
Protective case	1 pc

To be continued

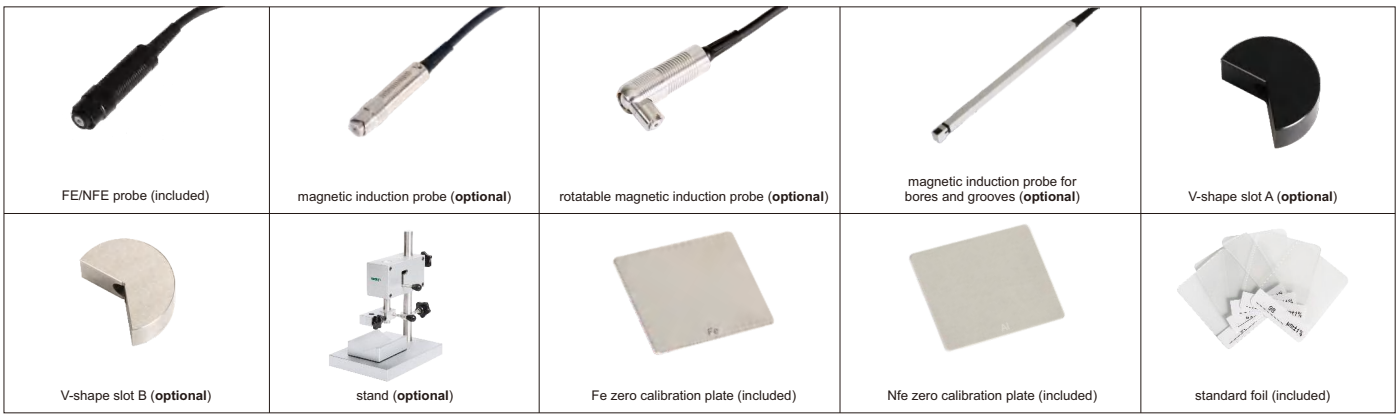
Continued from previous page

OPTIONAL ACCESSORY

FE/NFE probe	**5413-TC31-FN30**
Magnetic induction probe	**5413-TC31-FE15, 5413-TC31-FE30, 5413-TC31-FE50**
Rotatable magnetic induction probe	**5413-TC31-FL15, 5413-TC31-FL30, 5413-TC31-FL50**
Magnetic induction probe for bores and grooves	**5413-TC31-FE90**
V-shape slot A	**5413-VA-FN (for 5413-TC31-FN15, 5413-TC31-FN30)**
V-shape slot B	**5413-VB-FE (for 5413-TC31-FE15, 5413-TC31-FE30, 5413-TC31-FE50)**
Stand	**5413-STAND**

SPECIFICATION OF PROBES

Code	Range	Minimum substrate thickness	Minimum measuring area	Minimum curvature radius of convex workpiece	Probe type
5413-TC31-FN15 (included)	0~1500μm	0.3mm	Ø6mm	FE: 1.5mm, NFE: 3mm	FE/NFE probe
5413-TC31-FN30 (optional)	0~3000μm	0.3mm	Ø6mm	FE: 1.5mm, NFE: 3mm	
5413-TC31-FE15 (optional)	0~1500μm	0.3mm	Ø6mm	1.5mm	magnetic induction probe
5413-TC31-FE30 (optional)	0~3000μm	0.3mm	Ø6mm	1.5mm	
5413-TC31-FE50 (optional)	0~1500μm	0.3mm	Ø6mm	1.5mm	
5413-TC31-FL15 (optional)	0~3000μm	0.3mm	flat: Ø6mm, inner tube: Ø30mm	1.5mm	rotatable magnetic induction probe (0~90°)
5413-TC31-FL30 (optional)	0~1500μm	0.3mm	flat: Ø6mm, inner tube: Ø30mm	1.5mm	
5413-TC31-FL50 (optional)	0~3000μm	0.3mm	flat: Ø6mm, inner tube: Ø30mm	1.5mm	
5413-TC31-FE90 (optional)	0~1500μm	0.3mm	flat: Ø8mm, inner tube: Ø13mm	-	magnetic induction probe for bores and grooves

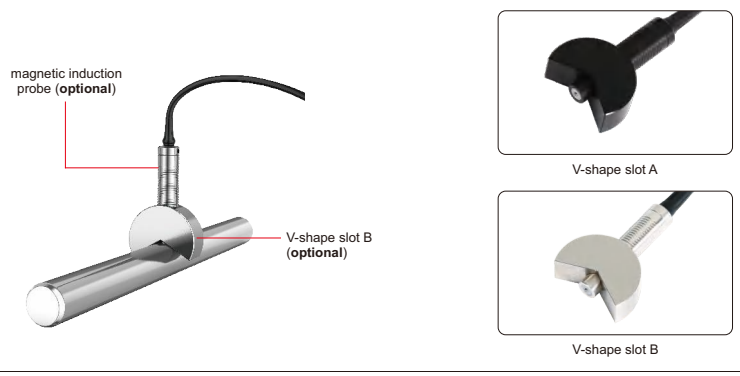


FE/NFE probe (included) | magnetic induction probe (**optional**) | rotatable magnetic induction probe (**optional**) | magnetic induction probe for bores and grooves (**optional**) | V-shape slot A (**optional**)

V-shape slot B (**optional**) | stand (**optional**) | Fe zero calibration plate (included) | Nfe zero calibration plate (included) | standard foil (included)

PROBE APPLICATION

■ probe with V-shape slot measuring cylinder



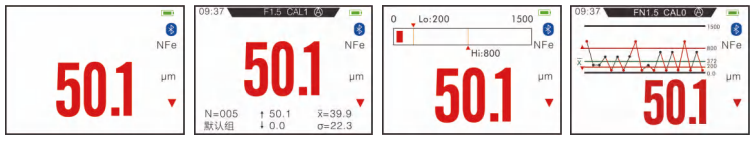
■ rotatable magnetic induction probe measuring confined area

LARGE RANGE COATING THICKNESS GAUGE (ADVANCED TYPE)
CODE 5414-TF100

INSPECTION CERTIFICATE

VIDEO

- Can measure the thickness of non-magnetic coating and non-metallic coating on magnetic metal substrate
  Substrate: iron, steel, magnetic stainless steel
  Coating: zinc, aluminum, copper, chrome, tin, plastic, powder, paint (not for nickel)
- Zinc coating weight mode displays zinc layer thickness and weight
- Upper and lower limits can be set, over-limit alarm alert
- Data statistics and chart analysis
- Color LCD screen automatically rotates for different angles



reading only | reading and statistics | reading and bar graph | reading and run chart

5414-TF100

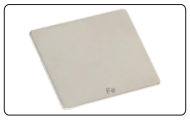
5414-TF100-P
probe (included)

SPECIFICATION

Measuring range	0~10000μm
Accuracy	±(2%L+1μm): ≤1500μm ±(3%L+1.5μm): >1500μm, L is measuring thickness in μm
Resolution	0.1μm (0~99.9μm), 1μm (100~999μm), 0.01mm (1.00~9.99mm), 0.1mm (10.0mm)
Measuring principle	magnetic induction
Calibration mode	zero calibration, one point calibration, two-point calibration, five-point calibration
Measuring mode	single mode, continous mode, average mode, zinc coating weight mode (for FE mode only)
Minimum curvature radius	20mm
Minimum measuring area	Ø16mm
Minimum substrate thickness	0.3mm
Storage	1600 (100×16 groups)
Operation environment	temperature: -10°C~50°C; humidity: <80% (non-condensing)
Unit	μm, mil
Language	English, Chinese
Power supply	2×1.5V AA batteries or USB
Dimensions (L×W×H)	main unit: 134×67×38mm, probe: Ø31mm×850mm (cable included)
Net weight	260g (probe included)

STANDARD DELIVERY

Main unit	1 pc
Probe (5414-TF100-P)	1 pc
Fe zero calibration plate	1 pc
Standard foil	1 set
1.5V AA battery	2 pcs
Protective case	1 pc



Fe zero calibration plate (included)

standard foil (included)

COATING THICKNESS GAUGE (BASIC TYPE)
CODE ISO-1000FN

FOR MAGNETIC AND NON-MAGNETIC SUBSTRATES

VIDEO

- Probe is suitable for both magnetic and non-magnetic metal substrates
- Can measure the thickness of non-magnetic coating and non-metallic coating on magnetic metal substrate
  Substrate: iron, steel, magnetic stainless steel (not for non-magnetic stainless steel)
  Coating: zinc, aluminum, copper, chrome, tin, plastic, powder, paint (not for nickel)
- Can measure the thickness of non-conductive coating on non-magnetic metal substrate
  Substrate: copper, aluminum, zinc, non-magnetic stainless steel
  Coating: plastic, powder, paint, anodizing (not for chrome and zinc plating)
- 3 measuring modes: Fe, NFe, Fe/NFe
- Store 9 measuring records
- Small and portable, easy for operation

ruby contact point

standard foil (included)

Fe zero calibration plate (included)

NFe zero calibration plate (included)

SPECIFICATION

Measuring range		0~5000μm
Resolution		0.1μm (range<100μm) 1μm (100μm≤range<1000μm) 0.01mm (1mm≤range≤5mm)
Accuracy*		<2000μm: ±(2μm+3%L) 2000μm~5000μm: ±(2μm+5%L)
Measure interval		0.5s
Calibration mode		zero calibration
Measuring mode		Fe, NFe, Fe/NFe
Minimum substrate thickness	Fe	0.2mm
	NFe	0.05mm
Minimum measuring area		Ø25mm
Minimum radius of curvature workpieces	convex surface	5mm
	concave surface	25mm
Unit		μm/mil
Power supply		2×1.5V AAA batteries
Dimension		101×62×28mm
Net weight		79g

*L is measuring thickness in μm

STANDARD DELIVERY

Main unit	1 pc
Fe zero calibration plate	1 pc
NFe zero calibration plate	1 pc
Standard foil (100μm)	1 pc
1.5V AAA battery	2 pcs

COATING THICKNESS GAUGE (BASIC TYPE)
CODE ISO-1200FN

FOR MAGNETIC AND NON-MAGNETIC SUBSTRATES

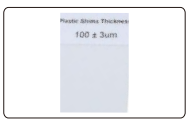
VIDEO

- Probe is suitable for both magnetic and non-magnetic metal substrates
- Can measure the thickness of non-magnetic coating and non-metallic coating on magnetic metal substrate
  Substrate: iron, steel, magnetic stainless steel (not for non-magnetic stainless steel)
- Coating: zinc, aluminum, copper, chrome, tin, plastic, powder, paint (not for nickel)
  Can measure the thickness of non-conductive coating on non-magnetic metal substrate
  Substrate: copper, aluminum, zinc, non-magnetic stainless steel
  Coating: plastic, powder, paint, anodizing (not for chrome and zinc plating)
- 3 measuring modes: Fe, NFe, Fe/NFe
- Store 9 measuring records
- Small and portable, easy for operation

ruby contact point

Fe zero calibration plate (included)

NFe zero calibration plate (included)


standard foil (included)

SPECIFICATION

Measuring range		0~5000μm
Resolution		0.1μm (range<100μm) 1μm (100μm≤range<1000μm) 0.01mm (1mm≤range≤5mm)
Accuracy*		<2000μm: ±(2μm+3%L) 2000μm~5000μm: ±(2μm+5%L)
Measure interval		0.5s
Calibration mode		zero calibration
Measuring mode		Fe, NFe, Fe/NFe
Minimum substrate thickness	Fe	0.2mm
	NFe	0.05mm
Minimum measuring area		Ø25mm
Minimum radius of curvature workpieces	convex surface	5mm
	concave surface	25mm
Unit		μm/mil
Power supply		2×1.5V AAA batteries
Main unit dimension		101×62×28mm
Probe dimension		71×26×22mm
Net weight		114g

*L is measuring thickness in μm

STANDARD DELIVERY

Main unit	1 pc
Fe zero calibration plate	1 pc
NFe zero calibration plate	1 pc
Standard foil (100μm)	1 pc
1.5V AAA battery	2 pcs

COATING THICKNESS GAUGE
CODE 5403-QM32

FOR INDOOR OR OUTDOOR LOW TEMPERATURE USE

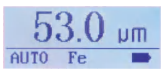
BLUETOOTH

VIDEO

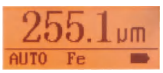
- Suitable for both magnetic and non-magnetic metal substrates
- Can measure the thickness of non-magnetic coating and non-metallic coating on magnetic metal substrate
  Substrate: iron, steel, magnetic stainless steel
- Coating: zinc, aluminum, copper, chrome, tin, plastic, powder, paint (not for nickel)
  Can measure the thickness of non-conductive coating on non-magnetic metal substrate
  Substrate: copper, aluminum, zinc, non-magnetic stainless steel
- Coating: plastic, powder, paint, anodizing (not for chrome and zinc plating)
  Can quickly detect the paint thickness of iron and aluminum body of car,
  three colors of backlight indication, can identify non-metal shell and iron powder putty layer
- Can connect to mobile APP, measure and generate test reports in real time, and save or share the report
- Built-in multiple languages
- Store 9 measuring records
- Small and portable, easy for operation

ruby probe

car body paint thickness detection



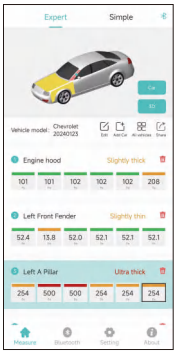
paint thickness<170μm, blue backlight indicates "normal thick"



paint thickness between 170μm and 350μm, yellow backlight indicates "slightly thick"

paint thickness>350μm, red backlight indicates "ultra thick"

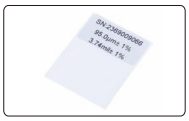
mobile APP



SPECIFICATION

Measuring range	0~5000μm
Resolution	0.1μm (range<1000μm) 1μm (1000μm≤range<5000μm)
Accuracy*	<3000μm: ±(2μm+3%L) 3000μm~5000μm: ±(2μm+5%L)
Measure interval	0.5s
Calibration mode	zero calibration
Display	LCD
Working temperature	-20°C~50°C
Unit	μm/mil
Language	English, Chinese, Russian, Turkish, Ukrainian
Power supply	2×1.5V AAA batteries
Dimension (L×W×H)	100×60×24mm
Net weight	80g

*L is measuring thickness in μm



standard foil (included)

Fe zero calibration plate (included)

STANDARD DELIVERY

Main unit	1 pc
Fe zero calibration plate	1 pc
NFe zero calibration plate	1 pc
Standard foil (100μm)	1 pc
1.5V AAA battery	2 pcs

NFe zero calibration plate (included)

DOUBLE SCREEN COATING THICKNESS GAUGE
CODE 5404-QM42

FOR INDOOR OR OUTDOOR LOW TEMPERATURE USE

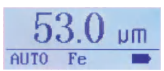
BLUETOOTH

VIDEO

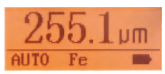
- Probe is suitable for both magnetic and non-magnetic metal substrates
- Can measure the thickness of non-magnetic coating and non-metallic coating on magnetic metal substrate
  Substrate: iron, steel, magnetic stainless steel
- Coating: zinc, aluminum, copper, chrome, tin, plastic, powder, paint (not for nickel)
  Can measure the thickness of non-conductive coating on non-magnetic metal substrate
  Substrate: copper, aluminum, zinc, non-magnetic stainless steel
  Coating: plastic, powder, paint, anodizing (not for chrome and zinc plating)
- Can quickly detect the paint thickness of iron and aluminum body of car, three colors of backlight indication, can identify non-metal shell and iron powder putty layer
- Can connect to mobile APP, measure and generate test reports in real time, and save or share reports
- Double screen, easy reading and normal use at -40°C low temperature
- Built-in multiple languages
- Store 9 measuring records
- Small and portable, easy for operation

ruby probe

car body paint thickness detection



paint thickness<170μm, blue backlight indicates "normal thick"



paint thickness between 170μm and 350μm, yellow backlight indicates "slightly thick"

paint thickness>350μm, red backlight indicates "ultra thick"

OLED screen

mobile APP

SPECIFICATION

Measuring range	0~5000μm
Resolution	0.1μm (range<1000μm) 1μm (1000μm≤range<5000μm)
Accuracy*	<3000μm: ±(2μm+3%L) 3000μm~5000μm: ±(2μm+5%L)
Measure interval	0.5s
Calibration mode	zero calibration
Display	front screen LCD, top screen OLED
Working temperature	-20°C~50°C (LCD screen), -40°C~50°C (OLED screen)
Unit	μm/mil
Language	English, Chinese, Russian, Turkish, Ukrainian
Power supply	2×1.5V AAA batteries
Dimension (L×W×H)	100×60×24mm
Net weight	80g

* L is measuring thickness in μm

standard foil (included)

Fe zero calibration plate (included)

NFe zero calibration plate (included)

STANDARD DELIVERY

Main unit	1 pc
Fe zero calibration plate	1 pc
NFe zero calibration plate	1 pc
Standard foil (100μm)	1 pc
1.5V AAA battery	2 pcs

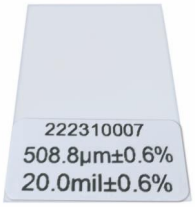
CALIBRATION FOILS FOR COATING THICKNESS GAUGES

INSPECTION CERTIFICATE

- To calibrate or check the accuracy of coating thickness gauges
- Increase the measurement accuracy after foil calibration
- Uniformity: ±0.3μm (≤50μm), ±0.6% (>50μm)
- Dimension: 45×30mm (thickness≤2000μm), 50×30mm (thickness>2000μm)
- Supplied with manufacturer inspection certificate

Code	Thickness	Deviation*	Uniformity
9503-FL1	11.5μm	±5%	±0.3μm
9503-FL3	50.5μm	±5%	±0.6%
9503-FL4	102μm	±5%	±0.6%
9503-FL6	495μm	±3%	±0.6%
9503-FL7	995μm	±2%	±0.6%
9503-FL8	1780μm	±5%	±0.6%

*Deviation between the ordered thickness and the thickness marked on the calibration foils when supplied



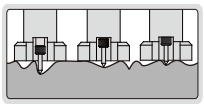
9503-FL6

SURFACE PROFILE GAUGE

VIDEO

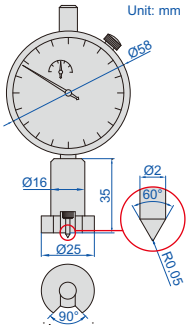
- Measure peak-to-valley height of blast cleaned surface.
  If the profile is too low, the adhesion of the coating to the surface will be reduced.
  If the profile is too high, there is the danger that the profile peaks will remain uncoated, allowing rust spots to occur.
- Meet ASTM D 4417-B
- Zero set block is included, set zero before measurement
- Stainless steel base

measure peak-to-valley height of blast cleaned surface



2344-1

Unit: mm



set zero

Code	Range	Dial indicator stroke	Dial indicator graduation	Accuracy
2344-1	0-1mm	1mm	0.001mm	±0.005mm

DIGITAL SURFACE PROFILE GAUGE

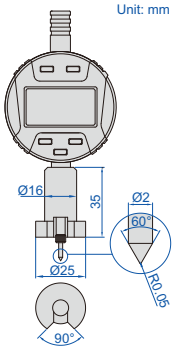
DATA OUTPUT

DISPLAY MAXIMUM, MINIMUM, DIFFERENCE VALUE BETWEEN MAXIMUM AND MINIMUM

- Measure peak-to-valley height of blast cleaned surface.
  If the profile is too low, the adhesion of the coating to the surface will be reduced.
  If the profile is too high, there is the danger that the profile peaks will remain uncoated, allowing rust spots to occur.
- Meet ASTM D 4417-B
- Zero set block is included, set zero before measurement
- Button function: tolerance Go and No-Go display, data preset, measuring direction change, max./min./TIR measurement, inch/metric conversion, absolute/incremental measurement
- CR2032 battery
- Automatic power off (time is adjustable)
- Data output
- Stainless steel base
- Optional accessory:
  wireless transmitter code **7315-50M** (receiver is needed)

2844-10

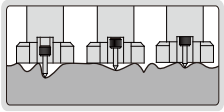
Unit: mm



VIDEO

set zero

measure peak-to-valley height of blast cleaned surfaces



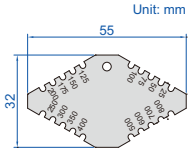
Code	Range	Digital indicator stroke	Digital indicator resolution	Accuracy
2844-10	0-12.7mm/0-0.5"	12.7mm/0.5"	0.001mm/0.00005"	±0.005mm

WET FILM GAUGES

- Made of stainless steel

4845-1

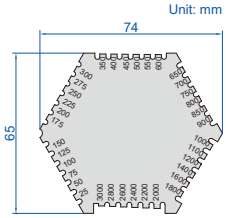
Unit: mm



4845-1

4845-2

Unit: mm



4845-2

Code	Range	Accuracy	Thickness
4845-1	25-800μm	±5μm	1.8mm
4845-2	25-3000μm	25-100μm: ±5μm 100μm-3000μm: ±5%	1mm

GLOSS METERS

DATA OUTPUT

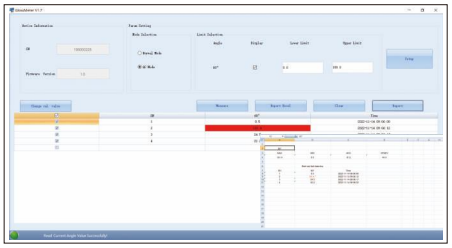
VIDEO

- According to JJG 696, ISO 2813, ASTM D2457, ASTM D523, GB/T 9754
- To measure the gloss level of material surfaces such as paint, wood, stone, plastic, paper, leather, metal, etc.
- Automatic judgement after setting high and low limits
- Automatic power off

5702-DG8

base with calibration block (included)

software (included), test can be controlled from the software, display test data and report



SPECIFICATION

Code	5702-DG6	5702-DG8
Measuring angle	60°	20°, 60°, 85°
Measuring range	0~200GU	20°: 0~2000GU, 60°: 0~1000GU, 85°: 0~160GU
Measuring spot	9mm×15mm	20°: 9mm×9mm, 60°: 9mm×15mm, 85°: 5mm×38mm
Minimum measurement size	20mm×10mm	57mm×10mm
Accuracy	0~100GU: ±1.5GU 100~200GU: ±1.5%	0~100GU: ±1.5GU 100~2000GU: ±1.5%
Repeatability	0~100GU: 0.2GU 100~200GU: 0.2%	0~100GU: 0.2GU 100~2000GU: 0.2%
Resolution	0.1GU	
Zero value error	0.1GU	
Data port	USB (type-C)	
Power supply	3.7V rechargeable Li-ion battery	
Dimension	135×45×75mm	
Net weight	237g	

STANDARD DELIVERY

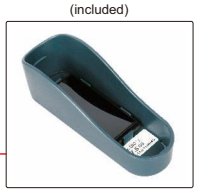
Main unit	1 pc
Base with calibration block	1 pc
USB flash disk	1 pc
AC/DC adapter	1 pc
USB data cable	1 pc

60° GLOSS METER CODE ISQ-DG6

VIDEO

- To test the gloss of coating, such as painting, varnish, printing ink, etc.
- To test the material surfaces, such as metal, granite, ceramic, plastic, paper, etc.
- According to ISO 2813, ASTM D2457, ASTM D523
- Automatic power off

base with calibration block (included)



connect mobile phone via bluetooth (only Android system)

operate and output data by mobile phone

SPECIFICATION

Incidence angle	60°
Measuring range	0~150GU
Resolution	0.1GU
Accuracy	±1.2GU
Repeatability	0.4GU
Zero set error	0.2GU
Measuring area	20×10mm
Output	bluetooth
Power supply	1×1.5V AA battery
Dimension	123×38×65mm
Net weight	300g

STANDARD DELIVERY

Main unit	1 pc
Base with calibration block	1 pc
Spare calibration block	1 pc

MICROPOROUS GLOSS METER (BASIC TYPE)
CODE 5712-SG60

DATA OUTPUT | CAN BE OPERATED BY COMPUTERS OR MOBILE PHONES | BLUETOOTH | SPOT SIZE 1.5×3mm

VIDEO

- According to ISO 2813, ASTM D2457, ASTM D523, GB/T 9754
- For measuring the gloss level of small and curved surfaces
- To measure the gloss level of material surfaces such as paint, wood, stone, plastic, paper, leather, metal, etc.
- Automatic power off

microporous

base with calibration block (included)

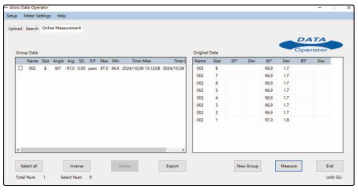
connect to mobile phone via Bluetooth (only Android system)

operate and output data by mobile phone

SPECIFICATION

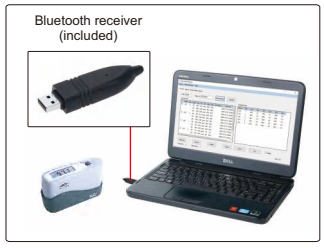
Measuring angle	60°
Measuring range	0~199.9GU
Resolution	0.1GU
Accuracy	±1.5GU
Zero value error	±0.2GU
Repeatability	±0.4GU
Measuring spot	1.5mm×3mm
Minimum measurement size	2mm×4mm
Data output	Bluetooth
Software support	Windows, Android
Power supply	1×1.5AA battery
Dimension	123×65×38mm
Net weight	300g

software (included), test can be controlled from the software



connect to computer via Bluetooth

Bluetooth receiver (included)



STANDARD DELIVERY

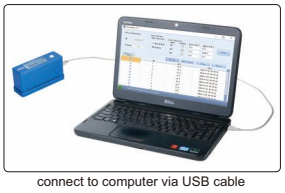
Main unit	1 pc
Base with calibration block	1 pc
USB flash disk	1 pc
Bluetooth receiver	1 pc

MICROPOROUS GLOSS METER (ADVANCED TYPE)
CODE 5711-SG60

DATA OUTPUT | QUALITY INSPECTION | SPOT SIZE 1.5×3mm

VIDEO

- According to ISO 2813, ASTM D2457, ASTM D523, GB/T 9754
- For measuring the gloss level of small and curved surfaces up to 1000GU
- To measure the gloss level of material surfaces such as paint, wood, stone, plastic, paper, leather, metal, etc.
- The normal mode is for immediate measurement and fast readings, the quality control mode with customizable upper and lower limits is for rapid incoming inspection
- Self-contained calibration board with freely definable calibration values



connect to computer via USB cable

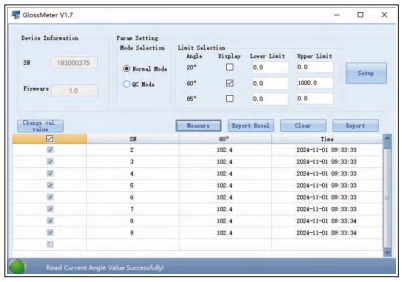
base with calibration block (included)

microporous

SPECIFICATION

Measuring angle	60°
Measuring range	0~1000GU
Resolution	0.1GU
Accuracy	0~100GU: ±1.5GU 100~1000GU: ±1.5%
Zero value error	±0.2GU
Repeatability	0~100GU: ±0.2GU 100~1000GU: ±0.2%
Measuring spot	1.5mm×3mm
Minimum measurement size	3mm×6mm
Data output	USB (Type-C)
Software support	Windows
Power supply	Li-ion battery, 3.7V
Dimension	102×35×51mm
Net weight	300g

software (included), test can be controlled from the software



STANDARD DELIVERY

Main unit	1 pc
Base with calibration block	1 pc
USB flash disk	1 pc
Data cable	1 pc

20°/60°/85° GLOSS METER
CODE ISQ-DG8

DATA OUTPUT | BLUETOOTH | CAN BE OPERATED BY COMPUTERS OR MOBILE PHONES

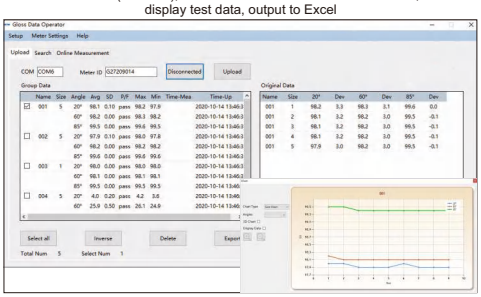
VIDEO

software flash disk
(included)

base with calibration block
(included)

- To test the gloss of coating, such as painting, varnish, printing ink, etc.
- To test the material surfaces, such as metal, granite, ceramic, plastic, paper, etc.
- According to ISO 2813, ASTM D2457, ASTM D523
- Memory of 10000 measurement results for browsing and output
- Automatic power off

software (included), test can be controlled from the software, display test data, output to Excel

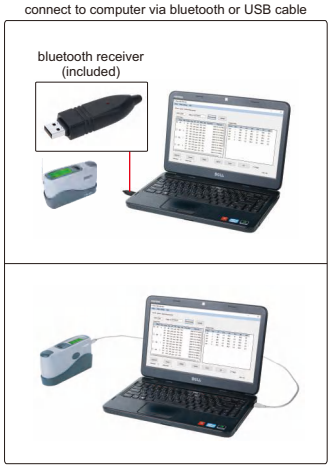


connect to mobile phone via bluetooth
(only Android system)

operate and output data by mobile phone

connect to computer via bluetooth or USB cable

bluetooth receiver
(included)



SPECIFICATION

Incidence angle	20°	60°	85°
Measuring range	0~2000GU	0~1000GU	0~160GU
Resolution	0.1GU (range≤119.9GU)		
	1GU (range>119.9GU)		
Accuracy	±1.5GU (range≤119.9GU)		
	±1.5% (range>119.9GU)		
Repeatability	0.2GU (range≤119.9GU)		
	0.2% (range>119.9GU)		
Zero set error	0.2GU		
Measuring area	10×9mm	16×9mm	39×5mm
Output	USB and bluetooth		
Power supply	1×1.5V AA battery		
Dimension	155×48×75mm		
Net weight	400g		

STANDARD DELIVERY

Main unit	1 pc
Base with calibration block	1 pc
Software and USB cable	1 pc
Bluetooth receiver	1 pc

COLORIMETER (BASIC TYPE)
CODE 5700-LS35

INSPECTION CERTIFICATE | DATA OUTPUT | MATCHING COLOR CARD QUICKLY

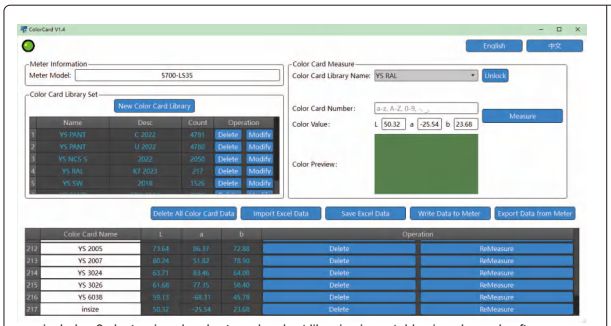
VIDEO

- 3.5-inch IPS display and capacity touch panel
- Able to store 1000 color compare records, 1000 color scan records, 100 standard records, 100 spectral curve records
- With multiple built-in standard electronic color charts, the color measurement function enables quick matching of the 3 closest color codes
- QC testing function, can set color difference threshold
- 3.7V/4000mAh battery, 10000 continuous measurements
- Testing can be controlled from the software, with test data displayed, passes counted, and reports exported

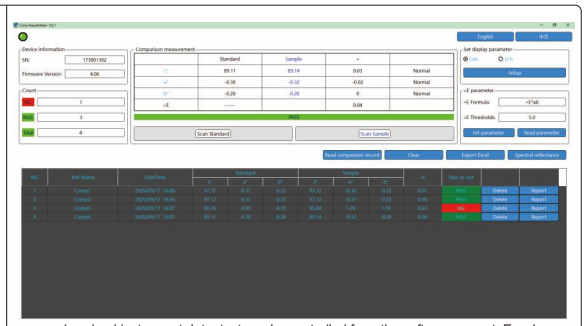
white calibration cavity (included)

locating plate (included)

software interface (included)



includes 6 electronic color charts, color chart libraries importable via colorcard software



download instrument data, test can be controlled from the software, report, Excel

SPECIFICATION

Illumination geometry	D/8, specular component include (SCI)
Illumination light source	full spectrum LED light source
Measurement conditions	light source D65, field of view 10°
Wavelength range	400~700nm
Wavelength interval	10nm
Illumination aperture	8mm
Measuring time	1s
Color space	CIE-Lab, CIE-LCh, CIE Luv, Yxy, CMYK, RGB, YI-98, WI-98, WI-Ganz, WI-Hunter, WI-R457, HSL, HSV, ITA, Spectra
Color difference formula	ΔE*ab, ΔE*uv, ΔE*94, ΔE*cmc(2:1), ΔE*cmc(1:1), ΔE*cmc(1.4:1), ΔE*00
Repeatability	standard deviation ΔE*ab≤0.03 (measurement condition: the average value of 30 measurements on the whiteboard at an interval of 3s after calibration)
Electronic color chart	can create up to 46 charts, total 20000 color codes
Operating environment	0~45°C, 0~85%RH (no condensation)
Storage environment	-25~55°C, 0~85%RH (no condensation)
Interface	USB (Type-C)
Dimension (L×W×H)	86×63×158mm
Net weight	245g

STANDARD DELIVERY

Main unit	1 pc
White calibration cavity	1 pc
USB cable	1 pc
Power adapter	1 pc
Software	1 set
Cleaning cloth	1 pc
Locating plate	1 pc

HANDHELD SPECTROPHOTOMETERS (STANDARD TYPE)

DATA OUTPUT | FOUR KINDS OF APERTURE | GRATING SPECTROPHOTOMETRIC | MATCHING COLOR CARD QUICKLY

VIDEO

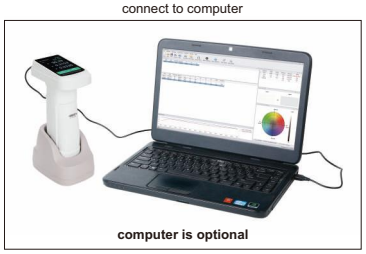
INSPECTION CERTIFICATE

- Conforms with CIE No.15, ISO7724-1, ASTM E1164 and DIN5033 Teil7 standards
- Grating spectrophotometric, 3.5" IPS full color screen, dual optical path high precise CMOS array sensor
- Use long life and low power consumption combined LED light source, include UV and exclude UV measurement
- Camera locating function, switchable four apertures
- Large capacity storage space, over 20000 measurement data
- Two standard observer angles, a variety of illuminant, a variety of color indexes, conforms with a variety of standard colorimetric data
- Measure sample spectra, accurate Lab data, can be used in color matching and accurate color transmission

5701-D40

white calibration cavity (included)

connect to computer



computer is optional

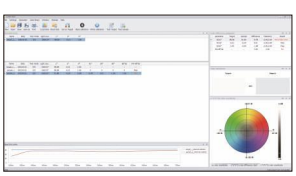
SPECIFICATION

Code		5701-D40	5701-D45
Optical geometry		D/8 (diffused illumination/8° direction reception), SCI+SCE (specular component included+specular component excluded)	45/0 (45° illumination/vertical reception)
Integrating sphere size		Ø40mm	ring lighting strips
Light source		LED (full band balanced LED)+UV	LED (full band balanced LED)
Spectrophotometric mode		grating	
Sensor		dual optical path high precise CMOS array sensor	
Wavelength range		400~700nm	
Wavelength interval		10nm	
Reflectance measurement range		0~200%	
Reflectance resolution		0.01%	
Display resolution		0.01	
Illumination area/aperture		MAV: Ø11mm; SAV: Ø6mm, Ø3mm; MINI: 1×3mm	
Color space		CIE-Lab, CIE-LCh, HunterLab, CIE Luv, XYZ, Yxy, RGB	
Color difference formula		ΔE*ab, ΔE*cmc, ΔE*94, ΔE*00, ΔE*ch, ΔE*uv, ΔEab	
Other colorimetric index		whiteness (ASTM E313-00, ASTM E313-73, CIE/ISO, AATCC, hunter, taube berger stensby), yellowness (ASTM D1925, ASTM 313-00, ASTM E313-73), blackness (My, dM), color fastness, tint (ASTM E313-73) color density CMYK (A, T, E, M), milm, munsell, opacity, color strength	
Observer angle		2°/10°	
Illumination		A, B, C, D50, D55, D65, D75, F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, CWF, U30, U35, DLF, NBF, TI83, TI84, ID50, ID65, LED-B1, LED-B2, LED-B3, LED-B4, LED-B5, LED-BH1, LED-RGB1, LED-V1, LED-V2	
Measuring time		about 1.5s	
Repeatability	spectral reflectance	within 0.08% of standard deviation	
	colorimetric values	ΔE*ab≤0.025 (after whiteboard correction, measuring the whiteboard 30 times at 5s interval)	
Inter-instrument error		ΔE*ab≤0.25 (BCRA series II, average value of 12 color plates)	
Data port		USB, bluetooth	
Light source lifetime		10 years, more than 1 million times measurements	
Power supply		3.7V/3000mAh, rechargeable 8000 times continuous tests	
Dimension		95×129×231mm	
Net weight		750g	

STANDARD DELIVERY

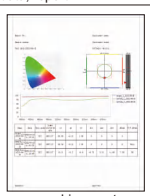
Main unit	1 pc
White calibration cavity	1 pc
Measuring aperture	8 pcs
USB cable	1 pc
USB disk	1 pc
AC/DC adapter	1 pc
Black light trap	1 pc

software (included), test can be controlled from the software, display test data, report



software

pure data report



graphic report

MULTI-ANGLE SPECTROPHOTOMETER
CODE 5705-MS45

INSPECTION CERTIFICATE

VIDEO

CONCAVE GRATING SPECTROPHPTOMETRIC

DATA OUTPUT

BLUETOOTH

- Adopt 5 illumination sources, 1 receiver to measure 5 measurement angles at the same time
- Touch screen can display all angle measurement results, more intuitive view of the comprehensive data
- Full spectrum illumination measurement is more professional to avoid spectrum loss
- Provide 6 color spaces, multiple observation light sources
- Using concave grating spectrophotometric technology, with higher resolution, makes color measurement more accurate
- Built-in color camera positioning, can accurately judge the object measured position, and improve the measurement efficiency and accuracy
- Multiple functions, the screen can display various data intuitively

specimen reflectance recording interface

specimen recording interface

SPECIFICATION

Measurement geometry	5 measurement angles (5 illumination sources, 1 receiver)
Measuring angle	45° receiver: 45as15°, 45as25°, 45as45°, 45as75°, 45as110°
Lighting source	full spectrum LED light source with blue enhancement
Lamp life	5 years, 3 million times measurements
Spectrophotometric mode	concave grating
Sensor	256 image element double array CMOS image sensor
Wavelength range	400nm~700nm
Wavelength interval	10nm
Measurement range	0~600%
Semiband width	10nm
Measuring aperture	illuminant Ø23mm/sampling Ø12mm
Color space	CIE LAB, XYZ, Yxy, Lch, βxy, DIN Lab99
Color difference formula	ΔE*ab, ΔE*94, ΔE*cmc (2: 1), ΔE*cmc (1: 1), ΔE*00, DINΔE99, ΔE DIN6175
Other colorimetric index	flop index
Observer angle	2°/10°
Illuminant	D65, A, C, D50, D55, D75, F1, F2 (CWF), F3, F4, F5, F6, F7 (DLF), F8, F9, F10 (TPL5), F11 (TL84), F12 (TL83/U30)
Measuring time	approx, 1 second for one angle, approx, 5 seconds for all angles
Repeatability	spectral reflectance: standard deviation within 0.08% chromaticity value: ΔE*ab 0.03 (when a white calibration plate is measured 30 times at 5 second intervals after white calibration)
Reproducibility	ΔE*<0.10, avg on the gray tile of BCRA tile set, ΔE*<0.25, avg on the color BCRA tile set
Spectrophotometric mode	0.2ΔE*00 (avg on reference series II BCRA tile set)
Trigger mode	pressure sensing, trigger, key trigger, software trigger
Measuring mode	single measurement, average measurement (1~99), continuous measurement (1~99)
Locating method	color camera preview
Power supply	Li-ion battery, 3.7V, 3200mAh, continuous test 6000 times within 8 hours of full charge
Display screen	3.5-inch TFT color LCD, capacitive touch screen
Data port	USB, bluetooth 5.0
Data storage	standard 1000 pcs, sample 4000 pcs
Calibration	built-in white board parameters, external white board, black light trap
Calibration interval	4 hours, 8 hours, 24 hours, startup calibration
Dimension	195×83×128mm
Net weight	1kg

STANDARD DELIVERY

Main unit	1 pc
Black light trap	1 pc
White board	1 pc
Software and USB cable	1 pc
Power adapter	1 pc
Bluetooth receiver	1 pc

black light trap (included)

white board (included)

bluetooth receiver (included)

OPTIONAL ACCESSORY

Wired printer	**5705-MS45-PRINTER-A**
Wireless printer	**5705-MS45-PRINTER-B**

wireless printer (**optional**)

wired printer (**optional**)

SPECTROPHOTOMETER
CODE 5706-DS01

VIDEO

- Highly stable UV source for stable fluorescence measurements
- Grating spectroscopy, 7" IPS touch screen
- Two types of light sources: pulsed lamp and LED, can measure SCI and SCE simultaneously and quickly
- 24 standard light sources, more than 40 measurement indicators
- Temperature and humidity compensation function

SPECIFICATION

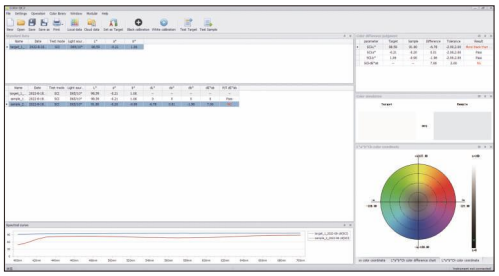
Optical geometry	reflect: D/8 (diffused illumination, 8°direction reception), transmission: D/0 (diffused illumination, vertical reception), SCI (specular reflective light included), SCE (specular reflective light not included)
Integrating sphere diameter	Ø152mm
Light source	pulsed xenon lamp and LED
Spectrophotometric mode	concave grating
Sensor	double array CMOS image sensor
Wavelength range	360nm~780nm
Wavelength interval	10nm
Reflectance measuring range	0~200%
Reflectance resolution	0.01%
Transmission measurement	width and height unlimited, thickness≤50mm
Measuring aperture	reflect: XLAV Ø25.4mm/Ø30mm, LAV Ø15mm/Ø18mm, MAV Ø8mm/Ø11mm, SAV Ø3mm/Ø6mm transmission: Ø17mm/Ø25mm
Color space	L*a*b, L*C*h, Hunter Lab, Yxy, XYZ
Color difference formula	ΔE*ab, ΔE*CH, ΔE*uv, ΔE*cmc, ΔE*94, ΔE*00, ΔEab (Hunter), 555 color classification
Colorimetric index	WI (ASTM E313-00, ASTM E313-73, CIE/ISO, AATCC, Hunter, Taube, Berger Stensby), YI (ASTM D1925, ASTM E313-00, ASTM E313-73), Tint (ASTM E313-00), metamerism index Milm, staining fastness, color fastness, ISO luminance, R457, A density, Tdensity, Edensity, M density, APHA/Hazen/Pt-Co, Gardner, Saybolt, Astm color, haze, total transmittance, coverage, power, strength
Observer angle	2°/10°
Illuminant	A, C, D50, D55, D65, D75, F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, CWF, U30, DLF, NBF, TL83, TL84
Measuring time	SCI or SCE <2 seconds, SCI and SCE simultaneous measuring <4 seconds
Repeatability *	ΔE*ab≤0.015; reflect / transmittance≤0.1%
Inter-instrument error	XLAV ΔE*ab≤0.25 (based on average of 12 swatches of BCRA series at 23°C)
Data port	RS232, USB, USB-B
Power supply	power adapter (24V/2.5A)
Dimension	465×240×260mm
Net weight	10.8kg

* After calibration, measure the white plate for 30 times at 5-second intervals with XLAV aperture, the standard deviation of the measurement results.

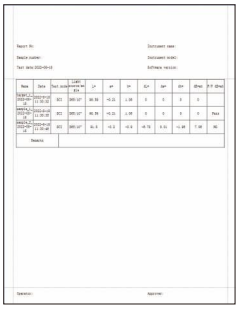
To be continued

Continued from previous page

software (included), can control the test by software, display test data and generate reports



software interface



data report

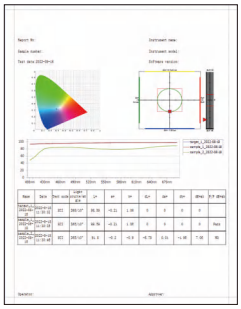
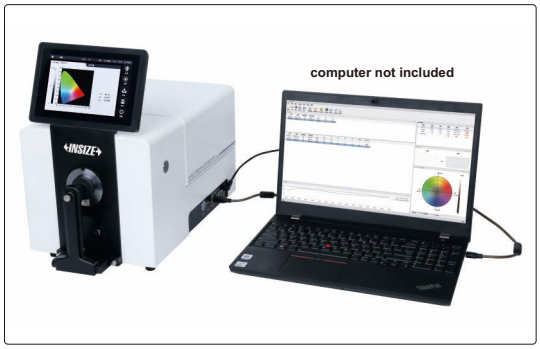
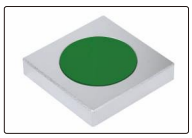


illustration report

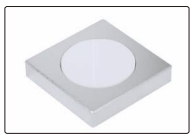
connect to computer



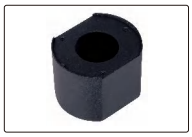
upward measurement



green plate (included)

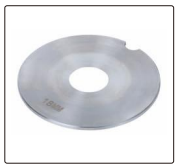


white plate (included)



black cavity (included)

cuvette (included)



measuring aperture (included)

heated transmission clamp (**optional**)

small sample fixture (**optional**)

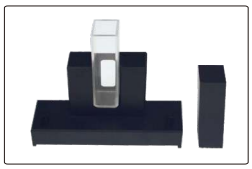
protective plate (**optional**)

vertical stand (**optional**)

cuvette support (**optional**)

fiber test holder (**optional**)

film test clamp (**optional**)



microtransmission clamp (**optional**)

STANDARD DELIVERY

Main unit	1 pc
Black cavity	1 pc
White plate	1 pc
Green plate	1 pc
Measuring aperture	4 pcs
Cuvette	1 pc
USB flash disk	1 pc
Data cable	2 pcs
Damping handle	1 pc
Support platform	1 pc
Transmission fixture	1 pc
Power adapter	1 pc

OPTIONAL ACCESSORY

Heated transmission clamp	5706-DS01-CLAMP1
Small sample fixture	5706-DS01-FIXTURE
Cuvette support	5706-DS01-SUPPORT
Vertical stand	5706-DS01-STAND
Protective plate	5706-DS01-PLATE
Fiber test holder	5706-DS01-HOLDER
Microtransmission clamp	5706-DS01-CLAMP2
Film test clamp	5706-DS01-CLAMP3

K7 RAL COLOR CHART
CODE 5703-K7

- 216 RAL classic colors
- Crafted with low-solvent and low-odour water-based paints
- RAL color card dimension: 50×150×15mm, 5 color codes per page, 20×50mm color block

SPECIFICATION

Code	Color
RAL 1000	Green beige
RAL 1001	Beige
RAL 1002	Sand yellow
RAL 1003	Signal yellow
RAL 1004	Golden yellow
RAL 1005	Honey yellow
RAL 1006	Maize yellow
RAL 1007	Daffodil yellow
RAL 1011	Brown beige
RAL 1012	Lemon yellow
RAL 1013	Oyster white
RAL 1014	Ivory
RAL 1015	Light ivory
RAL 1016	Sulfur yellow
RAL 1017	Saffron yellow
RAL 1018	Zinc yellow
RAL 1019	Grey beige
RAL 1020	Olive yellow
RAL 1021	Colza yellow
RAL 1023	Traffic yellow
RAL 1024	Ochre yellow
RAL 1026	Luminous yellow
RAL 1027	Curry
RAL 1028	Melon yellow
RAL 1032	Broom yellow
RAL 1033	Dahlia yellow
RAL 1034	Pastel yellow
RAL 1035	Pearl beige
RAL 1036	Pearl gold
RAL 1037	Sun yellow
RAL 2000	Yellow orange
RAL 2001	Red orange
RAL 2002	Vermilion
RAL 2003	Pastel orange
RAL 2004	Pure orange
RAL 2005	Luminous orange
RAL 2007	Luminous bright orange
RAL 2008	Brightred orange
RAL 2009	Traffic orange
RAL 2010	Signal orange
RAL 2011	Deep orange
RAL 2012	Salmon orange
RAL 2013	Pearl orange
RAL 2017	RAL orange
RAL 3000	Flame red
RAL 3001	Signal red
RAL 3002	Carmine red
RAL 3003	Rubyred
RAL 3004	Purple red
RAL 3005	Wine red
RAL 3007	Black red
RAL 3009	Oxide red
RAL 3011	Brown red
RAL 3012	Beige red

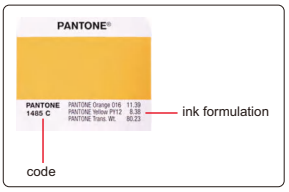
Code	Color
RAL 3013	Tomato red
RAL 3014	Antique pink
RAL 3015	Light pink
RAL 3016	Coral red
RAL 3017	Rose
RAL 3018	Strawberry red
RAL 3020	Traffic red
RAL 3022	Salmon pink
RAL 3024	Luminous red
RAL 3026	Luminous bright red
RAL 3027	Raspberry red
RAL 3028	Pure red
RAL 3031	Orient red
RAL 3032	Pearlruby red
RAL 3033	Pearl pink
RAL 4001	Red lilac
RAL 4002	Red violet
RAL 4003	Heather violet
RAL 4004	Claret violet
RAL 4005	Blue lilac
RAL 4006	Traffic purple
RAL 4007	Purple violet
RAL 4008	Signal violet
RAL 4009	Pastel violet
RAL 4010	Telemagenta
RAL 4011	Pearl violet
RAL 4012	Pearl blackberry
RAL 5000	Violet blue
RAL 5001	Green blue
RAL 5002	Ultramarine blue
RAL 5003	Sapphire blue
RAL 5004	Black blue
RAL 5005	Signal blue
RAL 5007	Brillant blue
RAL 5008	Grey blue
RAL 5009	Azure blue
RAL 5010	Gentian blue
RAL 5011	Steel blue
RAL 5012	Light blue
RAL 5013	Cobalt blue
RAL 5014	Pigeon blue
RAL 5015	Sky blue
RAL 5017	Traffic blue
RAL 5018	Turquoise blue
RAL 5019	Capri blue
RAL 5020	Ocean blue
RAL 5021	Water blue
RAL 5022	Night blue
RAL 5023	Distant blue
RAL 5024	Pastel blue
RAL 5025	Pearl gentian blue
RAL 5026	Pearlnight blue
RAL 6000	Patina green
RAL 6001	Emerald green

Code	Color
RAL 6002	Leaf green
RAL 6003	Olive green
RAL 6004	Blue green
RAL 6005	Moss green
RAL 6006	Grey olive
RAL 6007	Bottle green
RAL 6008	Brown green
RAL 6009	Fir green
RAL 6010	Grass green
RAL 6011	Reseda green
RAL 6012	Black green
RAL 6013	Reed qreen
RAL 6014	Yellow olive
RAL 6015	Black olive
RAL 6016	Turquoise green
RAL 6017	May green
RAL 6018	Yellow green
RAL 6019	Pastel green
RAL 6020	Chrome green
RAL 6021	Pale green
RAL 6022	Olive drab
RAL 6024	Traffic green
RAL 6025	Fern green
RAL 6026	Opal green
RAL 6027	Light green
RAL 6028	Pine green
RAL 6029	Mint green
RAL 6032	Signal green
RAL 6033	Mint turquoise
RAL 6034	Pastel turquoise
RAL 6035	Pearl green
RAL 6036	Pearl opal green
RAL 6037	Pure green
RAL 6038	Luminous green
RAL 6039	Fibrous green
RAL 7000	Squirrel grey
RAL 7001	Silver grey
RAL 7002	Olive grey
RAL 7003	Moss grey
RAL 7004	Signal grey
RAL 7005	Mouse grey
RAL 7006	Beige grey
RAL 7008	Khaki grey
RAL 7009	Green grey
RAL 7010	Tarpaulin grey
RAL 7011	Iron grey
RAL 7012	Basalt grey
RAL 7013	Brown grey
RAL 7015	Slate grey
RAL 7016	Anthracite grey
RAL 7021	Black grey
RAL 7022	Umbra grey
RAL 7023	Concrete grey
RAL 7024	Graphite grey

Code	Color
RAL 7026	Granite grey
RAL 7030	Stone grey
RAL 7031	Blue grey
RAL 7032	Pebble grey
RAL 7033	Cement grey
RAL 7034	Yellow grey
RAL 7035	Light grey
RAL 7036	Platinum grey
RAL 7037	Dusty grey
RAL 7038	Agate grey
RAL 7039	Quartz grey
RAL 7040	Window grey
RAL 7042	Traffic grey A
RAL 7043	Traffic grey B
RAL 7044	Silk grey
RAL 7045	Telegrey 1
RAL 7046	Telegrey 2
RAL 7047	Telegrey 4
RAL 7048	Pearl mouse grey
RAL 8000	Green brown
RAL 8001	Ochre brown
RAL 8002	Signal brown
RAL 8003	Clay brown
RAL 8004	Copper brown
RAL 8007	Fawn brown
RAL 8008	Olive brown
RAL 8011	Nut brown
RAL 8012	Red brown
RAL 8014	Sepia brown
RAL 8015	Chestnut brown
RAL 8016	Mahogany brown
RAL 8017	Chocolate brown
RAL 8019	Grey brown
RAL 8022	Black brown
RAL 8023	Orange brow
RAL 8024	Beige brown
RAL 8025	Pale brown
RAL 8028	Terra brown
RAL 8029	Pearl copper
RAL 9001	Cream
RAL 9002	Grey white
RAL 9003	Signal white
RAL 9004	Signal black
RAL 9005	Jet black
RAL 9006	White aluminium
RAL 9007	Grey aluminium
RAL 9010	Pure white
RAL 9011	Graphite black
RAL 9012	Cleanroom white
RAL 9016	Traffic white
RAL 9017	Traffic black
RAL 9018	Papyrus white
RAL 9022	Pearl light grey
RAL 9023	Pearl dark grey

PANTONE FORMULA GUIDE
CODE 5708-PT22

- For graphic design, digital design, product design and printing
- Standard coated card and uncoated card
- Solid coated glossy paper and solid uncoated matte offset paper in 2,390 Pantone colors
- Coated card dimension: 23.6×4.3×5.3cm, uncoated card dimension: 23.6×4.3×6cm
- Portable, handheld fan decks provide easy on-the-go reference, 7color codes per page, 4.3×2cm color block, each color shows the code and ink formulation



color example

HOLIDAY DETECTOR
CODE 9511-HA30

VIDEO

- Inspect anti-corrosion coating status of different thickness with adjustable pulse high-voltage, coating includes insulating paint, glass lining, rubber lining, glass fiber reinforced plastic, coal tar epoxy, etc
- When the brush with pulse high-voltage moves near the crack, pinhole or thin area on the coating surface, which results in gap gas breakdown and discharge spark, sound and light alarm will appear on the probe and the alarm sound can be heard with the headphone
- LCD display with light-control backlight
- Built-in rechargeable battery, easy to carry and suitable for outdoor inspection
- Automatic power off

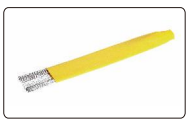
SPECIFICATION

Measuring range	0.05~10mm (customization for inspecting coating thicker than 10mm is available)
Output voltage	0.6~30.0kV (stepless adjustable)
Resolution	0.1kV
Power	≤5W
Power supply	12V rechargeable Ni-MH battery
Dimension	240×135×115mm
Net weight	2.5kg

STANDARD DELIVERY

Main unit	1 pc
Probe	1 pc
Strip brush*	1 pc
Flat brush	1 pc
Ground wire	1 pc
Ground rod	1 pc
Headphone	1 pc
AC/DC adapter	1 pc

*Arc brush and circular probe can be customized


flat brush (included)

headphone (included)

COLOR ASSESSMENT CABINET
CODE CAC-S600

VIDEO

- Color detection applicable to industries such as textiles, toys, printing and dyeing, plastics, etc.
- Display usage time, name, and number of switches for each source
- Automatic switching of light source with metamerism
- No warm-up, no flashing, fast and reliable evaluation of colors
- Configure common light sources according to British and American standards

SPECIFICATION

Light source	F, D65, TL84, UV, CWF, TL83
Illuminance non-uniformity rate	≤20%
Color temperature non-uniformity rate	≤20%
Power supply	220V/50Hz
Working temperature	5~40°C, ≤80%RH, no condensation
Storage temperature	-20~45°C, ≤80%RH, no condensation
Dimension (L×W×H)	710×530×570mm
Net weight	28kg

STANDARD DELIVERY

Main unit	1 pc
D65 light source tube (CAC-D65)	2 pcs
Power adapter	1 pc

LIGHT SOURCE SPECIFICATION

Light source	Instruction	Power	Color temperature	Configuration quantity
D65	international standard artificial daylight	18W	6500K	2 tubes
F	standard reference light source for colorimetry	40W	2700K	4 tubes
TL84	light sources for stores in Europe, Japan and China	18W	4000K	2 tubes
UV	ultraviolet light source	20W	-	1 tube
CWF	cool white store light sources in the United States	18W	4150K	2 tubes
U30	warm white store light sources in the United States	18W	3000K	2 tubes
TL83	European standard warm white store light sources	18W	3000K	2 tubes

OPTIONAL ACCESSORY

F light source bulb	CAC-F
TL84 light source tube	CAC-TL84
UV light source tube	CAC-UV
CWF light source tube	CAC-CWF
TL83 light source tube	CAC-TL83
U30 light source tube	CAC-U30
45° standard viewing station	CAC-SVS

DIGITAL ADHESION TESTER
CODE SPT-AD21

VIDEO

Ø20mm dolly (included)

- Pull-off test
- Built-in rechargeable lithium battery, no need external power source
- Portable design, can be used anywhere
- Standard USB interface, can directly transmit the stored data to computer, no need to install software
- Conforms to GB/T 5210, ASTM D4541/D7234, ISO 4624/16276-1
- Store all test results, includes maximum pull-off force, pull-off rate, dolly size and time
- Built in real-time clock, all saved data have corresponding date and time
- Selectable four different sizes dolly for different resolution and testing range
- No need conversion, the instrument can calculate pull-off force according to the dolly size
- Get the testing results from LCD directly
- Two units MPa and psi for selection and can be converted automatically

cutting tool (included) for Ø10mm, Ø14mm, Ø20mm dolly

glue gun and glue (included)

SPECIFICATION

Range	0~20MPa
Dolly diameter	Ø20mm
Resolution	0.01MPa (1psi)
Accuracy	±1% full scale
Pull-off force	0.7~20MPa
Power supply	built-in rechargeable lithium battery
Dimension (L×W×H)	360×75×115mm
Net weight	3kg

STANDARD DELIVERY

Main unit	1 pc
Ø20mm dolly	20 pcs
Cutting tool	1 pc
Charger	1 pc
USB cable	1 pc
Glue gun	1 pc
3M glue	1 pc

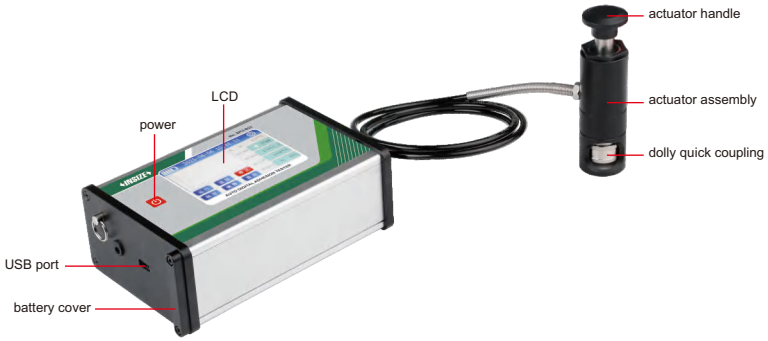
OPTIONAL ACCESSORY

Ø10mm dolly	**SPT-AD21-10**	10 pcs/package pull-off force: 2.8~80MPa
Ø14mm dolly	**SPT-AD21-14**	10 pcs/package pull-off force: 1.4~40MPa
Ø20mm dolly	**SPT-AD21-20**	10 pcs/package pull-off force: 0.7~20MPa
Ø50mm dolly	**SPT-AD21-50** *	10 pcs/package pull-off force: 0.4~3.5MPa
Cutting tool	**SPT-AD21-CUTTER1**	for Ø10mm, Ø14mm, Ø20mm dolly
Cutting tool	**SPT-AD21-CUTTER2** *	for Ø50mm dolly
Sleeve	**SPT-AD21-SLEEVE** *	for Ø50mm dolly
Glue	**SPT-AD21-GLUE**	3M DP420 epoxy glue/50ml

*Ø50mm dolly requires corresponding cutter and sleeve

AUTOMATIC DIGITAL ADHESION TESTER
CODE SPT-B22

VIDEO



Ø20mm dolly (included)

- Pull-off test
- Built-in rechargeable lithium battery, no need external power source
- Portable design, can be used anywhere
- One-touch measurement for convenience
- Standard USB interface, can directly transmit the stored data to computer, no need to install software
- According to GB/T 5210, ASTM D4541/D7234, ISO 4624/16276-1
- Store all test results, includes maximum pull-off force, pull-off rate, dolly size and time
- Built in real-time clock, all saved data have corresponding data and time
- Five different size dollies maximize capability across a wide range of bond strengths
- No need conversion, the instrument can calculates pull-off force according to the dolly size
- Get the testing results from LCD directly
- Two units MPa and psi for selection and can be converted automatically

electric cutting tool (included) for
Ø10mm, Ø14mm, Ø20mm dolly

glue gun and glue (included)

cutting tool (included) for
Ø10mm, Ø14mm, Ø20mm dolly

SPECIFICATION

Range	0~24MPa (0~3480psi)
Dolly dimension	Ø20mm
Resolution	0.01Mpa (1psi)
Accuracy	±1% full scale
Pull-off force	0.7~24MPa (102~3480psi)
Pressurisation rate	0.1~1.5MPa/s (15~215psi/s)
Power	built-in rechargeable lithium battery
Dimension (L×W×H)	240×138×81mm
Net weight	4kg

STANDARD DELIVERY

Main unit	1 pc
Ø20mm dolly	20 pcs
Cutting tool	1 pc
Electric cutting tool	1 pc
Charger	1 pc
USB cable	1 pc
Glue gun	1 pc
3M glue	1 pc

OPTIONAL ACCESSORY

Name	Code	Description
Ø10mm dolly	**SPT-AD21-10**	10pcs/package, pull-off force: 4.0~96Mpa (580~13920psi), pressurisation rate: 0.4~6.0MPa/s (58~870psi/s)
Ø14mm dolly	**SPT-AD21-14**	10pcs/package, pull-off force: 2.0~50Mpa (290~7250psi), pressurisation rate: 0.2~3.0MPa/s (29~435psi/s)
Ø20mm dolly	**SPT-AD21-20**	10pcs/package, pull-off force: 0.7~24Mpa (102~3480psi), pressurisation rate: 0.1~1.5MPa/s (15~215psi/s)
Ø50mm dolly	**SPT-AD21-A50***	10pcs/package, pull-off force: 0.1~3.8Mpa (15~550psi), pressurisation rate: 0.02~0.24MPa/s (3~34psi/s)
50x50mm dolly	**SPT-AD21-B50***	10pcs/package, pull-off force: 0.1~3.0Mpa (15~435psi), pressurisation rate: 0.01~0.19MPa/s (2~27psi/s)
Cutting tool	**SPT-AD21-CUTTER1**	for Ø10mm, Ø14mm, Ø20mm dolly
Cutting tool	**SPT-AD21-CUTTER2***	for Ø50mm dolly
Electric cutting tool	**SPT-AD21-CUTTER3**	for Ø10mm, Ø14mm, Ø20mm dolly
Electric cutting tool	**SPT-AD21-CUTTER4***	for Ø50mm dolly
Sleeve	**SPT-AD21-SLEEVE1***	for Ø50mm dolly
Sleeve	**SPT-AD21-SLEEVE2***	for 50×50mm dolly
Adapter	**SPT-AD21-ADAPTER***	for 50×50mm dolly
3M glue	**SPT-AD21-GLUE**	3M DP420 epoxy glue/50ml

* Ø50mm dolly requires corresponding cutter and sleeve, 50×50mm dolly requires corresponding sleeve and adapter

PENCIL HARDNESS TESTER
CODE PHT-C751

VIDEO

- For flat coating surfaces
- Conform to ASTM D3363, ISO 15184, BS3900-E19 and ECCA-T4/1

in use

SPECIFICATION

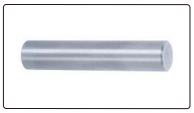
Pressure of pencil on coating	500g, 750g, 1000g (main unit is 500g, one weight is 750g, two weights are 1000g)
Angle between pencil and measured surface	45°
Dimension (L×W×H)	95×80×110mm
Net weight	2kg

STANDARD DELIVERY

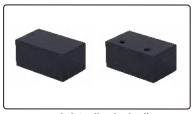
Main unit	1 pc
Weights	2 pcs
Leveling rod	1 pc
Level	1 pc
Pencil	12 pcs (4B, 3B, 2B, B, HB, F, H, 2H, 3H, 4H, 5H, 6H)
Pencil sharpener	1 pc

level (included)

pencils (included)



leveling rod (included)



weights (included)

OPTIONAL ACCESSORY

Pencil (12 pcs: 4B-6H)	PHT-C751-P
400 grade abrasive paper	PHT-C751-S

ROTATIONAL ABRASION TESTER
CODE QMY-AP32

VIDEO

- To test flat paint film
- Comply with ISO 7784-2, ISO 9352, GB/T1768, ASTM D3884, ASTM D1175 standards

SPECIFICATION

Plateform rotary speed	60±2 r/min, 72±2 r/min (selectable)
Load weight	500g, 750g, 1000g
Sample size	Ø100mm
Grinding wheel	external diameter (51.6±0.1)mm, thickness (12.7±0.1)mm
Counting range of plateform rotation	0~9999 times
Motor power	25W
Power supply	220V, 50Hz
Dimension	260×410×280mm
Net weight	14kg

STANDARD DELIVERY

Main unit	1 pc
Vacuum cleaner	1 pc
1000g weight	2 pcs
750g weight	2 pcs
500g weight	2 pcs
TABER CS-10 grinding wheel	1 pair
Sandpaper	10 pcs
Glass plate	5 pcs

OPTIONAL ACCESSORY

TABER CS17 grinding wheel (1 pair)	QMY-AP32-CS17
Glass plate (Ø100mm with a 9mm center hole, 100 pcs/box)	QMY-AP32-GP
Aluminum plate (Ø100mm with a 9mm center hole, 100 pcs/box)	QMY-AP32-AP
180# emery cloth strip (100 pcs/box)	QMY-AP32-EC

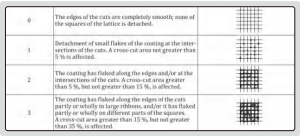
CROSS CUT ADHESION TESTERS

VIDEO

- To test the adhesion of paint coating on metal, wood, plastic, etc.
- According to ASTM D3359, BS 3900E6, BS/EN ISO 2409

step 1: make grid cutting on surface

step 2: paste and remove the tape


0	The edges of the cuts are completely smooth; none of the squares of the lattice is detached.	
1	Detachment of small flakes of the coating at the intersections of the cuts. A cross-cut area not greater than 5 % is affected.	
2	The coating has flaked along the edges and/or at the intersections of the cuts. A cross-cut area greater than 5 %, but not greater than 15 %, is affected.	
3	The coating has flaked along the edges of the cuts partly or wholly in large ribbons, and/or it has flaked partly or wholly on different parts of the squares. A cross-cut area greater than 15 %, but not greater than 35 %, is affected.	

step 3: according to the shedding status, judge the adhesion grade

test tape (included)

2X magnifier (included)

brush (included)

SPECIFICATION

Code		ISQ-PB1	ISQ-PB2	ISQ-PB3	ISQ-PB4	ISQ-PB5
Type		octahedral blade				
Number of blade teeth		6	11	6	11	6
Blade pitch		1mm		2mm		3mm
Applied paint thickness	on hard substrate (like metal)	0~60μm		61~120μm		121~250μm
	on soft substrate (like wood, plaster)	—		0~120μm		121~250μm
Minimum substrate thickness	hard substrate (like metal)	0.25mm				
	soft substrate (like wood, plaster)	—		10mm		
Minimum size of test sample		150×100mm				
Dimension	handle	180×28×40mm			180×30×40mm	180×28×40mm
	blade	Ø30×18mm			Ø30×21mm	Ø30×18mm
Net weight		277g				

STANDARD DELIVERY

Handle	1 pc
Blade	1 pc
Test tape	1 pc
2X magnifier	1 pc
Brush	1 pc

OPTIONAL ACCESSORY

Code	Description	Applicable codes
ISQ-PBV	25mm wide test tape, consumable	all codes
ISQ-PB1-A	octahedral blade with 6 teeth and 1mm pitch	ISQ-PB1, ISQ-PB2 ISQ-PB3, ISQ-PB5
ISQ-PB2-A	octahedral blade with 11 teeth and 1mm pitch	
ISQ-PB3-A	octahedral blade with 6 teeth and 2mm pitch	
ISQ-PB4-A	octahedral blade with 11 teeth and 2mm pitch	ISQ-PB4
ISQ-PB5-A	octahedral blade with 6 teeth and 3mm pitch	ISQ-PB1, ISQ-PB2, ISQ-PB3, ISQ-PB5

PAINT FILM FLEXIBILITY TESTER CODE PPF-BF62

VIDEO

- To test the flexibility of paint and varnish
- Bend the coated test plates on the shaft rods with different diameter, the minimum shaft rod diameter that does not cause damage to the film is the film flexibility

SPECIFICATION

Shaft rod length	35mm
Shaft rod 1	Ø15mm
Shaft rod 2	Ø10mm
Shaft rod 3	Ø5mm
Shaft rod 4	Ø4mm
Shaft rod 5	cross section 3×10mm, radius of curved surface 1.5mm
Shaft rod 6	cross section 2×10mm, radius of curved surface 1.0mm
Shaft rod 7	cross section 1×10mm, radius of curved surface 0.5mm
Dimension	450×75×100mm
Net weight	3.1kg

STANDARD DELIVERY

Main unit	1 pc
Test plate	1 box (500 pcs)
4X magnifier	1 pc

OPTIONAL ACCESSORY

Test plate (dimension: 120×25×0.28mm, 500 pcs/box)	PPF-BF62-TP

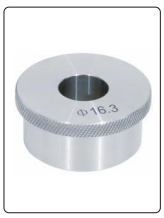
IMPACT TESTER
CODE THD-PF34

2lb additional weight (included)

1000g additional weight (included)

300g main weight (included)

1000g main weight (included)


Ø16.3mm die base (included)

Ø12.7mm indenter (included)

Ø15.9mm indenter (included)

2lb main weight (included)

- For paint and varnish dry coating. To test the ability to resist cracking or peeling from the substrate when deformation is caused by weights impact under standard conditions
- Indenter, base and weight can be replaced quickly
- Conform to ISO 6272-2:2002, ASTM D 2794

SPECIFICATION

Impact height range	0-100cm (0-40inch)
Graduation	1cm
Impact depth	2.5cm
Weight	1000g (2pcs), 300g (1pc), 2lb (2pcs)
Indenter diameter	Ø12.7mm (1/2 inch DIA), Ø15.9mm (5/8 inch DIA)
Die base diameter	Ø16.3mm

OPTIONAL ACCESSORY

Base plate (120×70×0.5mm, 180pcs/box)*	THD-PF34-T

*Can be customized according to the needs of different thickness, size and processing

STANDARD DELIVERY

Main unit	1 pc
1000g main weight	1 pc
300g main weight	1 pc
2lb main weight	1 pc
1000g additional weight	1 pc
2lb additional weight	1 pc
Ø12.7mm indenter	1 pc
Ø15.9mm indenter	1 pc
Ø16.3mm die base	1 pc

ISO FLOW CUP

- According to ISO 2431, ASTM D5125
- Aluminum body, stainless steel orifice, interior polished
- Suitable for measuring the flow time of Newtonian or near-Newtonian liquids, such as coatings, paints, inks, etc.

FCV-S04

triangular stand **(optional)**

desktop stand **(optional)**

SPECIFICATION

Code	FCV-S04
Cup No.	4#
Orifice (mm)	4
Range (cSt)*	34~135
Efflux (s)	30~100

*1cSt=$10^{-6}m^2/s$=$1mm^2/s$

OPTIONAL ACCESSORY

Triangular stand	FCV-TB01
Desktop stand	FCV-DB01
Digital stopwatch	DSW-A010

FORD VISCOSITY CUP

- According to ASTM D1200
- Aluminum body, copper alloy orifice, interior polished
- Suitable for measuring the flow time of Newtonian or near-Newtonian paints, varnishes, lacquers, etc.

FCV-F04

triangular stand **(optional)**

desktop stand **(optional)**

SPECIFICATION

Code	FCV-F04
Cup No.	4#
Orifice (mm)	4.12
Range (cSt)*	70~370
Efflux (s)	20~105

*1cSt=$10^{-6}m^2/s$=$1mm^2/s$

OPTIONAL ACCESSORY

Triangular stand	FCV-TB01
Desktop stand	FCV-DB01
Digital stopwatch	DSW-A010

DIN CUP

VIDEO

- According to DIN 53211
- Aluminum body, stainless steel orifice, interior polished
- Suitable for measuring low-viscosity fluids, such as glue, solvents, etc.
- Optional stainless steel handle for quick measurements in workshops

FCV-D04

triangular stand
(optional)

desktop stand
(optional)

SPECIFICATION

Code	FCV-D04
Orifice (mm)	4±0.02
Range (cSt)*	96~683
Efflux (s)	20~110
Capacity (mL)	100

*1cSt=10^{-6}m²/s=1mm²/s

OPTIONAL ACCESSORY

Triangular stand	FCV-TB01
Desktop stand	FCV-DB01
Digital stopwatch	DSW-A010

Zahn CUP

VIDEO

- According to ASTM D4212
- Suitable for workshops, factories, laboratories etc.
- Suitable for measuring the viscosity of Newtonian or near-Newtonian inks

FCV-Z04

SPECIFICATION

Code	FCV-Z04
Cup No.	4#
Orifice (mm)	4.27
Range (cSt)*	200~1200
Efflux (s)	20~80

*1cSt=10^{-6}m²/s=1mm²/s

OPTIONAL ACCESSORY

Digital stopwatch	DSW-A010

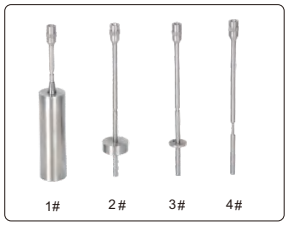
ROTATIONAL VISCOMETER (STANDARD TYPE) CODE DRV-606

DATA OUTPUT

VIDEO

- Widely used to measure the viscosity of fluids such as grease, paints, pharmaceuticals, coatings, adhesives, detergents, etc.
- For measuring the absolute viscosity of Newtonian liquids and the apparent viscosity of non-Newtonian liquids
- Measurement results show rotor number, speed, liquid viscosity, and full-scale percentage simultaneously
- 5-inch color touch screen, convenient and quick operation
- Automatic measurement mode, the rotor stops when measurements stabilize
- The temperature sensor is included for real-time sample temperature detection
- Software is included for data transfer

DRV-606



rotors (included)

SPECIFICATION

Range (mPa·s)	1~6×10⁶
Rotor No.	0.1, 0.3, 0.6, 1.5, 3, 6, 12, 30, 60
Rotation speed (r/min)	1#, 2#, 3#, 4#
Resolution (mPa·s)	0.1
Accuracy	±1.0%FS
Repeatability	±0.5%FS
Working environment	5°C~35°C, ≤80%
Power supply	AC110V~220V, 50/60Hz
Dimension (L×W×H)	460×180×420mm
Net weight	6.3kg

STANDARD DELIVERY

Main unit	1 pc
Rotor	4 pcs
Temperature sensor	1 pc
Protection cap	1 pc
Main post for lifting	1 pc
Host connection handle	1 pc
Main engine base	1 pc
Rotor protection frame	1 pc
Power adapter	1 pc
Wrench	3 pcs

OPTIONAL ACCESSORY

Printer	DRV-PRINTER
Thermostatic water bath	DRV-BATH
Rotor 0	DRV-SPINDLE

INFRARED THERMAL IMAGING CAMERAS (ECONOMIC TYPE)

DATA OUTPUT

IP54 WATERPOOF

VIDEO

- Suitable for electric power, construction, mechanical industry, etc.
- Equipped with 96×96 infrared detector, supporting super resolution enhancement to 192×192
- -20°C~550°C temperature measurement range, automatic switch
- Wide imaging angle, discernible details and defect visualization
- Software is included: support file management, thermal image analysis, real-time transmission, report editing, etc.

0239-HT96B

SPECIFICATION

Code		0239-HT96A	0239-HT96B
Infrared image	detector type	unrefrigerated vanadium oxide, 7.5μm~14μm	
	infrared resolution	96×96	
	super resolution	upgrade to 192×192	
	thermal sensitivity/NETD	<50mK	
	infrared frame rate	25Hz	
	spatial resolution/IFOV	8.89mrad	
	minimum object distance	0.1m	
	field of view	50°×50°	
	focal length	1.35mm	
	focusing mode	focus-free	
Image display	display screen	2.4" LCD, 320×240 pixel	
	visual camera	unavailable	640×480
	image mode	infrared	infrared, visual, fusion
	color palettes	white hot, black hot, rainbow, iron red, red hot, fusion, blue yellow	
Measurement and analysis	measurement range	support auto-switching: -20°C~150°C, 100°C~550°C	
	measurement accuracy	±2°C or ±2%, whichever is greater	
	measurement tools	center spot, maximum spot, minimum spot	
Function	laser	class 2, wavelength 650nm, power <1mW	
	storage	built-in 4G	
	image storage	JPG (with temperature information)	
	video storage	Mp4 (without temperature information)	
	casting screen	available	
	external interface	TYPE-C, 1/4" tripod mounting	
	battery type	rechargeable lithium-ion battery, approximately 8 hours on a full charge	
Physical parameter	operating environment	-10°C~50°C, ≤95%RH	
	storage environment	-40°C~70°C, ≤95%RH	
	protection	IP54, 2m drop test	
	dimension (L×W×H)	78×59×196mm	
	net weight	290g	

0239-HT96A

0239-HT96B

STANDARD DELIVERY

Main unit	1 pc
TYPE-C data cable	1 pc

OPTIONAL ACCESSORY

Tripod	0701-TR175

INFRARED THERMAL IMAGING CAMERA (BASIC TYPE)
CODE 9132-T400

VIDEO

DATA OUTPUT

IP54 WATERPROOF

- Suitable for electric power, mechanical and electrical, heating ventilation and air conditioning, intelligent manufacturing, etc.
- High-sensitive infrared detector, resolution 256x192
- Support real-time super resolution technology, 4 times better image quality
- -20°C~550°C wide temperature measurement range, automatic switch
- Software is included: support file management, thermal image analysis, video analysis, report editing, etc.
- Mobile APP is included: support real-time data and video transmission

STANDARD DELIVERY

Main unit	1 pc
Power adapter	1 pc
TYPE-C data cable	1 pc
4G USB flash disk	1 pc
Software	1 pc

OPTIONAL ACCESSORY

Tripod	0701-TR175

SPECIFICATION

Imaging and optics	detector type	unrefrigerated vanadium oxide, 7.5μm~14μm
	infrared resolution	256×192@12μm
	super resolution	upgrade to 512×384
	thermal sensitivity/NETD	45mK
	infrared frame rate	25Hz/9Hz
	focal length	3.2mm
	field of view	56°×48°
	spatial resolution/IFOV	3.75mrad
	minimum object distance	0.1m
	distance to spot size/D:S	266:1
	focusing mode	focus-free
Measurement and analysis	measurement range	support auto-switching: -20°C~150°C, 0°C~550°C
	measurement accuracy	±2°C or ±2%, whichever is greater
	analyzed target	center spot, fixed temperature measurement areas: small/medium/large
	temperature alarm	full screen temperature alarm with image and flash
	temperature measuring parameter	emissivity, reflected temperature, target distance
Image display	display screen	2.4" LCD
	image mode	IR, VIS, MIF, PIP
	color palette	6: iron red, white hot, arctic, rainbow 1, rainbow 2, hot iron
	image adjustment	level span mode: automatic, semi-automatic, manual
	digital camera	2MP
Function	laser	laser indication
	recording function	photo and video
Storage and transmission	storage	built-in 16GB
	image storage	JPG with temperature information
	video storage	support real-time video transmission, IRGD with temperature information
	external interface	TYPE-C, 1/4" tripod interface
	WIFI	can be connected to the mobile terminal for image and real-time video transmission
Power supply	battery type	rechargeable lithium-ion battery, non-removable
	operation time	11 hours
	charging mode	TYPE-C charging, capable of charging while using
	charging time	90% of full charge in 2.5 hours
Environmental parameter	operation temperature	-15°C~50°C
	protection	IP54, 2m drop test
	certification	CE, RoHS
Physical parameter	net weight	375g
	dimension	194×61.5×76mm

front view

INFRARED THERMAL IMAGING CAMERA (MANUAL FOCUS TYPE)
CODE 0238-HT192

DATA OUTPUT

IP54 WATERPOOF

VIDEO

- Suitable for electric power, construction, electrical industry, petrochemical industry, mechanical industry, scientific research, etc.
- Equipped with 192×144 infrared detector, supporting super resolution enhancement to 384×288, delivering uniform imaging with discernible details and sharp clarity
- -20°C~650°C temperature measurement range, automatic switch
- Support point, line, rectangle and circle measurement tools, with flexible regional emissivity adjustment capabilities
- Software is included: support file management, thermal image analysis, video analysis, real-time transmission, report editing, etc.
- Mobile APP is included: support real-time data and video transmission

SPECIFICATION

Infrared image	detector type	unrefrigerated detector, 7.5μm~14μm
	infrared resolution	192×144
	super resolution	upgrade to 384×288
	thermal sensitivity/NETD	<50mK
	infrared frame rate	25Hz
	spatial resolution/IFOV	1.74mrad
	aperture value	F1.0
	field of view	19°×14°
	focal length	6.9mm
	focusing mode	manual focus
	digital zoom	1.0X~8.0X
Image display	display screen	3.5" touchscreen LCD, 640×480 pixel
	visual camera	3264×2448
	image mode	infrared, visual, fusion, pip, blending
	color palettes	white hot, black hot, rainbow, iron red, red hot, fusion, rain, blue red
	color highlight	above, below, interval, insulation, condensation
Measurement and analysis	measurement range	support auto-switching: -20°C~150°C, 100°C~650°C
	measurement accuracy	±2°C or ±2%, whichever is greater
	measurement tools	center spot, hot spot, cold spot, user-definable: delta T, 10 spots, 5 rectangles, 5 circles, 1 line
Function	laser	class 2, wavelength: 650nm, power: <1mW
	storage	32G Micro SD card
	image storage	JPG (with temperature information)
	video storage	MP4 (without temperature information) and HRV (with temperature information)
	WIFI	available
	bluetooth	available
	external interface	TYPE-C, SD card slot, 1/4" tripod mounting
	battery type	interchangeable and rechargeable lithium-ion battery, approximately 6 hours on a full charge
Physical parameter	operating environment	-10°C~50°C, ≤95%RH
	protection	IP54, 2m drop test
	dimension (L×W×H)	100×104×244mm
	net weight	660g

STANDARD DELIVERY

Main unit	1 pc
TYPE-C data cable	1 pc
SD card	1 pc
Lithium-ion battery	2 pcs
Desktop charger	1 pc
Power adapter	1 pc

OPTIONAL ACCESSORY

Tripod	0701-TR175

INFRARED THERMAL IMAGING CAMERA (STANDARD TYPE) CODE 0231-IC650

DATA OUTPUT | IP54 WATERPROOF | VIDEO

- Suitable for electric power, metallurgy, petrochemical, scientific research and teaching, manufacturing, rail transit, building testing, electronic equipment overhaul, mechanical equipment maintenance, etc.
- Four image presentation: IR, VIS, MIF, PIP
- Real-time image can be photographed and video recorded
- Software is included: image browsing, image parameter editing, infrared image analysis, batch report generation, video editing, etc.
- WIFI real-time sharing, one-click connection to mobile device

SPECIFICATION

Imaging and optics	detector type	unrefrigerated vanadium oxide/7.5μm~14μm
	infrared resolution	256×192@12μm
	super resolution	upgrade to 512×384
	thermal sensitivity/NETD	<45mK
	infrared frame rate	30Hz/9Hz
	focal length	10.5mm
	field of view	25°×19°
	spatial resolution (IFOV)	1.7mrad
	minimum object distance	0.1m
	distance to spot size (D:S)	588:1
	focusing mode	manual/automatic/continuous autofocus
	digital zoom	1.1X~8X
	shot recognition	auto
	laser ranging	indication/ranging: 0.1m~40m
Measurement and analysis	measurement range	support auto-switching: -40°C~150°C, 0°C~650°C
	measurement accuracy	±2°C or ±2%, whichever is greater
	analyzed target	spot×5, line×5, area×5
	tracking/alarm	full screen maximum, minimum and average temperature tracking; the maxium, minimum and average temperature tracking of analyzed target; full screen temperature threshold alarm (image, voice and flash)
	temperature measuring parameter	emissivity, reflected temperature, target distance, humidity, atmospheric transmittance, optical transmittance, dew point
	other	isothermals, smart stroke, intelligently calculate the area
Image display	display screen	4.3", 800×480 pixel touch screen LCD
	digital camera	5MP
	image mode	IR, VIS, MIF, PIP
	image adjustment	level span mode: automatic, semi-automatic, manual
	color palettes	white hot, iron red, arctic, rainbow 2, hot iron, rainbow 1, fulgurite, medical, tint, black hot, blue hot, sepia, green hot, ice and fire, amber, customized
Function	recording function	photo and video (infrared & visible light)
	cloud service	available
	other	customized physical button, intelligent diagnosis, OTA update
Storage and transmission	storage	local storage (64GB) and external 64GB SD
	image storage	JPG with temperature information
	video storage	MP4 (without temperature information), can be used to record audio synchronously; irgd (with temperature information), up to 30Hz for temperature analysis
	external interface	TYPE-C, SD card slot
	WIFI	can be connected to the mobile terminal for image and real-time video transmission
	bluetooth	bluetooth 5.0, support image transmission (only for Android)
Power system	battery type	lithium-ion rechargeable battery, working time≥5 hours
	charging mode	TYPE-C charging; PC/portable charger; capable of charging while using
	charging time	90% of full charge in 2.5 hours
Environmental parameter	operation temperature	-20°C~50°C
	storage temperature	-40°C~60°C
	protection	IP54, 2-meter drop test
	certification	CE, FCC, RoHS
Physical parameter	hardware	illuminator, microphone, speaker, electronic compass, GPS
	dimension	292×125×125mm
	net weight	1.15kg

STANDARD DELIVERY

Main unit	1 pc
64G SD card	1 pc
Lithium-ion battery	2 pcs
Power adapter	1 pc
Software	1 pc

OPTIONAL ACCESSORY

Tripod	0701-TR175

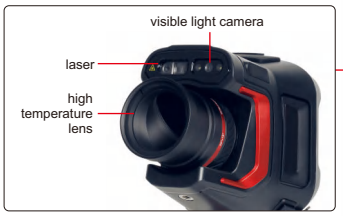
INFRARED THERMAL IMAGING CAMERAS (ADVANCED TYPE)

VIDEO

DATA OUTPUT

IP54 WATERPROOF

- Suitable for electric power, oil and petrochemical, heating ventilation and air conditioning, electronic information, etc.
- 4 image modes: IR, VL, MIF and PIP
- Software is included: support file management, thermal image analysis, video analysis, report editing, etc.
- Mobile APP is included: support real-time data and video transmission



0234-TC850B

STANDARD DELIVERY

Code	0234-TC850A	0234-TC850B
Infrared lens	1 pc (standard lens)	2 pcs (standard lens+high temperature lens)
Main unit	1 pc	
64G SD card	1 pc	
Lithium-ion battery	2 pcs	
Desktop charger	1 pc	
Power adapter	1 pc	
Software	1 pc	

OPTIONAL ACCESSORY

Tripod	0701-TR175

SPECIFICATION

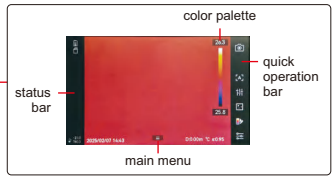
Code		0234-TC850A	0234-TC850B
Measurement and analysis	measurement range	support auto-switching: -40°C~150°C, 0°C~650°C	support auto-switching: -40°C~150°C, 0°C~650°C, 500°C~2000°C (high temperature lens is required, included)
	measurement accuracy	±2°C or ±2%, whichever is greater	
	analyzed target	12 in total (spot/line/area)	
	temperature alarm	full screen temperature alarm with image, voice and flash	
	temperature measuring parameter	emissivity, reflected temperature, target distance, humidity, atmospheric temperature, optical transmittance, dew point	
	others	isothermals, smart stroke, intelligently calculate the area	
Image display	display screen	4.3" touchscreen LCD, 800×480 pixel	
	digital camera	8MP	
	image mode	IR, VIS, MIF, PIP	
	image adjustment	level span mode: automatic, semi-automatic, manual	
	color palettes	15: white hot, iron red, arctic, rainbow 2, hot iron, rainbow 1, fulgurite, medical, tint, black hot, blue hot, sepia, green hot, ice and fire, amber; customized	
Imaging and optics	detector type	unrefrigerated vanadium oxide, 7.5μm~14μm	
	infrared resolution	480×360@12μm	
	super resolution	upgrade to 960×720	
	thermal sensitivity/NETD	45mK	
	infrared frame rate	30Hz/9Hz	
	focal length	17.7mm	
	field of view	25°×19°	
	spatial resolution/IFOV	0.91mrad	
	minimum object distance	0.15m	
	distance to spot size/D:S	1099:1	
	focusing mode	manual, automatic, touch autofocus, continuous autofocus	
	digital zoom	1.1x~16x	
Function	laser	indication/ranging: 0.1m~40m	
	recording function	photo (image stitching) and video (infrared and visible light)	
	cloud service	available	
Storage and transmission	storage	built-in 64GB and external SD card (64GB and up to 256GB)	
	image storage	JPG (with temperature information)	
	video storage	MP4 (without temperature information) can be used to record audio synchronously; IRGD (with temperature information), up to 30Hz for temperature analysis	
	external interface	TYPE-C, SD card slot, 1/4" tripod mounting	
	WIFI	can be connected to the mobile terminal for image and real-time video transmission	
	bluetooth	bluetooth 5.0, support image transmission (only for Android)	
Power supply	battery type	lithium-ion rechargeable battery, operating time≥4 hours	
	charging mode	TYPE-C charging; PC/portable charger; capable of charging while using; desktop charger	
	charging time	90% of full charge in 2.5 hours	
Environmental parameter	operating temperature	-20°C~50°C	
	protection	IP54, 2m drop test	
	certification	CE, RoHS	
Physical parameter	hardware	illuminator, microphone, speaker, electronic compass, GPS	
	dimension	292×125×125mm	
	net weight	1.2kg	

INFRARED THERMAL IMAGING CAMERA (HIGH TEMPERATURE TYPE)
CODE 0235-HT480

DATA OUTPUT

IP54 WATERPROOF

VIDEO



- Suitable for electric power, construction, electrical, mechanical, scientific research, etc.
- -20°C~650°C temperature measurement range, automatic switch, up to 2000°C with high temperature lens
- 4 hours operation time with interchangeable and rechargeable lithium-ion battery
- Software is included: support file management, thermal image analysis, video analysis, report editing, etc.
- Mobile APP is included: support real-time data and video transmission

STANDARD DELIVERY

Main unit	1 pc
High temperature lens	1 pc
64G SD card	1 pc
Lithium-ion battery	2 pcs
Desktop charger	1 pc
Power adapter	1 pc
Software	1 pc

OPTIONAL ACCESSORY

Tripod	0701-TR175

SPECIFICATION

Infrared image	detector type	unrefrigerated detector, 7.5μm~14μm
	infrared resolution	480×360
	super resolution	upgrade to 960×720
	thermal sensitivity/NETD	<30mK
	infrared frame rate	50Hz
	spatial resolution/IFOV	0.68mrad
	aperture value	F1.0
	field of view	19°×14°
	minimum object distance	0.3m
	focusing mode	AF/continuous AF/laser assisted AF/touch AF/manual focus
	digital zoom	1.0x~8.0x
Image display	display screen	4.3" touchscreen LCD, 800×480 pixel
	visual camera	3264×2448
	image mode	infrared, visual, fusion, pip, blending
	color palettes	white hot, black hot, rainbow, ironbow, red hot, fusion, rain, blue red
	color highlight	above, below, interval, insulation, condensation
Measurement and analysis	measurement range	support auto-switching: -20°C~150°C, 100°C~650°C, 300°C~2000°C (high temperature lens is required, included)
	measurement accuracy	±2°C or ±2%, whichever is greater
	measurement tools	center spot, hot spot, cold spot, user-definable: delta T, 10 spots, 5 rectangles, 5 circle, 1 line
Function	laser	indication: class 2, wavelength: 635nm, power: <1mW ranging: indoor 50m, outdoor 15m; accuracy: 0.1m
	storage	64G Micro SD card
	image storage	JPG (with temperature information)
	video storage	MP4 (without temperature information) and HRV (with temperature information)
	WIFI	802.11 b/g/n (2.4GHz and 5GHz)
	bluetooth	bluetooth 4.2
	GPS and compass	available
	external interface	TYPE-C, HDMI, SD card slot, 1/4" tripod mounting
	battery type	interchangeable and rechargeable lithium-ion battery, operating time 4 hours
	charging time	approximate 4 hours fully charged
Physical parameter	operating environment	-20°C~50°C, ≤95%RH
	protection	IP54, 2m drop test
	dimension	285×120×125mm
	net weight	1.1kg

POCKET-SIZED THERMAL CAMERA
CODE 0232-PC550

VIDEO

DATA OUTPUT

IP54 WATERPROOF

- The 256×192 infrared detector produces crisp image
- The IR, VIS, PIP and MIF reveal temperature details
- -20°C to 550°C temperature range with auto-switching capability
- Software is included

SPECIFICATION

Imaging and optics	detector type	unrefrigerated vanadium oxide/7.5μm~14μm
	infrared resolution	256×192@12μm
	thermal sensitivity/NETD	≤45mK
	infrared frame rate	25Hz/9HZ
	focal length	3.2mm
	field of view	56°×48°
	spatial resolution (IFOV)	3.75mrad
	minimum object distance	0.3m
	distance to spot size (D:S)	266:1
	focusing mode	focus-free
	digital zoom	1.1x~8x
	laser ranging	≤8m
Measurement and analysis	measurement range	support auto-switching: -20°C~150°C, 100°C~550°C
	measurement accuracy	±2°C or ±2%, whichever is greater
	analyzed target	spot×2 (include center spot), area×3
	tracking/alarm	full screen maximum/minimum temperature tracking; the maxium or minimum temperature tracking of analyzed target; full screen temperature threshold alarm (image and flash)
	temperature measuring parameter	emissivity, reflected temperature, target distance
	other	intelligently calculate the area
Image display	display screen	3.5" LCD
	digital camera	5MP
	image mode	IR, VIS, MIF, PIP
	image adjustment	level span mode: automatic, semi-automatic, manual
	color palettes	white hot, black hot, iron red, hot iron, rainbow, arctic
Function	recording function	photo
	cloud service	available
	other	customized physical buttonx2
Storage and transmission	storage media	local storage (16GB)
	image storage	JPG with temperature information
	external interface	TYPE-C
	WIFI	can be connected to the mobile terminal for image transmission
Power system	battery type	rechargeable lithium-ion battery, working time≥4 hours
	charging mode	TYPE-C charging; PC/portable charger; capable of charging while using
	charging time	90% of full charge in 2.5 hours
Environmental parameter	operation temperature	-10°C~50°C
	storage temperature	-40°C~70°C
	protection	IP54, 1m drop test
	certification	CE, FCC, RoHS
Physical parameter	hardware	illuminator, Laser (indication, ranging)
	dimension	138×89×35mm
	net weight	296g

STANDARD DELIVERY

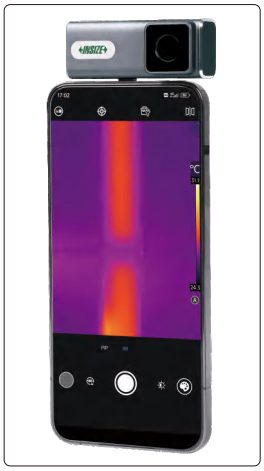
Main unit	1 pc
Power adapter	1 pc
Software	1 pc

OPTIONAL ACCESSORY

Tripod	0701-TR175

INFRARED THERMAL IMAGING CAMERA FOR MOBILE PHONE
CODE 0236-MC150

connect to Android mobile phone



- Suitable for intelligent farming, electrical industry, mechanical industry, construction, heating ventilation and air conditioning, etc.
- Clearly identify people and animals hundreds of meters away in the darkness field
- Automatically focus on subjects by touching the screen to quickly produce clear thermal images
- Up to 3 spots, 1 line and 2 areas of subjects to be analyzed
- Mobile App is included (only for Android system)

SPECIFICATION

Infrared detector	**detector type**	unrefrigerated vanadium oxide, 7.5μm~14μm
	infrared resolution	256×192@12μm
	infrared frame rate	25Hz
Lens	**focal length**	7mm
	field of view	25°
	focusing mode	automatic/electric
	detection range	100m
Temperature measurement	**measurement range**	-20°C~150°C
	measurement accuracy	±2°C or ±2%, whichever is greater
	analyzed target	spot, line, area
Function	**photo and video**	available
	color palettes	9: white hot, fulgurite, iron red, hot iron, medical, north pole, rainbow 1, rainbow 2, black hot; 1 customized
	instant sharing	images, videos
Power supply	**voltage**	4.5V~5.5V
	power	500mW
Environmental parameter	**operating temperature**	0°C~45°C
	protection	IP43, 1m drop test
	certification	CE, RoHS
Physical parameter	**external interface**	USB TYPE-C
	dimension (L×W×H)	59×20×24mm
	net weight	40g

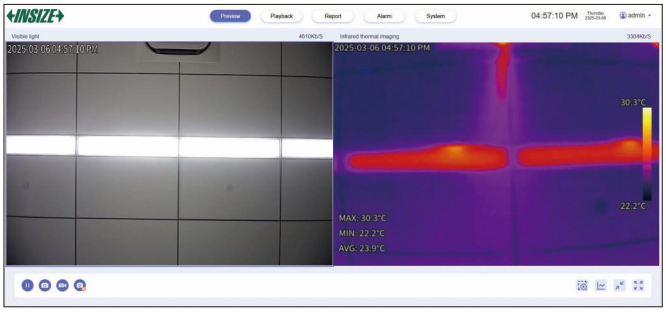
STANDARD DELIVERY

Main unit	1 pc
USB flash disk	1 pc

ONLINE INFRARED THERMAL IMAGING CAMERA
CODE 0237-NC200

IP67
WATERPROOF

- Suitable for electric power, electrical industry, mechanical industry, etc.
- Adopt 256×192 infrared detector, together with 1920×1080 visible light sensor
- Support real-time temperature measurement analysis, alarm setting, historical information query and export reports
- Support various installation methods such as magnetic mounting, wall mounting, vertical mounting, hanging mounting and tripod mounting
- Web-side control, no need other App or software



web-side real-time image

STANDARD DELIVERY

Main unit	1 pc
Adapter cable	1 pc
Back panel	1 pc

SPECIFICATION

Infrared image	**detector type**	unrefrigerated vanadium oxide, 7.5μm~14μm
	infrared resolution	256×192@12μm
	thermal sensitivity/NETD	45mK@30°C
	lens	3.2mm, 56°×42°
	focusing mode	focus-free
	color palettes	26: white hot, black hot, rainbow and so on
	featured function	detail enhancement, 2D/3D noise reduction, image flip, dual light fusion
Temperature measurement	**measurement range**	low: -20°C~150°C, high: 100°C~550°C
	measurement accuracy	±2°C or ±2%, whichever is greater
	measurement target	up to 21 targets (spot, line, rectangle, polygon and circle) can be simultaneously measured
	measurement function	cold/hot spot tracking, full-screen point temperature measuring, query and export of information
Visible light	**sensor type**	1/2.7" CMOS
	max. resolution	1920×1080
	min. illuminance	color: 0.005lux
	lens	2.8mm, 65°×49°
	fill light	white light
	featured function	visible light gain control, 2D/3D noise reduction, backlight compensation, wide dynamic, strong-light photoinhibition, image flip, exposure compensation
Image	**video compression**	H.264
	image format	JPEG
Protocol and storage	**network protocol**	IPv4/IPv6, HTTP, SMTP, RTSP, TCP, DHCP, ONVIF (automatic search device, RTSP video stream and device control), GB/T28181, MQTT
	local storage	4G EMMC
System function	**language**	Chinese/English
	user management	max. 20 users with three levels of user accounts (root, admin and user)
	fault detection	network interrupt detection, IP conflict detection, illegal access, storage exception
	intelligent function	sound and light alarm
Interface	**power interface**	DC12V±25%
	network interface	100M/1000M ethernet port, POE (802.3 at)
	alarm interface	1 input and 1 output
	other interface	RS485
Environmental parameter	**operating environment**	-30°C~60°C, ≤95%RH (non-condensing)
	protection	IP67, TVS 6000V lightning protection and surge protection
Physical parameter	**power**	3.5W
	dimension (L×W×H)	71×30×105mm
	net weight	300g

INFRARED THERMOMETER (BASIC TYPE)
CODE 0222-C520

POPULAR MODEL

- Unit: °C, °F
- Automatic data hold
- MAX/MIN/AVG/DIF mode
- High and low alarm
- Adjustable emissivity
- Low battery display
- Over range indicator
- Automatic power off

SPECIFICATION

Temperature range	-50°C~500°C/-58°F~932°F
Temperature accuracy	±(2°C+0.1°C/°C) (at -50°C~0°C), ±2.0°C or ±2% (at 0°C~500°C)
	±(4.0°F+0.1°F/°F) (at -58°F~32°F), ±4.0°F or ±2% (at 32°F~932°F)
Temperature resolution	0.1°C/0.2°F
Distance to spot size (D:S)	12:1
Emissivity	0.10~1.00 (adjustable)
Repeatability	±0.5°C or ±0.5%; ±1.0°F or ±0.5%
Response time	≤500ms (95% of reading)
Spectral response	8μm~14μm
Positioning laser	single-spot, class 2 laser product, output<1mW, wavelength 630nm~670nm
Power supply	2×AAA batteries, working time≥6h
Automatic power off	about in 15 seconds
Operation environment	temperature: 0°C~50°C/32°F~122°F; humidity: <90%RH (non-condensing)
Storage environment	temperature: -20°C~60°C/-4°F~140°F; humidity: <90%RH (non-condensing)
Dimension	148×85×46mm
Net weight	160g

STANDARD DELIVERY

Main unit	1 pc
Battery (AAA)	2 pcs

INFRARED THERMOMETER (STANDARD TYPE)
CODE 0213-A500

- Unit: °C, °F
- Dual-spot laser sighting
- Negativity display
- Automatic power off
- Automatic data hold
- Over range indicator
- Max/Min display

SPECIFICATION

Temperature range	-20°C~380°C/-4°F~716°F
Temperature accuracy	±2.5°C (at -20°C~20°C), ±2% or ±2.0°C (at 20°C~380°C)
	±4.5°F (at -4°F~68°F), ±2% or ±3.6°F (at 68°F~716°F)
Temperature resolution	0.1°C/0.1°F
Distance to spot size (D:S)	12:1
Emissivity	0.95 (fixed)
Repeatability	±1°C/1.8°F
Response time	150ms
Spectral response	8μm~14μm
Positioning laser	dual-spot, class 2 laser product, output<1mW, wavelength 630nm~670nm
Operation temperature	0°C~50°C/32°F~122°F
Operation humidity	10%RH~90%RH
Storage temperature	-10°C~60°C/14°F~140°F
Storage humidity	<80%RH
Power supply	1×9V battery
Dimension	137×73×38mm
Net weight	135g

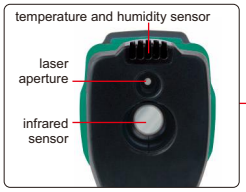
STANDARD DELIVERY

Main unit	1 pc
Battery	1 pc

INFRARED THERMOMETER (MEDIUM TEMPERATURE TYPE)
CODE 0215-A900

VIDEO

- Ambient temperature, dew point temperature and humidity detection
- Unit: °C, °F
- Circular laser sighting
- Display backlight
- Automatic power off
- Automatic data hold
- Adjustable emissivity
- High and low alarm



SPECIFICATION

Infrared sensor	temperature range	-30°C~800°C/-22°F~1472°F
	temperature resolution	0.1°C
		0.1°F (-22°F~1000°F), other range 1°F
	temperature accuracy	±3.0°C (at -30°C~20°C) ±(1% of reading +1)°C (at 20°C~450°C) ±(2% of reading)°C (at 450°C~800°C)
	distance to spot size (D:S)	20:1
	emissivity	0.10~1.00 (adjustable)
	response time	<150ms
	spectral response	8μm~14μm
	positioning laser	circular, class 2 laser product, output<1mW, wavelength 630nm~670nm
Temperature and humidity sensor	ambient temperature range	0°C~50°C/32°F~122°F
	dew point temperature range	0°C~50°C/32°F~122°F
	temperature resolution	0.1°C/0.1°F
	temperature accuracy	±1.0°C/±1.8°F
	humidity range	0%RH~100%RH
	humidity resolution	0.1%RH
	humidity accuracy	±5%RH (20%RH~80%RH), other range ±7%RH
Automatic power off		about in 10 seconds
Power supply		1×9V battery
Dimension		170×45×85mm
Net weight		196g

STANDARD DELIVERY

Main unit	1 pc
Battery	1 pc

INFRARED THERMOMETER (MEDIUM-HIGH TEMPERATURE TYPE)
CODE 0216-B210

VIDEO

- Unit: °C, °F
- Circular laser sighting
- Over range indicator with LED and buzzer
- 99 data storage
- Auto interval measurement
- MAX/MIN/AVG/DIF display

SPECIFICATION

Temperature range	-32°C~1300°C
Temperature accuracy	±(1.5+0.1·|t|)°C (<0°C), ±1.5°C or ±1.5% (≥0°C)
Temperature resolution	0.1°C (<1000°C), 1°C (≥1000°C)
Distance to spot size (D:S)	30:1
Emissivity	0.10~1.00 (adjustable)
Repeatability	0.7°C or 0.7%
Response time	≤250ms (95% of reading)
Spectral response	8μm~14μm
Positioning laser	circular, class 3R laser product, output 1mW≤P<3mW, wavelength 630nm~670nm
Operation temperature	0°C~50°C
Operation humidity	<90%RH (non-condensing)
Storage temperature	-20°C~60°C
Power supply	1×9V battery
Dimension	190×127×54mm
Net weight	310g

STANDARD DELIVERY

Main unit	1 pc
Battery	1 pc

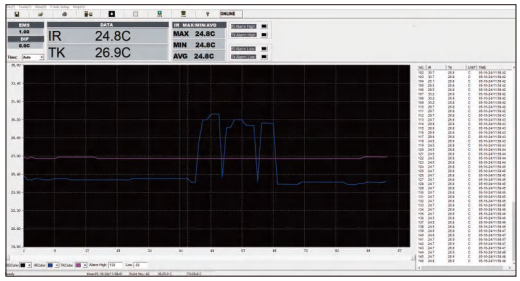
OPTIONAL ACCESSORY

Tripod	0701-TR175

INFRARED THERMOMETER (HIGH TEMPERATURE TYPE)
CODE 0218-B610

DATA OUTPUT

computer software (included):
connect to software via USB cable to collect, display and stored data



tripod (included)

K-type thermocouple
(included)

- Unit: °C/°F
- MAX/MIN/AVG/DIF mode
- Trigger lock continuous measurement function
- Adjustable emissivity: 0.10~1.00
- 100 data storage
- High and low alarm
- Automatic data hold
- Low battery display
- Automatic power off
- Computer software is included

SPECIFICATION

Infrared system	temperature range	-50°C~1850°C/-58°F~3362°F
	temperature accuracy	±(2%·|t|+3.0°C) (at-50°C~20°C); ±(1%·t+1.0°C) (at 20°C~500°C); ±1.5% (at 500°C~1000°C); ±2.0% (at 1000°C~1850°C)
	temperature resolution	0.1°C/°F (<1000°C/°F), 1°C/°F (≥1000°C/°F)
	distance to spot size (D:S)	50:1
	emissivity	0.10~1.00 (adjustable)
	repeatability	±1.5°C (at -50°C~20°C), ±0.5% or ±0.5°C (at 20°C~1850°C)
	response time	150ms
	spectral response	8μm~14μm
	positioning laser	dual-spot, class 2 laser product, output<1mW, wavelength 630nm~670nm
K-Type thermocouple system (electrical signal)	temperature range	-50°C~1370°C/-58°F~2498°F
	temperature accuracy	±(1.5%·|t|+3°C) (at -50°C~1000°C) ±(1.5%·t+2°C) (at 1000°C~1370°C)
	temperature resolution	0.1°C/°F (<1000°C/°F), 1°C/°F (≥1000°C/°F)
	repeatability	±1.5%
Power supply		1×9V battery
Operation environment		temperature: 0°C~50°C humidity: 10%RH~90%RH (non-condensing)
Storage environment		temperature: -10°C~60°C humidity: <80%RH (non-condensing)
Dimension		204×155×52mm
Net weight		315g

STANDARD DELIVERY

Main unit	1 pc
9V battery	1 pc
USB cable	1 pc
K-type thermocouple	1 pc
Tripod	1 pc

SPECIFICATION OF K-TYPE THERMOCOUPLE

Temperature range	-40°C~250°C
Temperature accuracy	±2.5°C
Length	1m

INFRARED AND PENETRATION THERMOMETER
CODE 0321-IT42

IP65 WATERPROOF

VIDEO

- Can measure the surface and inside temperature of objects
- Low battery display
- Display backlight
- High and low alarm
- Automatic data hold (infrared system)
- Automatic power off (infrared system)
- Unit: °C/°F

SPECIFICATION

Infrared system	temperature range	-15°C~280°C/5°F~536°F
	temperature resolution	0.1°C/0.1°F
	temperature accuracy	±3.0°C (at -15°C~20°C), other range ±(1%+1.0)°C
		±5.4°F (at 5°F~68°F), other range ±(1%+1.8)°F
	distance to spot size (D:S)	4:1
	emissivity	0.95 (fixed)
	spectral response	8~14μm
Penetration system	temperature range	-40°C~200°C/-40°F~392°F
	temperature resolution	0.1°C/0.1°F
	temperature accuracy	±2.0°C (at -40°C~0°C), other range ±(1%+1.0)°C
		±3.6°F (at -40°F~32°F), other range ±(1%+1.8)°F
Repeatability		<1.0°C
Measurement response time		<500ms
Power supply		2×1.5V AAA batteries
Dimension		140×39×24mm
Net weight		140g

STANDARD DELIVERY

Main unit	1 pc
Battery (AAA)	2 pcs

DIGITAL THERMOMETER
CODE 0340-DT53

IP65 WATERPROOF

- Unit: °C/°F
- MAX/MIN mode
- Display backlight
- Data hold function
- Automatic power off

SPECIFICATION

Temperature range	-50°C~250°C
Temperature accuracy	±1.0°C (at -50°C~-30.1°C), ±0.5°C (at -30°C~99.9°C), ±1% (at 100°C~250°C)
Temperature resolution	0.1°C
Sampling rate	0.5 sec/time
Display	LCD display with backlight
Housing material	ABS
Operation temperature	-20°C~+50°C
Storage temperature	-20°C~+50°C
Power supply	1×3V CR2032 battery
Dimension (L×W×H)	235×37×17mm
Net weight	45g

STANDARD DELIVERY

Main unit	1 pc
Battery (CR2032)	1 pc

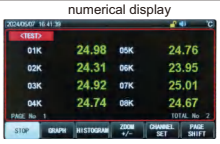
MULTI-CHANNEL TEMPERATURE LOGGERS

DATA OUTPUT

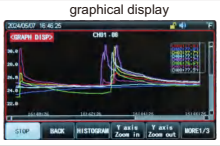
VIDEO

- Suitable for home appliances, motors, electric heating appliances, thermostats, transformers, ovens, thermal protectors, power supplies, lighting, electric power, LED and other industries
- Unit: °C/°F/K
- Channels are compatible with thermocouple types K/N/E/J/T/R/S/B
- 4.3 inch true color LCD
- Direct numerical value reading, histogram and graphical display mode
- Upper and lower limit overrun alarm
- Independent correction per channel
- Automatic detection of open-circuit thermocouple
- Standard U disk interface, support real-time data storage
- Computer software is included

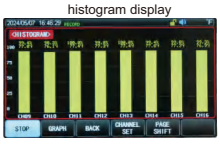
numerical display



graphical display



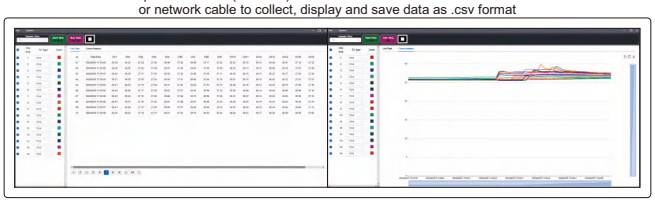
histogram display



0350-MC16

K-type thermocouples (included)

computer software (included): connect to PC software via RS232 cable or network cable to collect, display and save data as .csv format



SPECIFICATION

Code		0350-MC08	0350-MC16	0350-MC32	0350-MC48
Channel number		8	16	32	48
Net weight		3.5kg	3.6kg	3.7kg	3.8kg
Thermocouple type		K/J/T/E/N/S/R/B			
Temperature range (electrical signal)	type K	-100°C~1350°C			
	type J	-100°C~1200°C			
	type T	-150°C~400°C			
	type E	-100°C~850°C			
	type N	-100°C~1300°C			
	type S	0°C~1750°C			
	type R	0°C~1750°C			
	type B	600°C~1800°C			
Temperature accuracy (electrical signal)*	type K	±1.2°C (at -100°C~0°C); ±0.8°C (at 0°C~1350°C)			
	type J	±1.0°C (at -100°C~0°C); ±0.7°C (at 0°C~1200°C)			
	type T	±1.0°C (at -150°C~0°C); ±0.8°C (at 0°C~400°C)			
	type E	±0.9°C (at -100°C~0°C); ±0.7°C (at 0°C~850°C)			
	type N	±1.5°C (at -100°C~0°C); ±0.9°C (at 0°C~1300°C)			
	type S	±4.5°C (at 0°C~100°C); ±3.0°C (at 100°C~300°C); ±2.2°C (at 300°C~1750°C)			
	type R	±4.5°C (at 0°C~100°C); ±3.0°C (at 100°C~300°C); ±2.2°C (at 300°C~1750°C)			
	type B	±5.5°C (at 600°C~800°C); ±3.8°C (at 800°C~1000°C); ±2.5°C (at 1000°C~1800°C)			
Temperature resolution		0.01°C			
Test speed		fast: 500ms, slow: 1s			
Cold junction		accuracy: 0.5°C			
Interface		communication interface: RS232C/LAN			
		storage interface: USB (only U disk)			
Remote control		baud rate supports up to 115200bps, compatiable with SCPI protocol and ASCII transmission			
Power supply		AC: 100V~240V, 50/60Hz AC/DC adapter: 24V/1A (**optional**)			
Operation environment		temperature: 10°C~40°C humidity: 10%RH~90%RH (non-condensing)			
Storage environment		temperature: 0°C~50°C humidity: 10%RH~90%RH (non-condensing)			
Dimension		370×260×100mm			

* Accuracy is specified for main unit in the ambient temperature between 15ºC and 35ºC, the above specification does not include thermocouple probe error

STANDARD DELIVERY

Main unit	1 pc
K-type thermocouple (0350-K01)**	8/16/32/48 pcs
RS232 cable	1 pc
Network cable	1 pc
Software	1 pc

**Number of thermocouples corresponding to the number of channels

SPECIFICATION OF K-TYPE THERMOCOUPLE***

Code	Range	Accuracy	Length
0350-K01	-20°C~200°C	±1.5°C	2m

***Other models, temperature range and length of thermocouples can be customized

OPTIONAL ACCESSORY

AC/DC adapter	0350-ADAPTER

THERMOCOUPLE THERMOMETER (FOUR CHANNELS)
CODE 0323-CT47

VIDEO

DATA OUTPUT

BUILT-IN BLUETOOTH

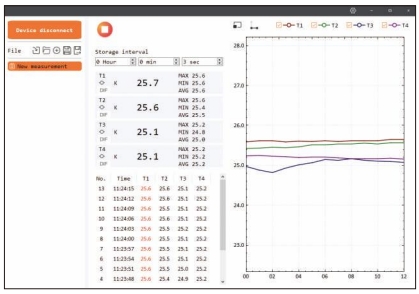
- Unit: °C/°F/K
- Channels are compatible with 7 types of thermocouples K, J, T, E, R, S and N
- MAX/MIN/AVG/DIF mode
- 72000 data storage
- Offset value compensation
- Data hold function
- Display backlight
- Over range indicator
- Battery level display
- Automatic power off
- Built-in Bluetooth, mobile APP is included
- Computer software is included

SPECIFICATION

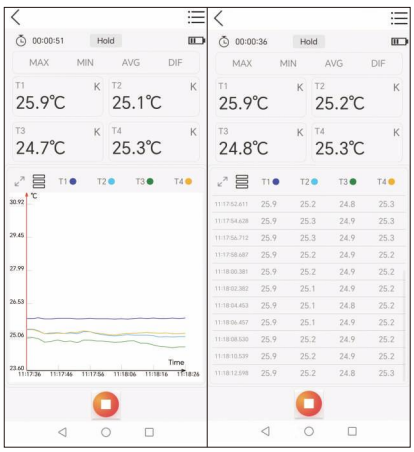
Thermocouple type	J/K/T/E/R/S/N
Temperature range (electrical signal)	K: -200°C~1372°C
	J: -200°C~1200°C
	T: -200°C~400°C
	E: -150°C~1000°C
	R: 300°C~1767°C
	S: 300°C~1767°C
	N: -200°C~1300°C
Temperature accuracy * (electrical signal)	±(0.2%·|t|+0.6°C) (at -10°C~1767°C); ±(0.4%·|t|+1.2°C) (at -200°C~-10°C)
Temperature resolution	0.1°C (<1000°C); 1°C (≥1000°C)
Repeatability	±(0.1%·|t|+0.3°C)
Response time	500ms
Logging interval	1s~24h (adjustable)
Memory capacity	72000
Data transmission	TYPE-C USB, Bluetooth
Power frequency anti-interference	50/60Hz
Input protection	60Vmax
Drop proof	1m
Power supply	3×AAA alkaline batteries, working time>30h; TYPE-C USB (only be connected to a PC power)
Operation environment	temperature: -10°C~50°C
	humidity: <90%RH (non-condensing)
Storage environment	temperature: -20°C~60°C
	humidity: <90%RH (non-condensing)
Dimension	180×63×38mm
Net weight	250g (including batteries)

*Accuracy is specified for ambient temperature between 18ºC and 28ºC, the above specification does not include thermocouple probe error

computer software (included): connect to PC software via USB cable to collect, display and stored data



mobile APP (included): connect to mobile APP via Bluetooth to collect, display and stored data, and can export the data stored on the device



STANDARD DELIVERY

Main unit	1 pc
Battery (AAA)	3 pcs
USB cable	1 pc
K-type thermocouple (0323-K01)	4 pcs

OPTIONAL ACCESSORY

Tripod	0701-TR175

SPECIFICATION OF K-TYPE THERMOCOUPLE **

Code	Range	Accuracy	Length
0323-K01	-30°C~260°C	±2.5%	900mm

**Other models, temperature range and length of thermocouples can be customized

THERMOCOUPLE THERMOMETER (STANDARD TYPE)
CODE 0326-CT31

IP52 WATERPROOF

VIDEO

- Unit: °C/°F
- Support thermocouple type K/J/T
- MAX/MIN/AVG mode
- Temperature upper and lower limit alarm function
- Graphical display
- Multi-point calibration function
- Display backlight
- Data hold function
- Battery level display
- Automatic power off

0326-CT31

SPECIFICATION

Channel number		1
Net weight		233g
Thermocouple type		K/J/T
Temperature range	type K	-200°C~1370°C
	type J	-200°C~1200°C
	type T	-200°C~400°C
Temperature accuracy*		±(0.3%·|t|+0.40)°C
Temperature resolution		0.01°C
Sampling rate		2 times/sec
Display		dot matrix LCD display with backlight
Operation temperature		-10°C~+50°C (non-condensing)
Storage temperature		-20°C~+60°C (without battery)
Power supply		3×AAA alkaline batteries
Dimension		174×73×40mm

*Temperature accuracy does not include thermocouple error

STANDARD DELIVERY

Main unit	1 pc
Battery (AAA)	3 pcs
K-type thermocouple (0326-K01)**	1/2 pcs

**Number of thermocouples is corresponding to the number of channels

SPECIFICATION OF K-TYPE THERMOCOUPLE***

Code	Range	Accuracy	Length
0326-K01	-40°C~300°C	±1.5°C	1.5m

***Other types, temperature range and length of thermocouples can be customized

THERMOCOUPLE THERMOMETER (RECORD TYPE)
CODE 0327-DL31

IP52 WATERPROOF

DATA OUTPUT

VIDEO

- Unit: °C/°F
- Support thermocouple type K/J/T
- MAX/MIN/AVG mode
- 20000 data storage
- Graphical display
- Display backlight
- Multi-point calibration function
- Temperature upper and lower limit alarm function
- Data hold function
- Battery level display
- Automatic power off
- Computer software is included

0327-DL31

computer software (included): connect to PC software via USB cable to collect, display and store data, and can be saved as TXT/CSV/XLS/PDF formats

SPECIFICATION

Channel number		1
Net weight		233g
Thermocouple type		K/J/T
Temperature range	type K	-200°C~1370°C
	type J	-200°C~1200°C
	type T	-200°C~400°C
Temperature accuracy*		±(0.3%·|t|+0.40)°C
Temperature resolution		0.01°C
Sampling rate		2 times/sec
Logging interval		1s~86399s (adjustable)
Memory capacity		20000
Data transmission		Micro USB
Display		dot matrix LCD display with backlight
Operation temperature		-10°C~+50°C (non-condensing)
Storage temperature		-20°C~+60°C (without battery)
Power supply		3×AAA alkaline batteries
Dimension		174×73×40mm

*Temperature accuracy does not include thermocouple error

STANDARD DELIVERY

Main unit	1 pc
Battery (AAA)	3 pcs
USB cable	1 pc
K-type thermocouple (0326-K01)**	1/2 pcs

**Number of thermocouples is corresponding to the number of channels

SPECIFICATION OF K-TYPE THERMOCOUPLE***

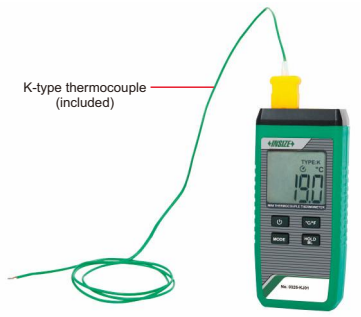
Code	Range	Accuracy	Length
0326-K01	-40°C~300°C	±1.5°C	1.5m

***Other types, temperature range and length of thermocouples can be customized

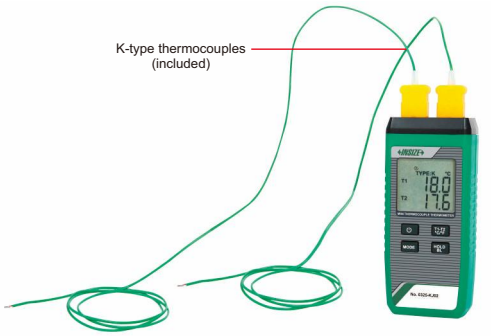
MINI THERMOCOUPLE THERMOMETERS (ECONOMIC TYPE)

VIDEO

- Unit: °C/°F
- MAX/MIN/AVG mode
- Display backlight
- Data hold function
- Low battery display
- Automatic power off



0325-KJ01



0325-KJ02

SPECIFICATION

Code		0325-KJ01	0325-KJ02
Channel number		1	2
Net weight		113g	116g
Thermocouple type		K/J	
Temperature range	type K	-50°C~1300°C	
	type J	-50°C~1200°C	
Temperature accuracy*		±1.8°C (at -50°C~0°C); ±(0.5%+1°C) (at 0°C~1000°C); ±(0.8%+1°C) (at 1000°C~1300°C)	
Temperature resolution		0.1°C (<1000°C); 1°C (≥1000°C)	
Operation environment		temperature: 0°C~40°C	
		humidity: ≤80%RH	
Power		3×AAA alkaline batteries	
Dimension		120×55×30mm	

*Temperature accuracy does not include thermocouple error

SPECIFICATION OF K-TYPE THERMOCOUPLE**

Code	Range	Accuracy	Length
0325-K01	-40°C~260°C	±2.0°C	900mm

** Other types, temperature range and length of thermocouples can be customized

STANDARD DELIVERY

Main unit	1 pc
Battery (AAA)	3 pcs
K-type thermocouple (0325-K01)***	1/2 pcs

*** Number of thermocouples is corresponding to the number of channels

K-TYPE THERMOCOUPLE THERMOMETER (ECONOMIC TYPE) CODE 0320-K230

- Contact K-type thermocouple
- Unit: °C/°F
- Data hold function
- Low battery display
- Display backlight

SPECIFICATION

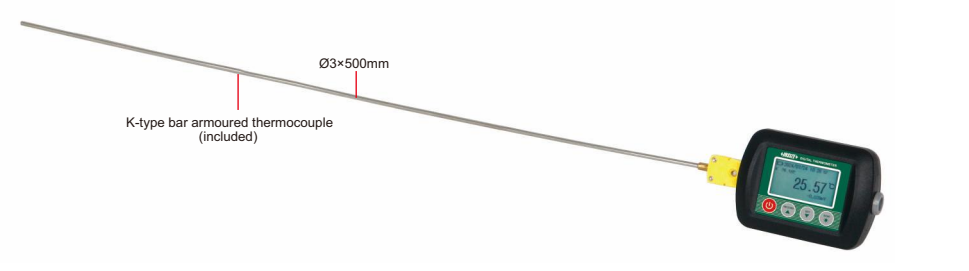
Temperature range	-50°C~200°C/-58°F~392°F
Temperature accuracy	±2.0°C/±3.6°F
Temperature resolution	0.1°C (at -50°C~199.9°C), 1°C (at -50°C~200°C)
	0.1°F (at -58°F~199.9°F), 1°F (at -58°F~392°F)
Sampling rate	2.5 times/sec
Power supply	3×3V CR2450 batteries (for 300 hours working)
Operation voltage	6.8V~10V
Dimension	149×76×34mm
Net weight	220g

STANDARD DELIVERY

Main unit	1 pc
Thermocouple (K-type)	1 pc
CR2450 battery	3 pcs

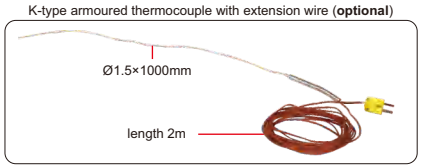
DIGITAL THERMOMETER (HIGH TEMPERATURE TYPE)
CODE 0324-DT11

VIDEO

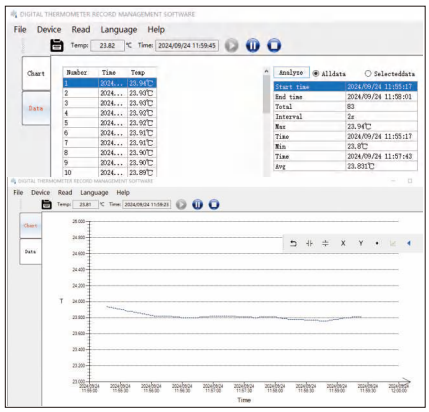


- Can measure the temperature of liquid, steam and gas
- Real time/MAX/MIN/AVG temperature display
- Built-in gravity sensor, automatic horizontal or vertical screen display
- Display backlight
- Automatic power off
- Software is included: on-line monitoring, data storage

K-type armoured thermocouple with extension wire (**optional**)



computer software (included): connect to PC software via data cable to collect, display and stored data



SPECIFICATION OF MAIN UNIT

Thermocouple type	K/E/N/T/S
Temperature range	K: -200°C~1372°C
	E: -200°C~1000°C
	N: -200°C~1300°C
	T: -200°C~400°C
	S: -50°C~1768°C
Temperature accuracy*	K: ±0.8°C (at -200°C~0°C); ±0.6°C (at 0°C~1372°C)
	E: ±0.7°C (at -200°C~0°C); ±0.5°C (at 0°C~1000°C)
	N: ±0.8°C (at -200°C~0°C); ±0.6°C (at 0°C~1300°C)
	T: ±0.8°C (at -200°C~0°C); ±0.6°C (at 0°C~400°C)
	S: ±1.5°C (at -50°C~0°C); ±1.2°C (at 0°C~1768°C)
Temperature resolution	0.1°C/0.01°C (adjustable)
Annual stability	±8μV
Memory capacity	100,000
Logging interval	2s~99s
Power supply	rechargeable lithium battery, working time≥40h
Operation environment	temperature: -10°C~50°C
	humidity: 0%RH~95%RH (non-condensing)
Dimension	60×63×83mm
Net weight	88g

*Accuracy is specified for ambient temperature between 18ºC and 28ºC, the above specification includes the error of the cold junction compensation and does not include the error of thermocouple sensor

SPECIFICATION OF SENSOR**

Code	Product	Range***	Accuracy	Dimension	Extension cord
0324-KB1	K-type bar armoured thermocouple	-40°C~1100°C	class 1: ±1.5°C or ±0.4%·t	Ø3×500mm	/
0324-KE2	K-type armoured thermocouple with extension wire	-40°C~1100°C	class 1: ±1.5°C or ±0.4%·t	Ø1.5×1000mm	2m

**Other models, temperature ranges and dimensions of thermocouples can be customized
***Sensors are consumables and are recommended to be used within 1000°C, beyond that the service life will be reduced

STANDARD DELIVERY

Main unit	1 pc
K-type bar armoured thermocouple (0324-KB1)	1 pc
Software	1 pc
Power adapter	1 pc

OPTIONAL ACCESSORY

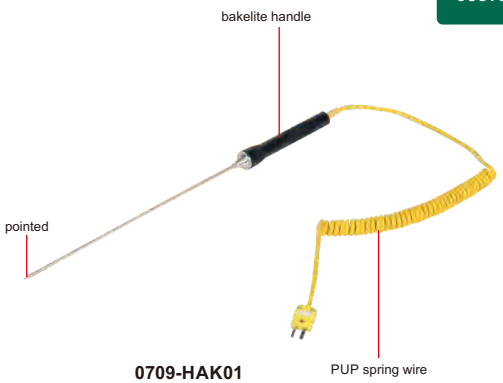
K-type armoured thermocouple with extension wire	**0324-KE2**

K-TYPE HANDHELD ARMORED THERMOCOUPLE

CUSTOMIZABLE

VIDEO

- Temperature sensor is made of 316L stainless steel, resistant to high temperature and corrosion
- Bakelite handle has good insulation, high mechanical strength and is not easy to deform
- Integrated plastic plug, insulated, flame-retardant, corrosion-resistant
- PUP spring wire has good elasticity and can be stretched
- Sensor length, diameter, temperature range can be customized



0709-HAK01

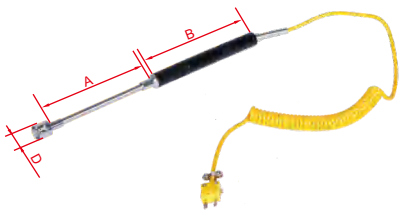
SPECIFICATION

Code	Lead material	Sensor	Thermocouple wire material	Range	Accuracy	Lead length
0709-HAK01	PUP spring wire	316L stainless steel pointed, Ø3×250mm	Ni-Cr vs Ni-Al	-40°C~600°C	±1.5°C or 0.004·|t| (at -20°C~600°C), other range ±2.5°C	tension up to 1.2m

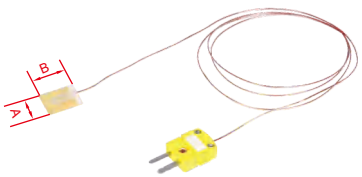
SURFACE THERMOCOUPLES

VIDEO

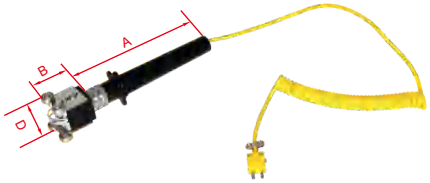
- Suitable for testing the temperature on surfaces



0760-SK03



0760-SK04



0760-SK06

SPECIFICATION

Code	Thermocouple	Range	Accuracy	Lead	Sensor	A (mm)	B (mm)	D (mm)
0760-SK03	type: K material: Ni-Cr vs Ni-Al	-40°C~400°C	±2.5°C (-40°C~150°C), ±2% (150°C~400°C)	PUP spring wire, tension up to 1.2m	reticulate	120	128	15

SPECIFICATION*

Code	Thermocouple	AWG	Thermocouple	Range	Accuracy	Sensor	A (mm)	B (mm)
0760-SK04	material: teflon length: 1m	30 (diameter: 0.255mm)	type: K material: Ni-Cr vs Ni-Al	-40°C~200°C	±1.5°C (-40°C~100°C), ±2% (100°C~200°C)	self-adhesive	12	20

*Other AWG, types and length of thermocouples can be customized

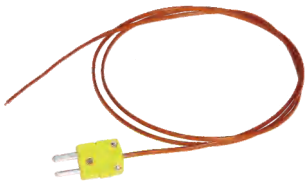
SPECIFICATION

Code	Thermocouple	Range	Accuracy	Lead	Sensor	A (mm)	B (mm)	D (mm)
0760-SK06	type: K material: Ni-Cr vs Ni-Al	-40°C~400°C	±2.5°C (-40°C~150°C), ±2% (150°C~400°C)	PUP spring wire, tension up to 1.2m	four-wheeled reticulate	135	40	40

TEFLON THERMOCOUPLES
CODE 0702-□□□

VIDEO

- Waterproof and oil-proof, corrosion-resistant and wear-resistant
- Small-diameter exposed solder joints, suitable for installation in narrow spaces and enabling rapid temperature response



0702-A1W1L2

0702-A7W1L2

Code explanation:

0702-A□W□L□

- L□ — lead length
- W□ — wiring method
- A□ — thermocouple type and american wire gauge (AWG)

Code example:

0702-A1W1L2	**A1**-thermocouple type: K, AWG: 24
	W1-wiring method: plug
	L2-lead length: 1m

SPECIFICATION

Insulating layer material	teflon			
Thermocouple type	K	J	T	E
Thermocouple wire material	Ni-Cr vs Ni-Al	Fe vs Cu-Ni	Cu vs Cu-Ni	Ni-Cr vs Cu-Ni
Measuring range	-40°C~260°C	-40°C~260°C	-200°C~260°C	-40°C~260°C
Accuracy	±1.5°C	±1.5°C	±0.5°C or 0.004·|t|	±1.5°C

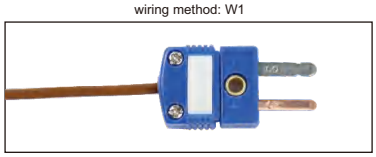
THERMOCOUPLE TYPE AND AMERICAN WIRE GAUGE (AWG)

A1	thermocouple type: K; AWG: 24 (diameter: 0.5mm; outer diameter dimension: 1.4×2.4mm)
A2	thermocouple type: K; AWG: 30 (diameter: 0.255mm; outer diameter dimension: 0.6×1.0mm)
A3	thermocouple type: K; AWG: 36 (diameter: 0.127mm; outer diameter dimension: 0.5×0.8mm)
A4	thermocouple type: K; AWG: 40 (diameter: 0.08mm; outer diameter dimension: 0.4×0.7mm)
A5	thermocouple type: K; AWG: 44 (diameter: 0.05mm; outer diameter dimension: 0.2×0.35mm)
A6	thermocouple type: T; AWG: 24 (diameter: 0.5mm; outer diameter dimension: 1.4×2.4mm)
A7	thermocouple type: T; AWG: 30 (diameter: 0.255mm; outer diameter dimension: 0.6×1.0mm)
A8	thermocouple type: T; AWG: 36 (diameter: 0.127mm; outer diameter dimension: 0.5×0.8mm)
A9	thermocouple type: T; AWG: 40 (diameter: 0.08mm; outer diameter dimension: 0.4×0.7mm)
A10	thermocouple type: J; AWG: 24 (diameter: 0.5mm; outer diameter dimension: 1.4×2.4mm)
A11	thermocouple type: J; AWG: 30 (diameter: 0.255mm; outer diameter dimension: 0.6×1.0mm)
A12	thermocouple type: J; AWG: 36 (diameter: 0.127mm; outer diameter dimension: 0.5×0.8mm)
A13	thermocouple type: E; AWG: 24 (diameter: 0.5mm; outer diameter dimension: 1.4×2.4mm)
A14	thermocouple type: E; AWG: 30 (diameter: 0.255mm; outer diameter dimension: 0.6×1.0mm)
A15	thermocouple type: E; AWG: 36 (diameter: 0.127mm; outer diameter dimension: 0.5×0.8mm)

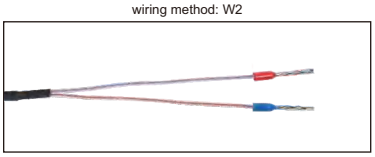
WIRING METHOD

W1	plug
W2	pin
W3	terminal
W4	bare wire

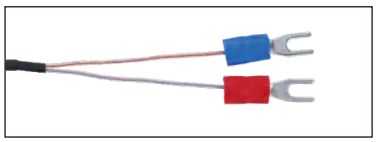
wiring method: W1



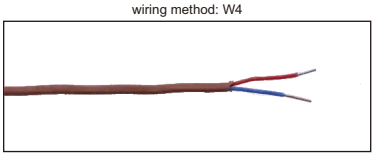
wiring method: W2



wiring method: W3



wiring method: W4



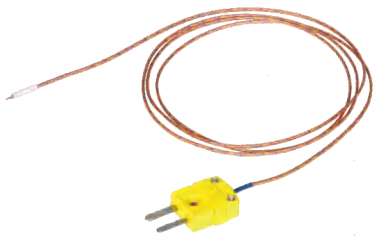
LEAD LENGTH

L1	0.5m
L2	1m
L3	2m
L4	3m
L5	5m

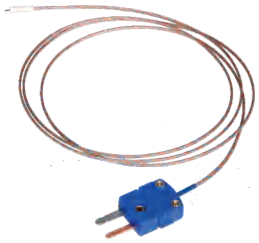
GLASS FIBER THERMOCOUPLES
CODE 0703-□□□□

VIDEO

- Resistant to high temperature, acid and alkali
- Small-diameter exposed solder joints, suitable for installation in narrow spaces and enabling rapid temperature response



0703-GKA24W1L2



0703-GTA24W1L2

Code explanation:

0703-G□A□W□L□

- thermocouple type
- american wire gauge (AWG)
- wiring method
- lead length

Code example:

0703-GKA24W1L2	**GK**-thermocouple type: K
	A24-AWG: 24
	W1-wiring method: plug
	L2-lead length: 1m

SPECIFICATION

Insulating layer material	glass fiber			
Thermocouple type	K	J	T	E
Thermocouple wire material	Ni-Cr vs Ni-Al	Fe vs Cu-Ni	Cu vs Cu-Ni	Ni-Cr vs Cu-Ni
Measuring range	-40°C~480°C	-40°C~480°C	-200°C~300°C	-40°C~480°C
Accuracy	±1.5°C or 0.004·|t|	±1.5°C or 0.004·|t|	±0.5°C or 0.004·|t|	±1.5°C or 0.004·|t|

THERMOCOUPLE TYPE

GK	K
GT	T
GE	E
GJ	J

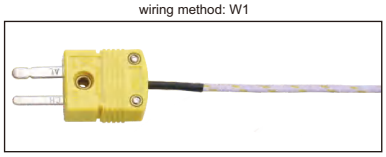
AMERICAN WIRE GAUGE (AWG)

A24	AWG: 24 (diameter: 0.5mm; outer diameter dimension: 1.3×2.1mm)
A30	AWG: 30 (diameter: 0.255mm; outer diameter dimension: 0.9×1.3mm)
A36	AWG: 36 (diameter: 0.127mm; outer diameter dimension: 0.8×1.1mm)

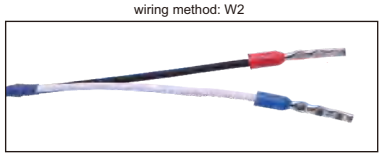
WIRING METHOD

W1	plug
W2	pin
W3	terminal
W4	bare wire

wiring method: W1



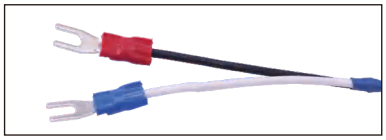
wiring method: W2



LEAD LENGTH

L1	0.5m
L2	1m
L3	2m
L4	3m
L5	5m

wiring method: W3

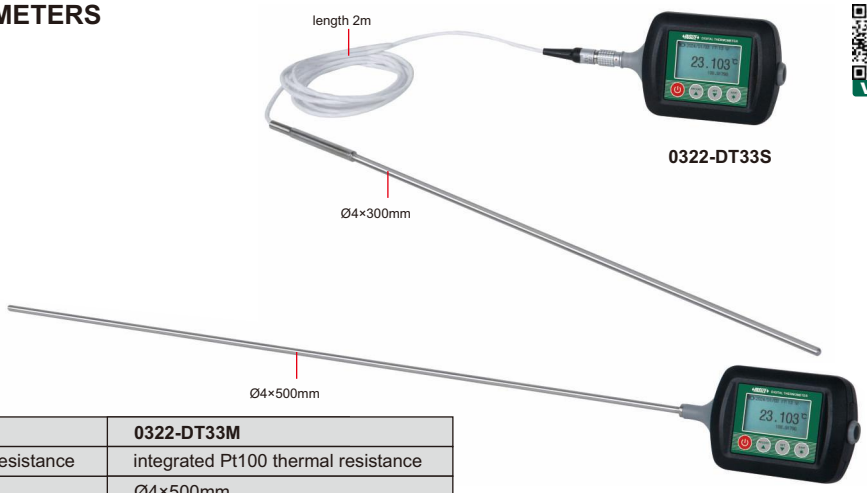


wiring method: W4

HIGH PRECISION DIGITAL THERMOMETERS

- Can measure the temperature of liquid, steam and gas
- Real time/MAX/MIN/AVG temperature display, real time resistance display
- Built-in gravity sensor, automatic horizontal or vertical screen display
- Display backlight
- Automatic power off
- Software is included: on-line monitoring, data storage

VIDEO



0322-DT33S

0322-DT33M

SPECIFICATION

Code	0322-DT33S	0322-DT33M
Sensor type	separated Pt100 thermal resistance	integrated Pt100 thermal resistance
Sensor dimension	Ø4×300mm	Ø4×500mm
Net weight	147g	115g
Measuring range	-30°C~300°C/-22°F~572°F	
Resolution	0.1°C/0.01°C/0.001°C (adjustable) 0.1°F/0.01°F/0.001°F (adjustable)	
Accuracy	±0.5°C/±0.9°F	
Annual stability	±0.2°C/±0.36°F	
Response time	<60s	
Memory capacity	100,000	
Logging interval	1s~99s	
Power supply	rechargeable lithium battery, working time≥40h	
Operation environment	temperature: -10°C~50°C/14°F~122°F humidity: 0%RH~95%RH (non-condensing)	

STANDARD DELIVERY

Main unit	1 pc
Software	1 pc
Power adapter	1 pc

HIGH PRECISION PLATINUM RESISTANCE THERMOMETER (RECORD TYPE) CODE 0329-DL41

IP52 WATERPROOF

DATA OUTPUT

- Unit: °C/°F
- MAX/MIN/AVG mode
- Temperature upper and lower limit alarm function
- 20000 data storage
- Graphical display
- Display backlight
- Multi-point calibration function
- Data hold function
- Battery level display
- Automatic power off
- Computer software is included

VIDEO

0329-DL41

SPECIFICATION

Channel number		1
Net weight		283g
Platinum resistance sensor *	type	PT1000
	range	-40°C~200°C
Temperature accuracy		±0.5°C
Temperature resolution		0.001°C
Sampling rate		1 time/sec
Logging interval		1s~86399s (adjustable)
Memory capacity		20000
Data transmission		Micro USB
Display		dot matrix LCD display with backlight
Operation temperature		-10°C~+50°C (non-condensing)
Storage temperature		-20°C~+60°C (without battery)
Power supply		3×AAA alkaline batteries
Dimension		174×73×40mm

*Other types, specifications, and temperature ranges can be customized

STANDARD DELIVERY

Main unit	1 pc
Battery (AAA)	3 pcs
USB cable	1 pc
PT1000 platinum resistance sensor (0328-PT1000)**	1/2 pcs

**Number of PT1000 platinum resistance sensor is corresponding to the number of channels

computer software (included): connect to PC software via USB cable to collect, display and store data, and can be saved as TXT/CSV/XLSX/PDF formats

HIGH PRECISION PLATINUM RESISTANCE THERMOMETER
CODE 0328-PT41

VIDEO

IP52 WATERPROOF

SPECIFICATION

Channel number		1
Net weight		283g
Platinum resistance sensor *	type	PT1000
	range	-40°C~200°C
Temperature accuracy		±0.5°C
Temperature resolution		0.001°C
Sampling rate		1 time/sec
Display		dot matrix LCD display with backlight
Operation temperature		-10°C~+50°C (non-condensing)
Storage temperature		-20°C~+60°C (without battery)
Power supply		3×AAA alkaline batteries
Dimension		174×73×40mm

*Other types, specifications, and temperature ranges can be customized

0328-PT41

- Unit: °C/°F
- MAX/MIN/AVG mode
- Temperature upper and lower limit alarm function
- Graphical display
- Multi-point calibration function
- Display backlight
- Data hold function
- Battery level display
- Automatic power off

STANDARD DELIVERY

Main unit	1 pc
Battery (AAA)	3 pcs
PT1000 platinum resistance sensor (0328-PT1000)*	1/2 pcs

*Number of PT1000 platinum resistance sensor is corresponding to the number of channels

DATA LOGGER FOR TEMPERATURE AND HUMIDITY (BASIC TYPE)
CODE 0318-TH26A

DATA OUTPUT

VIDEO

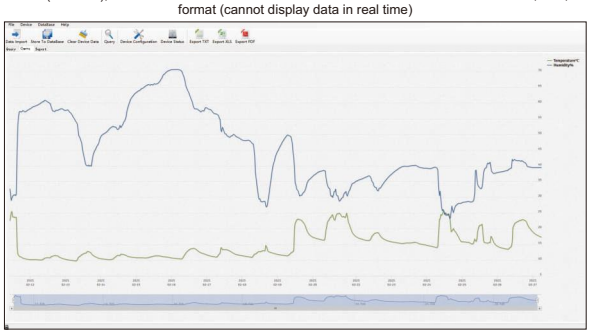
- Built-in high-precision sensor
- 260,000 memory for long-term logging
- Unit: °C/°F
- Temperature and humidity upper and lower limit alarm
- Temperature and humidity linear correction function
- Battery level display
- Computer software is included

0318-TH26A

SPECIFICATION

Temperature range	-20°C~60°C/-4°F~140°F
Temperature accuracy	±0.5°C (at 0°C~60°C), other range ±0.8°C ±0.9°F (at 32°F~140°F), other range ±1.4°F
Temperature resolution	0.1°C/0.1°F
Humidity range	0%RH~100%RH
Humidity accuracy	±5%RH (at 10%RH~90%RH), other range ±7%RH
Humidity resolution	0.1%RH
Memory size	260,000
Sampling interval	2s~255s (adjustable)
Logging interval	5s~18h (adjustable)
Logging start mode	key operation/time-lapse start/timing start
Logging end mode	key operation/Full/timing end
Interface	Micro USB
Power supply	3.7V rechargeable lithium battery, working time: 1 year (with logging interval of 10min) 5V DC
Dimension (L×W×H)	120×33×113mm
Net weight	209g

software (included), download data to PC software via USB cable and save the data as XLS, TXT, PDF format (cannot display data in real time)



STANDARD DELIVERY

Main unit	1 pc
Software and USB cable	1 pc
4G USB flash disk	1 pc

MINI DATA LOGGER FOR TEMPERATURE AND HUMIDITY (STANDARD TYPE)
CODE 0317-TH37

VIDEO

DATA OUTPUT

IP64 WATERPROOF

- Built-in high-precision sensor
- 15000 memory for long-term logging
- Unit: °C/°F
- Display backlight
- Over range indicator
- Battery level display
- Computer software is included

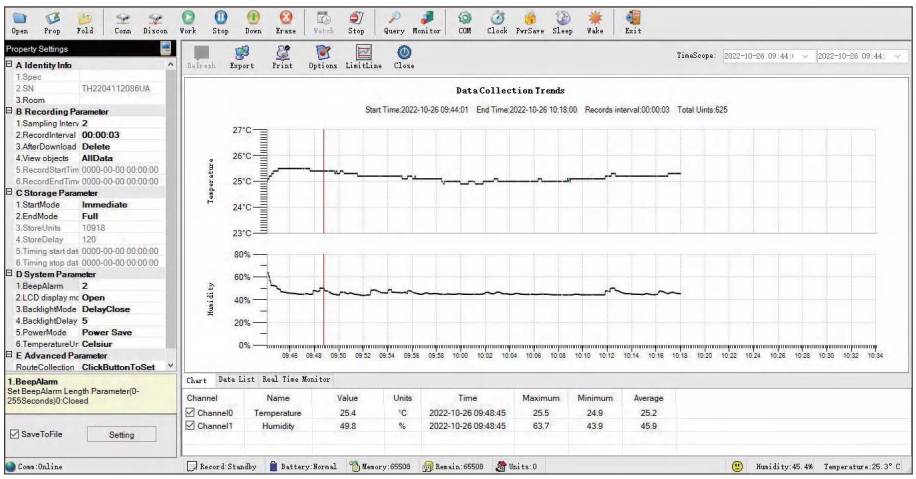
STANDARD DELIVERY

Main unit	1 pc
USB cable	1 pc
Software	1 pc
4G USB flash disk	1 pc

SPECIFICATION

Temperature range	-30°C~70°C/-22°F~158°F
Temperature accuracy	±0.5°C/±0.9°F
Temperature resolution	0.1°C/0.2°F
Humidity range	0%RH~100%RH
Humidity accuracy	±3%RH (at 10%RH~85%RH, testing temperature: 23°C±2°C); ±5%RH (at 0%RH~10%RH and 85%RH~100%RH, testing temperature: 23°C±2°C)
Humidity resolution	0.1%RH
Memory size	15,000
Alarm	function: alarm when over high or low limit method: display+backlight
Sampling interval	2s, 5s, 10s, 30s, 60s, 255s
Logging interval	2s~24h (adjustable)
Start with delay time	1s~120s (adjustable)
Logging start mode	key operation/start immediately/time-lapse start/timing start
Logging end mode	key operation/Full/FIFO/presetting units/timing end
Interface	Mini USB
Power supply	3.6V rechargeable lithium battery, working time: 1 year (with sample rate of 60s)
Storage temperature	-50°C~90°C
Dimension (L×W×H)	86.2×64.2×25.4mm
Net weight	81g

software (included), connect to PC via USB cable, download and display in real time, collect, store and analyze data



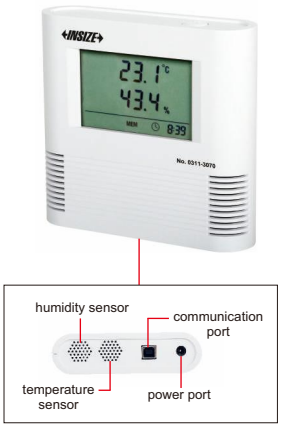
DATA LOGGER FOR TEMPERATURE AND HUMIDITY (ADVANCED TYPE)
CODE 0311-3070

DATA OUTPUT

IP54 WATERPROOF

VIDEO

- Signal acquisition, display, storage, analysis function
- Low power consumption
- Built-in high-precision temperature and humidity sensor
- Software is included



stand (included)

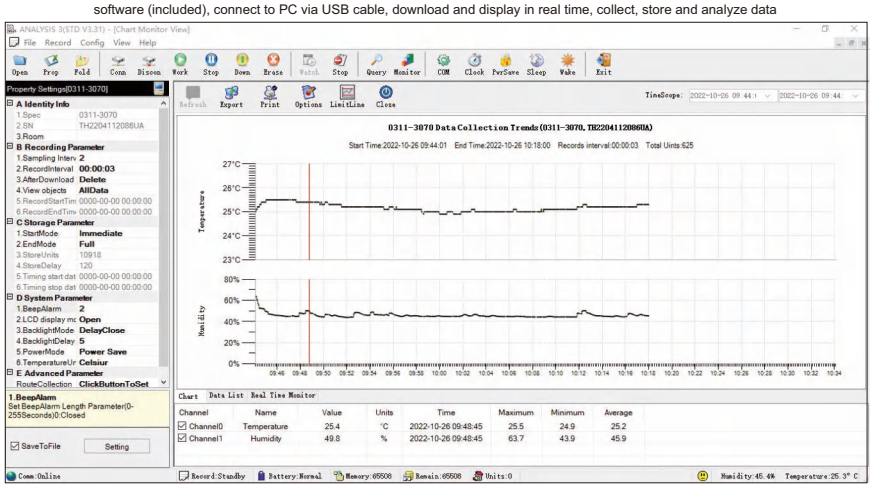
SPECIFICATION

Temperature range	-30°C~70°C/-22°F~158°F
Temperature accuracy	±0.3°C (at 23°C±2°C), other range ±0.5°C
	±0.6°F (at 73.4°F±3.6°F), other range ±0.9°F
Temperature resolution	0.1°C/0.2°F
Humidity range	0%RH~100%RH
Humidity accuracy	±3%RH (at 10%RH~85%RH), other range ±5%RH
Humidity resolution	0.1%RH
Memory capacity	10918
Alarm	function: alarm when over high or low limit method: display+buzz+backlight
Sampling interval	2s, 5s, 10s, 30s, 60s, 255s (adjustable)
Logging interval	2 seconds~24 hours (adjustable)
Start with delay	1~120 seconds (adjustable)
Logging start mode	start immediately/delay start/timing start
Logging end mode	Full/FIFO/preset/timing end
Timing start/end	random start/end with format YYMMDD HHMMSS
Interface	USB
Time battery	CR2032
Power supply	3.6V lithium battery (ER14505) or 5~24V DC
Dimension (L×W×H)	123×117×33mm
Net weight	260g

STANDARD DELIVERY

Main unit	1 pc
Software and USB cable	1 pc
Power adapter	1 pc
Time battery	1 pc
Lithium battery	1 pc

software (included), connect to PC via USB cable, download and display in real time, collect, store and analyze data



MINI TEMPERATURE AND HUMIDITY METER (ECONOMIC TYPE)
CODE 0319-TH60

VIDEO

POPULAR MODEL

- 3.5" LCD screen
- Temperature/humidity/time/comfort display
- Highest/lowest temperature and humidity memory function
- Unit: °C/°F

SPECIFICATION

Temperature range	0°C~55°C/32°F~131°F
Temperature resolution	0.1°C/0.1°F
Temperature accuracy	±0.5°C/±0.9°F
Humidity range	0%RH~99%RH (non-condensing)
Humidity resolution	1%RH
Humidity accuracy	±5%RH (at 10%RH~90%RH), other range ±7%RH
Power supply	2×3V CR2032 batteries
Dimension	88×70×12mm
Net weight	62g

STANDARD DELIVERY

Main unit	1 pc
Battery (CR2032)	2 pcs

TEMPERATURE AND HUMIDITY METER (ECONOMIC TYPE)
CODE 0312-TH50

- Environment comfort display: COMFORT, WET, DRY
- Time/temperature/humidity display
- Highest/lowest temperature and humidity memory function
- Alarm clock function
- Unit: °C, °F

SPECIFICATION

Temperature range	0°C~50°C/32°F~122°F
Temperature accuracy	±1.0°C (at 5°C~40°C), other range ±1.5°C
	±1.8°F (at 41°F~104°F), other range ±2.7°F
Temperature resolution	0.1°C/0.1°F
Humidity range	10%RH~90%RH
Humidity accuracy	±5%RH (at 40%RH~80%RH), other range ±8%RH
Humidity resolution	1%RH
Power supply	1×AAA 1.5V battery
Dimension	108×60×15mm
Net weight	74g

STANDARD DELIVERY

Main unit	1 pc
Battery	1 pc

THERMOHYGROMETER (BASIC TYPE)
CODE 0316-TH62

- Temperature/humidity/time display
- High and low alarm
- Low battery display
- Display backlight
- Environment comfort display

SPECIFICATION

Temperature range	-20°C~60°C
Temperature accuracy	±0.5°C (at 26°C~42°C), other range ±1.0°C
Temperature resolution	0.1°C
Humidity range	10%RH~99%RH (non-condensing)
Humidity accuracy	±5%RH (45%RH~79%RH), other range ±7%RH
Humidity resolution	0.1%RH
Sampling interval	3s
Power supply	2×AAA batteries
Dimension	117×94×23mm
Net weight	149g

STANDARD DELIVERY

Main unit	1 pc
Battery (AAA)	2 pcs

TEMPERATURE AND HUMIDITY METER (ADVANCED TYPE)
CODE 0330-TH36

- Ambient temperature/humidity/dew point temperature/time/comfort display
- Real-time value/MAX/MIN/AVG display
- High and low alarm
- Unit: °C/°F
- 3.9" LCD screen
- Display backlight
- Battery level display

SPECIFICATION

Temperature range	-30°C~65°C/-22°F~149°F
Temperature accuracy	±0.3°C (at -10°C~65°C), other range ±0.5°C; ±0.5°F (at 14°F~149°F), other range ±0.9°F
Temperature resolution	0.1°C/0.1°F
Humidity range	0%RH~100%RH (non-condensing)
Humidity accuracy	±3%RH (at 10%RH~90%RH, testing temperature: 25°C), other range ±4%RH
Humidity resolution	0.1%RH
Sampling interval	5s
Power supply	3×AAA batteries
Dimension (L×W×H)	96×20×108mm
Net weight	119g

STANDARD DELIVERY

Main unit	1 pc
Battery (AAA)	3 pcs

TEMPERATURE/HUMIDITY/ATMOSPHERIC PRESSURE METER
CODE 0331-AP31

- Atmospheric pressure/ambient temperature/humidity/dew point temperature/time/comfort display
- Real-time value/MAX/MIN/AVG display
- High and low alarm
- Unit: °C/°F
- 3.9" LCD screen
- Display backlight
- Battery level display

SPECIFICATION

Temperature range	-30°C~65°C/-22°F~149°F
Temperature accuracy	±0.3°C (at -10°C~65°C), other range ±0.5°C; ±0.5°F (at 14°F~149°F), other range ±0.9°F
Temperature resolution	0.1°C/0.1°F
Humidity range	0%RH~100%RH (non-condensing)
Humidity accuracy	±3%RH (at 10%RH~90%RH, testing temperature: 25°C), other range ±4%RH
Humidity resolution	0.1%RH
Atmospheric pressure range	300hPa~1100hPa
Atmospheric pressure accuracy	±1hPa (at 950hPa~1050hPa, testing temperature: 0°C~40°C), other range ±2hPa
Atmospheric pressure resolution	0.2hPa
Sampling interval	5s
Power supply	3×AAA batteries
Dimension (L×W×H)	96×20×108mm
Net weight	119g

STANDARD DELIVERY

Main unit	1 pc
Battery (AAA)	3 pcs

DIGITAL THERMOHYGROMETER (ADVANCED TYPE)
CODE 9362-TH27

IP50
DUSTPROOF

- Measure humidity, ambient temperature and dew-point temperature
- Max/Min/Average mode
- Alarm function
- IP50 protection grade

SPECIFICATION

Sensor model	NTC thermistor/humidity capacitance/digital sensor
Temperature range	-20°C~70°C/-4°F~158°F
Temperature accuracy	±0.5°C/±0.9°F
Temperature resolution	0.1°C/0.2°F (minimum adjustable unit is 0.2°F in setting mode)
Humidity range	0~100%RH
Humidity accuracy	±5%RH
Humidity resolution	0.1%RH
Sampling interval	5s
Power supply	1.5V AAA battery
Dimension	95×107×18mm
Net weight	105g

STANDARD DELIVERY

Main unit	1 pc
Battery (AAA)	1 pc

THERMOHYGROMETER (BASIC TYPE)
CODE 0313-TH48

- External sensor, 3m cable
- Time/temperature/humidity display
- Temperature and humidity upper and lower limit alarm function
- Unit: °C/°F
- Low battery alarm

SPECIFICATION

Temperature range	-40°C~80°C/-40°F~176°F
Temperature accuracy	±0.5°C (at -20°C~60°C), ±1.0°C (at 60°C~80°C), ±2°C (at -40°C~-20°C),
	±2°F(at -20°F~176°F), ±3°F (at -40°F~-20°F)
Temperature resolution	0.1°C (at -20°C~80°C), other range 1°C
	0.1°F (at -20°F~100°F), other range 1°F
Humidity range	0%RH~99.9%RH
Humidity accuracy	±5%RH (at 10°C~60°C), other range ±7% ±5%RH (at 50°F~140°F), other range ±7%
Humidity resolution	0.1%RH
Sensitivity attenuation value	temperature: <0.1°C/year (<0.2°F/year) humidity: <1%RH/year
Sampling interval	5 seconds
Power supply	built-in rechargeable lithium battery (USB 5V charging) working time at least one month
Dimension	88×88×21mm
Net weight	174g

STANDARD DELIVERY

Main unit	1 pc
USB charging cable	1 pc

MECHANICAL TEMPERATURE AND HUMIDITY METER
CODE 0332-MT36

BATTERY-FREE

- Constructed with 304 stainless steel, featuring anti-oxidation and anti-corrosion properties
- Easy to use, suitable for both hanging and placing
- Battery-free

VIDEO

SPECIFICATION

Temperature range	-30°C~60°C
Temperature accuracy	±2°C (at 5°C~50°C), other range ±4°C
Humidity range	0%RH~100%RH (non-condensing)
Humidity accuracy	±6%RH (at 40%RH~70%RH, testing temperature: 20°C), other range ±8%RH
Dimension (L×W×H)	130×130×20mm
Net weight	203g

STANDARD DELIVERY

Main unit	1 pc
Stand	1 set

THERMOHYGROMETER (BASIC TYPE)
CODE 0315-HT164

BUILT-IN BLUETOOTH

- Real-time value/maximum/minimum display
- Unit: °C/°F
- Display backlight
- Automatic power off
- Low battery display
- Over range indicator
- Built-in bluetooth, mobile APP is included

APP (included)

SPECIFICATION

Temperature range	-10°C~60°C
Temperature accuracy	±1.0°C
Temperature resolution	0.1°C
Humidity range	0%RH~99.9%RH
Humidity accuracy	±5.0%RH
Humidity resolution	0.1%RH
Sampling interval	1s
Power supply	3×AAA batteries, working time≥12h
Operation environment	temperature: 0°C~40°C
	humidity: <90%RH (non-condensing)
Storage environment	temperature: -20°C~60°C
	humidity: <75%RH (non-condensing)
Dimension	137×55×28mm
Net weight	102g

STANDARD DELIVERY

Main unit	1 pc
Battery (AAA)	3 pcs

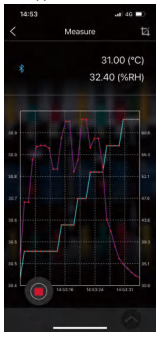
OPTIONAL ACCESSORY

Tripod	0701-TR175

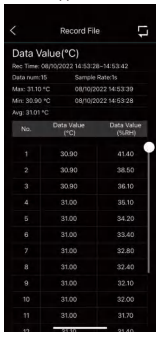
THERMOHYGROMETER (STANDARD TYPE)
CODE 0310-H26

- Measure humidity, ambient temperature, dew point temperature and wet dulb temperature
- Min/Max, data hold function
- Bluetooth 4.0
- Auto power off
- Supplied with APP for Apple and Android

App measurement



App record



SPECIFICATION

Function	Measuring range	Resolution	Accuracy
Ambient temperature	0°C~50°C 32°F~122°F	0.1°C/0.1°F	±1.0°C/±1.8°F
Wet dulb temperature	0°C~50°C 32°F~122°F		
Dew point temperature	0°C~50°C 32°F~122°F		
Humidity	0%RH~80%RH	0.1%RH	±5.0%RH
Auto power off	30 minutes		
Data port	Bluetooth 4.0		
Power supply	9V battery		
Dimension	204×54×36mm		
Net weight	172g		

STANDARD DELIVERY

Main unit	1 pc
Battery	1 pc

OPTIONAL ACCESSORY

Tripod	0701-TR175

LARGE SCREEN TIME/TEMPERATURE/HUMIDITY METERS

VIDEO

0314-H533A

0314-H533B

- High definition LED large screen display: temperature, humidity, time
- Exceeding limit alarm: buzzer alarm, digit/light flash alarm
- Installation method: wall mounted or ring type

SPECIFICATION

Code	0314-H323A	0314-H323B	0314-H423A	0314-H423B	0314-H533A	0314-H533B	0314-H643A	0314-H643B
Dimension	300×200×36mm		400×265×36mm		500×330×36mm		600×400×36mm	
Sensor type	integrated	separated	integrated	separated	integrated	separated	integrated	separated
Power consumption	5W		5W		9W		10W	
Net weight	1.3kg		2kg		3kg		4kg	

SPECIFICATION

Sensor	integrated: plastic probe case (not dustproof, not waterproof)	separated: metal probe case (dustproof, waterproof), cable length 1m (can be customized, within 20m)
Temperature range	-20°C~60°C	-40°C~80°C
Temperature resolution	0.1°C (at 0°C~60°C), other range 1°C	0.1°C (at 0°C~80°C), other range 1°C
Temperature accuracy	±0.5°C (at 0°C~60°C), other range ±2°C	±0.5°C (at 0°C~80°C), other range ±2°C
Humidity range	5%RH~95%RH	
Humidity resolution	0.1%RH	
Humidity accuracy	±3%RH (@25°C)	
Long-term stability	temperature≤0.1°C/year; humidity≤1%RH/year	
Repeatability	temperature≤0.1°C; humidity≤0.5%RH	
Sampling speed	1 sec/time	
Response time	3 minutes to reach 90% of the final value	
Time accuracy	±15s/month (@25°C±2°C)	
Power supply	AC100~240V (50/60Hz)	
Power cable length	1.8m	
Operation condition	temperature: -20°C~60°C; humidity: 5%~95% (non-condensing)	

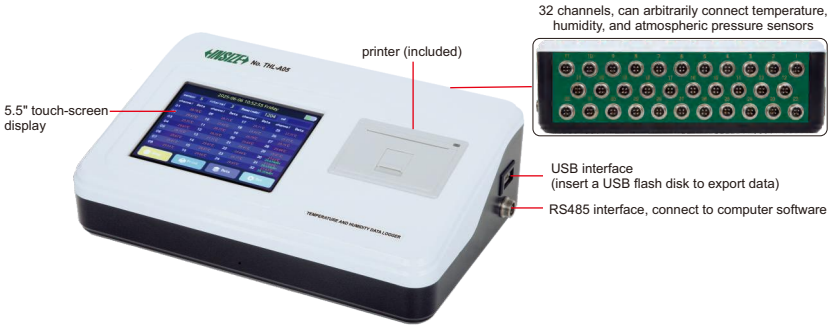
STANDARD DELIVERY

Main unit (including sensor)	1 pc

TEMPERATURE AND HUMIDITY DATA LOGGER
CODE THL-A05

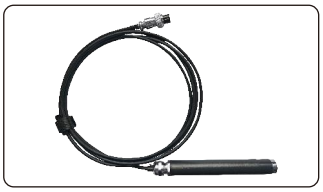
DATA OUTPUT

VIDEO



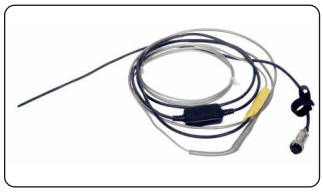
- Suitable for testing the uniformity and fluctuation of temperature and humidity field such as environment test equipment, industrial furnace, verification furnace, etc.
- 32-channel can be independently configured for thermocouple, resistance temperature detector, humidity, and atmospheric pressure inputs
- 32-channel independent and synchronous acquisition with configurable parameters such as sampling duration, interval
- Built-in high-capacity memory that can store up to 500 data sets (10,000 samples per set)
- User-friendly human-machine interface with touchscreen operation, featuring functions such as measurement, display, printing, automatic calibration, manual correction, storage, and parameter setting
- Computer software is included

humidity sensor (**optional**)



atmospheric pressure sensor (**optional**)

platinum resistance PT100 (**optional**)



K-type thermocouple (**optional**)

SPECIFICATION

Temperature (sensor optional)	**type**	platinum resistance Pt100	K-type thermocouple
	range	-100°C~300°C	300°C~1200°C
	resolution	0.01°C	0.01°C
	accuracy	±0.2°C (at -100°C~-50°C) ±0.1°C (at -50°C~200°C) ±0.2°C (at 200°C~300°C)	±0.004·t
	lead length	5m	1m thermocouple wire, 3m extension lead
Humidity (sensor optional)	**range**	0%RH~100%RH	
	resolution	0.01%RH	
	accuracy	±1.5%RH	
	lead length	5m	
Atmospheric pressure (sensor optional)	**range**	300hPa~1100hPa	
	resolution	0.01hPa	
	accuracy	±1hPa	
	lead length	5m	
Channel		32 channels (automatic identification of platinum resistance, thermocouple, humidity and atmospheric pressure sensors)	
Memory		capable of storing up to 500 data sets (10,000 samples per set), support exporting reports in multiple formats such as EXCEL or PDF	
Output		USB, RS485	
Printing		can print real-time data during inspection and print historical data	
Operation environment		temperature: 5°C~35°C humidity: 0%RH~85%RH (non-condensing)	
Power supply		built-in 10200mAh rechargeable lithium-ion battery (operating time ≥6hours); power adapter AC: 110V~220V	
Dimension (L×W×H)		280×180×90mm	
Net weight		1520g	

STANDARD DELIVERY

Main unit	1 pc
Power adapter	1 pc
16G USB flash disk	1 pc

OPTIONAL ACCESSORY

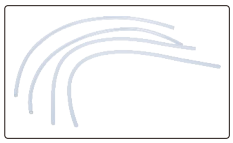
Platinum resistance PT100	**THL-A05-PT100**
K-type thermocouple	**THL-A05-K**
Humidity sensor (Rotronic)	**THL-A05-H**
Atmospheric pressure sensor	**THL-A05-AP**

DIFFERENTIAL PRESSURE MANOMETER
CODE 0140-DP05

DATA OUTPUT

VIDEO

- Offset and differential measurement
- Record maximum/minimum/average value with relative timestamp
- Built-in USB interface for data transmission
- Unit: kPa, psi, inH_2O, bar, mbar, inHg, mmHg, oz/in^2, ftH_2O, cmH_2O, kg/cm^2
- Zero adjust
- Data hold
- Display with backlight
- Low battery indication
- Automatic power off
- Safety rating: CAT III 600V

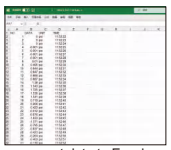


soft tubes (included)

software (included), connect to PC via USB cable

export data

display realtime value and curve



export data to Excel

SPECIFICATION

Measurement range	-34.47kPa~34.47kPa
Maximum pressure	137.9kPa
Unit	kPa
Resolution	0.01
Accuracy	±0.3%FSO (25°C)
Repeatability	±0.2% (Max. ±0.5%FSO)
Linearity/hysteresis	±0.29%FSO
Response time	0.5s typical
Operation temperature	0°C~50°C
Power supply	1×9V 6F22 battery or AC/DC adapter
Dimension	165×90×40mm
Net weight	350g

STANDARD DELIVERY

Main unit	1 pc
AC/DC adapter	1 pc
9V battery	1 pc
Software and USB cable	1 pc
Soft tubes	4 pcs

OPTIONAL ACCESSORY

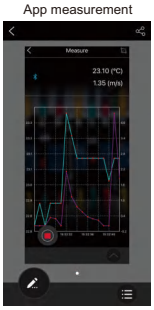
Tripod	0701-TR175

ANEMOMETER
CODE 0110-1125

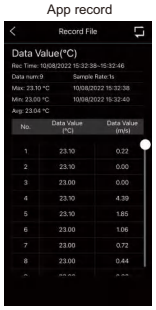
VIDEO

- Measure air velocity and temperature
- Min/Max, data hold function
- Bluetooth 4.0
- Auto power off
- Supplied with APP for Apple and Android

App measurement



App record



SPECIFICATION

	Unit	Measuring range	Resolution	Accuracy
Air velocity	m/s	1.1~25.0	0.01	±(3%+0.3)
	km/h	4~90	0.1	±(3%+1)
	ft/min	220~4920	1	±(3%+40)
	MPH	2.5~56.0	0.1	±(3%+0.4)
	knots	2.2~48.0	0.1	
Air temperature	°C	0~50	0.1	±2
	°F	32~122	0.1	±4
Sensors	air velocity sensor, NTC-type precision thermistor			
Sampling time	0.5s			
Operation altitude	max 2000m			
Operation environment	0~50°C, 0~80%RH			
Storage environment	-10~60°C, 0~80%RH			
Auto power off	10 minutes			
Data port	bluetooth 4.0			
Power supply	9V battery			
Dimension	213×54×36mm			
Net weight	172g			

STANDARD DELIVERY

Main unit	1 pc
Battery	1 pc

OPTIONAL ACCESSORY

Tripod	0701-TR175

HOT WIRE ANEMOMETER
CODE 0111-HW30

VIDEO

sensor

- Measure with platinum resistance sensor, high accuracy and stability
- Retractable aluminum alloy rod with slim probe, split design for convenient operation
- Maximum/minimum/average mode
- Over-range indication
- Display with backlight
- Low battery indication
- Automatic power off

SPECIFICATION

Function	Range	Accuracy		Resolution
Wind velocity	0~30m/s	±(4%+0.1m/s)	specified environment temperature: 15°C~30°C	0.01 (0~9.99) 0.1 (10.0~999.9) 1 (1000~9999)
	0~108km/h	±(4%+0.4km/h)		
	0~58.3kn	±(4%+0.2kn)		
	0~5906fpm	±(4%+20fpm)		
	0~67.1mph	±(4%+0.3mph)		
	0~11bft	±1bft		1
Wind temperature	0°C~40°C	±0.5°C	specified wind velocity: ≥1.5m/s	0.1
	-20°C~0°C, 40°C~70°C	±0.8°C		0.1
Wind flow	maximum range: 9999×10²			
	unit: m³/min, CFM, L/s			
	area setting: area, circle (set radius), rectangle (set length and width)			
Retractable rod length	1.2m			
Storage capacity	99 groups			
Operation environment	temperature: 0°C~40°C, humidity: ≤80%RH (no condensation)			
Storage environment	temperature: -20°C~60°C, humidity: ≤80%RH (no condensation)			
Power supply	3×AAA battery			
Dimension	181×63×40mm			
Net weight	350g			

STANDARD DELIVERY

Main unit	1 pc
Battery (AAA)	3 pcs

OPTIONAL ACCESSORY

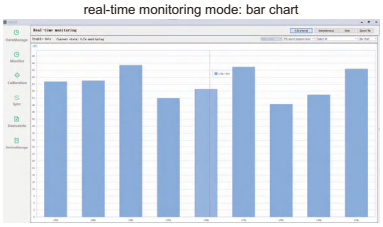
Tripod	0701-TR175

SOUND LEVEL METER (ADVANCED TYPE)
CODE 0011-FA25

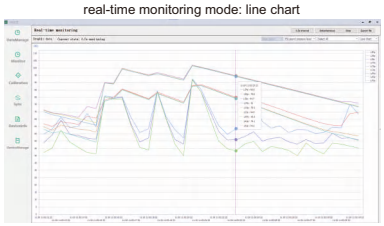
VIDEO

software (included), monitor and collect data to PC software via USB cable, data can sent to Excel

real-time monitoring mode: bar chart



real-time monitoring mode: line chart



- Integral function: 1s~24h (adjustable)
- Wide frequency range, large dynamic range, low background noise
- Parallel time weight and frequency weight
- Single range without shifting
- Software is included: on-line monitoring, data storage

SPECIFICATION

Accuracy	IEC 61672-1:2013 class 2
Microphone	1/2 inch prepolarized condenser microphone
Measuring range	25dB (A)~141dB (A); 35dB (C)~141dB (C); 50dB (Z)~141dB (Z) other frequency linear ranges: 31.5Hz: 26dB (A)~101dB (A); 12.5kHz: 25dB (A)~136dB (A)
Frequency	20Hz~12.5kHz
Self-generated electrical noise	<17dB (A), <23dB (C), <33dB (Z)
Frequency weighting	parallel A, C, Z weightings
Time weighting	parallel F (Fast), S (Slow), I (Impulse) weightings
Measuring function	Lp, Leq,t, Leq,T, Lmax, Lmin, Lpeak, SEL
Integral time	1s-24h (adjustable)
Start mode	button/clock/limit/interval
Power setting	power on or off regularly
Data storage	4MB FLash RAM 4 sets of parameter templates, 128 measurement point names; 64 calibration records
Language	Chinese, English, Portuguese
Power	<80mA/5V
Power supply	4×AAA batteries (for 10 hours working) AC/DC adapter: 5V/2A
Operation condition	temperature: -10°C~50°C humidity: 25%RH~90%RH, non-condensing pressure: 65kPa~108kPa
Dimension	230×69×26mm
Net weight	180g

STANDARD DELIVERY

Main unit	1 pc
Software	1 pc
Windscreen	1 pc
Battery (AAA)	4 pcs
AC/DC adapter	1 pc

OPTIONAL ACCESSORY

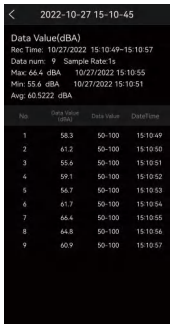
Tripod	**0701-TR175**

SOUND LEVEL METER (BASIC TYPE)
CODE 0010-A35

- Auto range selection
- Over range indication
- Display backlight
- Min/Max, data hold function
- Bluetooth 4.0
- Auto power off
- Supplied with APP for Apple and Android

App measurement

App record



SPECIFICATION

Frequency	31.5Hz~8kHz
Measuring range	35dB~130dB
Accuracy	±3.0dB (ref 94dB@1kHz)
Resolution	0.1dB
Frequency weighting	A and C
Display update	2 times/sec
Microphone	1/2 inch electret condenser microphone
Power supply	9V battery
Operation temperature and humidity	0°C~40°C/32°F~104°F, 10%RH~90%RH
Dimension	185×54×36mm
Net weight	184g

STANDARD DELIVERY

Main unit	1 pc
Battery	1 pc
Windscreen	1 pc

OPTIONAL ACCESSORY

Tripod	0701-TR175

DIGITAL SOUND LEVEL METER (ADVANCED TYPE)
CODE 9353-413

- Automatic range conversion
- Over range indicator
- Maximum mode
- Data hold
- AC signal output: 0.707Vrms, impedance approx.100Ω
  DC signal output: 20mV/dB, impedance approx.1kΩ

SPECIFICATION

Measuring range	40dB~130dB (ref.20μPa)
Frequency	20Hz~12.5kHz
Resolution	0.1dB
Accuracy	IEC 61672-1:2013 class 2
Frequency weighting	A weighting
Response time	fast (125ms), slow (1s)
Microphone	pre polarization condenser microphone
Refercner direction	axial direction of condenser microphone
Power supply	4×1.5V AAA batteries
Dimension	210×68×27mm
Net weight	240g

STANDARD DELIVERY

Main unit	1 pc
Battery (AAA)	4 pcs
Precision screwdriver	1 pc

OPTIONAL ACCESSORY

Tripod	0701-TR175

LIGHT METER (ECONOMIC TYPE)
CODE 0131-A120

- Photosensor can rotate 90° clockwise and 180° counterclockwise
- Build-in calibration filters ensure the accuracy when working in different colors
- Data hold function
- Lux/FC unit switch
- Low battery alarm

SPECIFICATION

Measuring range	0.1~199.9Lux	1~1999Lux	10~19990Lux	100~199900Lux
Resolution	0.1Lux	1Lux	10Lux	100Lux
Measuring range	0.01~19.99FC	0.1~199.9FC	1~1999FC	10~19990FC
Resolution	0.01FC	0.1FC	1FC	10FC
Accuracy	±(4%+10d), range<20000Lux/2000FC ±(5%+10d), range≥20000Lux/2000FC (d is resolution, calibrated with standard incandescent lamp at color temperature 2856K)			
Repeatability	±2%			
Sampling time	0.5s			
Operation environment	0~40°C, 0~70%RH			
Storage environment	-10~50°C, 0~80%RH			
Power supply	9V battery			
Dimension	185×68×38mm			
Net weight	130g			

STANDARD DELIVERY

Main unit	1 pc
Battery	1 pc

OPTIONAL ACCESSORY

Tripod	0701-TR175

LIGHT METER (ECONOMIC TYPE)
CODE 0130-L110

- Suitable for measuring illuminance in various occasions
- Data hold function
- Fast switching of measuring range, easy to operate

SPECIFICATION

Measuring range	1~1999Lux	10~19990Lux	100~100000Lux
Resolution	1Lux	10Lux	100Lux
Accuracy	±(4%+10d), range<10000Lux ±(5%+10d), range≥10000Lux (d is resolution, calibrated with standard incandescent lamp at color temperature 2856K)		
Repeatability	±2%		
Sampling time	0.5s		
Operation environment	0~40°C, 0~70%RH		
Storage environment	-10~50°C, 0~80%RH		
Power supply	9V battery		
Photodetector dimension	105×58×28mm		
Main unit dimension	130×72×30mm		
Net weight	170g		

STANDARD DELIVERY

Main unit	1 pc
Battery	1 pc

UV LIGHT METER
CODE 0132-UV199

DATA OUTPUT

VIDEO

- Self-recognize probes
- Real-time value, maximum value, minimum value, average value, time, energy value are displayed at the same time
- USB interface for data transmission

probe
0132-UVA1
(included)

PROBE SPECIFICATION

Probe code	**0132-UVA1** (included)	**0132-UVC0 (optional)**	**0132-UVCWP1 (optional)**
Application	general purpose low power UVA intensity and energy measurement	intensity and energy measurement of 254nm UV sterilization mercury lamp	intensity and energy measurement of 254nm UV sterilization mercury lamp
Spectral response	λp=365nm 315nm-400nm	λp=254nm 230nm-280nm	
Power measuring range	0~200000μW/cm²		
Resolution	0.1μW/cm²		
Energy measuring range	0-9999999μJ/cm²		
Measuring accuracy	±10%		
Record time	0-99999s		
Sampling speed	6 times/second		
Measuring unit	μW/cm² (default), mW/cm², W/m²		
Test hole diameter	Ø10mm		
Probe size	39×32×15mm	Ø39×15mm	Ø50×20mm
Waterproof depth	—	—	1m

Probe code	**0132-UVCLED0 (optional)**	**0132-UVB0 (optional)**	**0132-UVA0 (optional)**
Application	measurement of 260nm-285nm UV LED sterilization lamp	general purpose UVB intensity and energy measurement	intensity and energy measurement of light source of high pressure mercury lamp in UV curing industry
Spectral response	280nm-315nm*	λp=310nm** 280nm-315nm	λp=365nm 315nm-400nm
Power measuring range	0~200000μW/cm²		0~2000mW/cm²
Resolution	0.1μW/cm²		0.1mW/cm²
Energy measuring range	0-9999999μJ/cm²		
Measuring accuracy	±10%		
Record time	0-99999s		
Sampling speed	6 times/second		2048 times/second
Measuring unit	μW/cm² (default), mW/cm², W/m²		mW/cm² (default), W/m²
Test hole diameter	Ø10mm		
Probe size	Ø39×15mm		39×32×15mm

*Wide spectral range, avoid using in strong light

**Suitable for measuring UVB light source with wavelength 297nm, 308nm, and 313nm

Probe code	**0132-UVALED0 (optional)**	**0132-UVALED1 (optional)**	**0132-UVALED3 (optional)**
Application	intensity and energy measurement of area light source of UV LED in UV curing industry	intensity and energy measurement of point light source of UV LED in UV curing industry	general purpose UVA+UVV LED intensity and energy measurement, low power measuring range
Spectral response	calibrated with 395nm UV LED 340nm-420nm		
Power measuring range	0~20000mW/cm²		0~200000μW/cm²
Resolution	1mW/cm²		0.1μW/cm²
Energy measuring range	0-9999999μJ/cm²		
Measuring accuracy	±10%		
Record time	0-99999s		
Sampling speed	2048 times/second		6 times/second
Measuring unit	mW/cm² (default), W/cm², W/m²		μW/cm² (default), mW/cm², W/m²
Test hole diameter	Ø10mm	Ø1mm	Ø10mm
Probe size	39×32×15mm		

MAIN UNIT SPECIFICATION

Display	240×160 LCD
Power supply	4 AAA alkaline batteries
Output	USB
Dimension	148×76×26mm
Net weight	194g

STANDARD DELIVERY

Main unit	1 pc
Probe (0132-UVA1)	1 pc
Software and USB cable	1 pc
Battery	4 pcs

CONTACT/NON-CONTACT TACHOMETER
CODE 9225-405

VIDEO

- 2 measuring methods, contact and non-contact
- Can measure rotary speed and line speed
- Automatically save the maximum value, minimum value and the last value, 500 data can be stored during continuous measurement
- Automatic power off

cone head (included)

cone cavity head (included)

reflection sticker (included)

wheel with 0.1m perimeter (included)

small cone head (included)

clamping sleeve (included)

SPECIFICATION

Measuring method		Non-contact	Contact
Measuring range	rotary speed	2.5~99999RPM	0.5~19999RPM
	line speed	—	0.05~500m/min
Resolution	rotary speed	0.1RPM (range 2.5~999.9RPM) 1RPM (range 1000~99999RPM)	0.1RPM (range 0.5~999.9RPM) 1RPM (range 1000~19999RPM)
	line speed	—	0.01m/min (range 0.05~99.99m/min) 0.1m/min (range 100~500m/min)
Accuracy	rotary speed	±(0.05%n+1d)RPM n is rotary speed, d is resolution	±(0.4%n+1d)RPM (n<300RPM) ±(0.05%n+1d)RPM (n≥300RPM) n is rotary speed, d is resolution
	line speed	—	±(1%+1d)m/min d is resolution
Laser power		class 3R, 3mW~4mW	—
Sampling time		0.6s (above 100RPM)	
Measuring distance		50~500mm	—
Operation temperature		0~40°C	
Power supply		3×AA batteries	
Dimension		206×71×36mm	
Net weight		170g	

STANDARD DELIVERY

Main unit	1 pc
Reflection sticker (9220-RS)	3 pcs
Wheel with 0.1m perimeter	1 pc
Clamping sleeve	1 pc
Cone head	1 pc
Small cone head	1 pc
Cone cavity head	1 pc
Battery (AA)	3 pcs

NON-CONTACT TACHOMETER
CODE 9223-120

VIDEO

- Accurately measure the rotary speed without contact
- Automatically save the maximum value, minimum value and the last value, 500 data can be stored during continuous measurement

reflection sticker (included)

SPECIFICATION

Measuring range	2.5~99999RPM
Resolution	0.1RPM (range 2.5~999.9RPM) 1RPM (range 1000~99999RPM)
Accuracy	±(0.05%n+1d)RPM n is rotary speed, d is resolution
Laser power	class 3R, 3mW~4mW
Sampling time	0.6 second (above 100RPM)
Measuring distance	50~500mm
Operation temperature	0~40°C
Power supply	3×AA batteries
Dimension	180×71×29.9mm
Net weight	145g

STANDARD DELIVERY

Main unit	1 pc
Reflection sticker (9220-RS)	3 pcs
Battery (AA)	3 pcs

CONTACT TACHOMETER
CODE 9224-213

VIDEO

- Can measure rotary speed, line speed and line length
- Automatically save the maximum value, minimum value and the last value, 96 data can be stored during continuous measurement
- With backlight display

cone cavity head (included)

clamping sleeve (included)

cone head (included)

small cone head (included)

wheel with 0.1m perimeter (included)

SPECIFICATION

Measuring range	rotary speed	0.5~19999RPM
	line speed	0.05~500m/min
	line length	0.05~99999m
Resolution	rotary speed	0.1RPM (range 0.5~999.9RPM) 1RPM (range 1000~19999RPM)
	line speed	0.01m/min (range 0.05~99.99m/min) 0.1m/min (range 100~500m/min)
	line length	0.02m
Accuracy	rotary speed	±(0.4%n+1d)RPM (n<300RPM) ±(0.05%n+1d)RPM (n≥300RPM) n is rotary speed, d is resolution
	line speed	±(1%+1d)m/min d is resolution
	line length	±(1%+1d)m d is resolution
Sampling time		0.8s (above 60RPM)
Operation temperature		0~40°C
Power supply		3×AA batteries
Dimension		171×71×35mm
Net weight		162g

STANDARD DELIVERY

Main unit	1 pc
Wheel with 0.1m perimeter	1 pc
Clamping sleeve	1 pc
Cone head	1 pc
Small cone head	1 pc
Cone cavity head	1 pc
Battery (AA)	3 pcs

LED STROBOSCOPES

VIDEO

- Quick and easy operation with rotary encoder and buttons
- Adjust the LED flash frequency according to the rotational speed or cyclic movement frequency of the workpiece to make the workpiece appear stationary
- Measure the rotational speed or cyclic movement frequency of the workpiece without physical contact or reflective stickers
- External trigger mode allows automatic tracking with external sensors such as proximity switch (PNP-NO), Hall switch (PNP-NO), photoelectric switch, encoder etc.
- Adjustable brightness and single flash duration
- Built-in storage memory for flash frequency and parameter setting
- Low battery indication

ISQ-TS200K

SPECIFICATION

Code	DC type	ISQ-TS200K		
	AC type	ISQ-TS200A-P european type power cord	ISQ-TS200A-K british type power cord	ISQ-TS200A-B brazilian type power cord
Range		50.0FPM~36000FPM (flash per minute); 1.00Hz~600.00Hz		
Resolution		0.1FPM (<10000FPM), 1FPM (≥10000FPM); 0.01Hz (<1000Hz), 0.1Hz (≥1000Hz)		
Unit		FPM, Hz		
Accuracy		±0.1FPM (<1000FPM), ±0.01% (≥1000FPM)		
Trigger mode		internal trigger (F00), external trigger (F01, F02)		
Phase shift		range: 0°~359°, increment: 1° (only valid for F01 external trigger mode)		
Light source		9 CREE LED lamps, lamp lifetime: 3~5 years		
Power supply		DC type: 12.6V rechargeable Lithium battery AC type: 100V~240V, 50/60Hz		
Dimensions (L×W×H)		200×100×120mm		
Net weight		1350g		

proximity switch (included)

STANDARD DELIVERY

Code	ISQ-TS200K	ISQ-TS200A-P	ISQ-TS200A-K	ISQ-TS200A-B
Main unit	1 pc	1 pc	1 pc	1 pc
Proximity switch	1 pc	1 pc	1 pc	1 pc
AC/DC adapter	1 pc	-	-	-
Power cord	-	1 pc	1 pc	1 pc

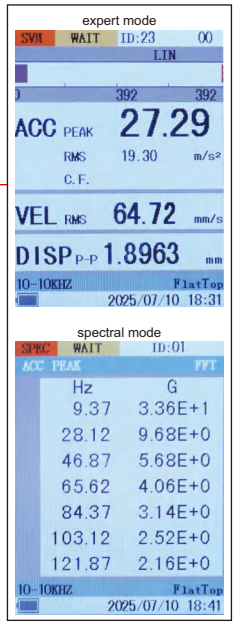
VIBRATION METER (STANDARD TYPE)
CODE 0024-VM40

VIDEO

DATA OUTPUT

- Suitable for factory inspection, status monitoring and fault diagnosis of mechanical equipments such as motors, pumps, fans, household appliances, compressors, generators, gearboxes, etc.
- Can measure the peak value and RMS value of acceleration, RMS value of velocity and peak-to-peak value of displacement
- Measure mode: expert mode and spectral mode
- 2.4" TFT color screen
- Automatic power off
- Battery level display
- Mobile App is included (only for Android system): upload data stored in the device to the mobile phone

0024-VM40



STANDARD DELIVERY

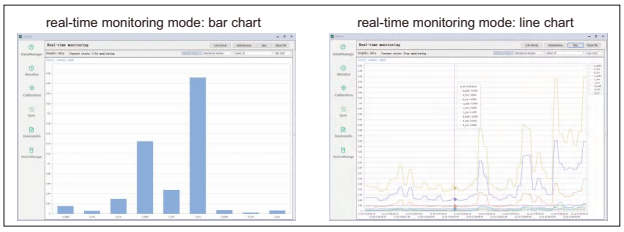
Main unit	1 pc
Accelerometer (including cable)	1 pc
Magnetic base	1 pc
Battery (AA)	2 pcs

SPECIFICATION

Measuring range	acceleration	0.1~392m/s² (peak value)
	velocity	0.01~800mm/s (RMS value)
	displacement	0.001~5mm (peak-peak value)
Frecuencia	acceleration	10Hz~10kHz
	velocity	10Hz~1kHz
	displacement	10Hz~500Hz
Frequency response		±5%
Linearity		±5%
Window function		rectangular window, hanning window, hamming window, flat-top window
Display		2.4" TFT dot-matrix color screen, pixel: 320×240, adjustable backlight
Data storage		99 sets of data, with each set capable of storing 50 data points or one spectrum data list
Data interface		bluetooth 4.0
Operation environment		temperature: -10°C~40°C humidity: ≤90%RH
Power supply		2×AA batteries (for 15 hours working)
Dimension (L×W×H)		150×68×33mm
Net weight		300g

VIBRATION METER
CODE 0022-VM20

VIDEO



software (included), monitor and collect data to PC software via USB cable, data can sent to Excel

- Can measure vibration frequency
- Can measure virtual value/peak value/peak-peak value of acceleration, velocity and displacement
- Suitable for factory inspection, status monitoring and fault diagnosis of mechanical equipments such as motors, pumps, fans, household appliances, compressors, smoke machines, generators, gearboxes, etc.
- Software is included: on-line monitoring, data storage

SPECIFICATION

Measuring parameter	acceleration (virtual/peak/peak-peak value) $a_{RMS,1}$, $a_{Peak,1}$, $a_{P-P,1}$, a_{Peak}', a_{P-P}'	velocity (virtual/peak/peak-peak value) $V_{RMS,1}$, $V_{Peak,1}$, $V_{P-P,1}$, V_{Peak}', V_{P-P}'	displacement (virtual/peak/peak-peak value) $d_{RMS,1}$, $d_{Peak,1}$, $d_{P-P,1}$, d_{Peak}', d_{P-P}'
Measuring range	0.01~200m/s² (peak value)	0.1~200mm/s (virtual value)	0.01~2mm (peak-peak value)
Frequency range	10Hz~5kHz	10Hz~1kHz	10Hz~500Hz
Amplitude frequency reponse	±5%		
Amplitude linearity	±5%		
Frequency accuracy	±0.5%		
Cut-off frequency (second-order high-pass filtering)	8kHz sampling frequency: 3.16Hz、10.00Hz、31.60Hz、N/A (adjustable) 32kHz sampling frequency: 12.64Hz、40.00Hz、126.4Hz、N/A (adjustable)		
Display	1.96" 128×64 dot matrix OLED screen		
Language	Chinese, English, Portuguese		
Power	<80mA/5V		
Power supply	4×AAA batteries: 6.0V/1000mAh; AC/DC adapter: 5V/2A		
Operation condition	temperature: -10°C~50°C; humidity: 25%RH~90%RH, non-condensing; pressure: 65kPa~108kPa		
Dimension	172×69×26mm		
Net weight	240g		

STANDARD DELIVERY

Main unit	1 pc
Software	1 pc
Accelerometer (including cable)	1 pc
Magnetic base	1 pc
M5 screw	1 pc
Battery (AAA)	4 pcs
AC/DC adapter	1 pc

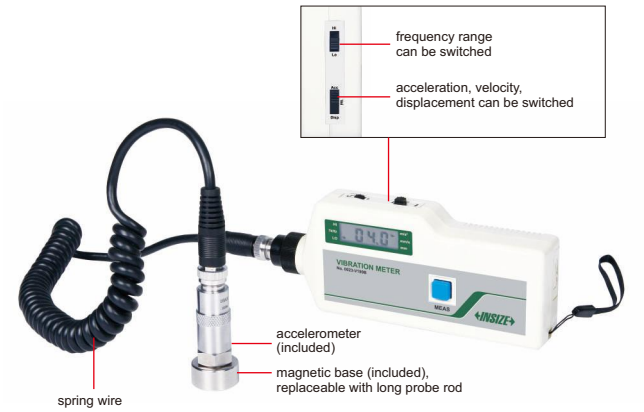
OPTIONAL ACCESSORY

Tripod	0701-TR175

VIBRATION METERS (BASIC TYPE)

VIDEO

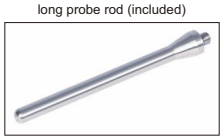
0023-V199A



0023-V199B

- Applied to the environment, machinery manufacturing, electric power, chemical industry and other fields of all kinds of rotating machinery and equipment condition monitoring and fault diagnosis
- Acceleration, velocity and displacement can be tested
- Data hold function
- Automatic power off

long probe rod (included)



SPECIFICATION

Code		0023-V199A	0023-V199B
Sensor type		integrated	separated
Net weight		228g	395g
Measuring range	acceleration	0.1~199.9m/s² (peak value)	
	velocity	0.1~199.9mm/s (virtual value)	
	displacement	0.001~1.999mm (peak-peak value)	
Frequency	acceleration	10Hz~1kHz (Lo) 1kHz~5kHz (Hi)	
	velocity	10Hz~1kHz (Lo)	
	displacement	10Hz~500Hz (Lo)	
Frequency response		±(5%+2dgts) (≥20Hz) -20%~+10% (<20Hz)	±(5%+2dgts)
Linearity		±(5%+2dgts)	
Display		3 ½ count display	
Sampling time		1s	
Automatic power off		60s	
Operation environment		temperature: 0°C~50°C humidity: <90%RH	
Power supply		1×9V battery (for 25 hours working)	
Dimension (L×W×H)		174×73×35mm	

STANDARD DELIVERY

Code	0023-V199A	0023-V199B
Probe rod	2 pcs (short probe rod+long probe rod)	1 pc (long probe rod)
Magnetic base	—	1 pc
Main unit (including accelerometer)	1 pc	
9V battery	1 pc	

VIBRATION PEN (THREE PARAMETERS)
CODE 0020-A199

VIDEO

- Acceleration, velocity and displacement can be tested
- Automatic power off

SPECIFICATION

Parameter	acceleration	velocity	displacement
Measuring range	0.01~199.9m/s² (peak value)	0.01~199.9mm/s (virtual value)	0.001~1.999mm (peak~peak value)
Frequency	10Hz~1kHz	10Hz~1kHz	10Hz~500Hz
Frequency response	±5% (≥20Hz) -20%~+10% (<20Hz)		
Linearity	±(5%+2unit)		
Indeterminacy of sensitivity	≤3%		
Operation temperature	0°C~40°C/32°F~104°F		
Operation humidity	<85%		
Power supply	2×LR44 battery (for 10 hours working)		
Dimension	150×22×18mm		
Net weight	55g		

STANDARD DELIVERY

Main unit	1 pc
LR44 battery	2 pcs

VIBRATION PEN
CODE 9720-199

VIDEO

- Measure vibration of motors, fans, pumps, compressors and machine tools to prevent mechanical failure
- Small size, light weight, low energy consumption, easy operation, easy to carry
- One key control
- Automatic power off

SPECIFICATION

Measured parameter	speed
Measuring range	0.1~199.9mm/s
Frequency	10Hz~1kHz
Accuracy	±(5%±2)mm/s
Operation temperature	0°C~40°C
Operation humidity	<85%
Power supply	2×LR44 batteries (for 10 hours wroking)
Dimension	150×22×18mm
Net weight	55g

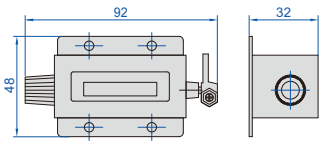
STANDARD DELIVERY

Main unit	1 pc
LR44 battery	2 pcs

STROKE COUNTER
CODE 7600-6

- Accumulate and record the number of mechanical movements
- Rotate back to zero

Unit: mm



SPECIFICATION

Code	Number of digits	Range
7600-6	6	0-999999

WATERPROOF DIGITAL STOPWATCH
CODE DSW-B024

WATERPROOF

- Single row display with backlight
- Count up to 23 hours 59 minutes and 59 seconds
- 2 recallable memory
- Time and calendar display with hour, minute, second, month, date and day

VIDEO

SPECIFICATION

Chronograph	range	0~23 hours 59 minutes and 59 seconds
	resolution	0.01s (<30mins) 1s (>30mins)
	accuracy	±1.5s (day error)
Clock	display	12/24 hour format
	function	alarm and hourly chime
Waterproof level		3bar (30meters)
Operation environment *		0°C~50°C
Power supply		CR2032 battery
Dimension		76×64×22mm
Net weight		62g

* Underwater button operation is not supported

STANDARD DELIVERY

Main unit	1 pc
String	1 pc

DIGITAL STOPWATCH
CODE DSW-A010

- Split time, total time and continuous time can be displayed
- 10 groups of results can be read out from memory after resetting
- Scroll back and forth to read out the memory digits
- The fastest, slowest and average time can be displayed
- Able to record the split times (00-199)

VIDEO

SPECIFICATION

Measuring range		0~9 hours, 59 minutes, 59.99 seconds
Resolution		0.01s
Accuracy		±0.5s
Function	memory	10 groups
	timer	up to 10 hours
	time	12-hour or 24-hour time display, alarm can be set
Power supply		CR2032 battery
Screen dimension		33.6×13.6mm
Dimension		76×63×16mm (metal case)

STANDARD DELIVERY

Main unit	1 pc
String	1 pc

DIGITAL MOISTURE METER
CODE 9341-50

- Suitable for wood, smooth cement, hard gypsum, mixed mortar, brick, etc.
- Measure moisture, temperature and relative humidity
- Temperature type: ambient, dew point, wet bulb
- Maximum and minimum modes
- Automatic power off

VIDEO

cover (included)

SPECIFICATION

Measuring depth		0~50mm
Measuring range	moisture	0~60%
	temperature	-10~50°C/14~122°F
	relative humidity	0~100%RH
Accuracy	moisture	±2%
	temperature	±2%/±3.6°F
	relative humidity	±5%RH
Resolution	moisture	0.1%
	temperature	0.1°C/0.1°F
	relative humidity	0.1%RH
Sampling time		0.5s for moisture
		1s for temperature and relative humidity
Power supply		2×AAA batteries
Dimension		130×56×29mm
Net weight		206g

STANDARD DELIVERY

Main unit	1 pc
Battery (AAA)	2 pcs

INDUCTIVE MOISTURE METER
CODE 0120-IM24

VIDEO

- Suitable for wood, gypsum and cement
- MAX/MIN/HOLD mode
- Alarm function
- Low battery indication
- Auto power off

SPECIFICATION

Measuring range	0~100%
Resolution	1%
Accuracy	±4%
Detection depth	20~40mm
Sampling time	0.5s
Power supply	9V battery
Dimension	185×55×38mm
Net weight	193g

STANDARD DELIVERY

Main unit	1 pc
Battery	1 pc

MOISTURE METER
CODE 0121-PM32

VIDEO

- Suitable for packing materials, building materials, soft wood and hard wood
- Self-test and calibration function
- Replaceable test probes
- Data hold
- Low battery indication
- Automatic power-off

self-test cover (included)

SPECIFICATION

Measuring range	packing	6.0%~61.2%
	building	0.4%~31.3%
	soft wood	5.7%~56.1%
	hard wood	3.9%~35.3%
Accuracy		±2%
Self-test range		21.3%~22.3%
Storage environment		temperature: 0°C~40°C, humidity: <85%RH, no condensation
Operation environment		temperature: -10°C~50°C, humidity: <85%RH, no condensation
Power supply		rechargeable Li-ion battery
Dimensions (L×W×H)		167×67×27mm
Net weight		150g

STANDARD DELIVERY

Main unit	1 pc
Spare test probe	2 pcs

PERSONAL DOSIMETER
CODE 0523-PD12

VIDEO

- Detect X ray, γ ray radiation
- Measure radiation dose rate in real-time and record cumulative dose at the same time
- Adjustable dose rate alarm and dose alarm threshold
- Data stored in built-in memory will not lose after power off
- Alarm mode: warning sound, flash, vibration
- Auto screen-off and wake-up
- Low battery indication
- Language: English, Chinese

SPECIFICATION

Sensor	Geiger-Müller tube with energy compensation
Dose rate range	0.01μSv/h~10mSv/h
Dose range	0.00μSv~999.9Sv
Power supply	<5% (at 1mSv/h)
Sensitivity	>1.5cps/μSv/h (relative to ^{137}Cs)
Energy response	48keV~3.0MeV
Working environment	-10°C~50°C
Power	<33mW
Power supply	2×1.5V AAA batteries or USB-C
Dimensions (L×W×H)	98×70×43mm
Net weight	110g

STANDARD DELIVERY

Main unit	1 pc
1.5V AAA battery	2 pcs

EDDY CURRENT CONDUCTIVITY TESTER
CODE 0420-EL60

INSPECTION CERTIFICATE

DATA OUTPUT

VIDEO

- Measure conductivity (MS/m, %IACS) and resistivity (Ω·mm²/m) of non-ferromagnetic metals or alloys with eddy current phase detection
- With temperature compensation, even when the temperature of the calibration block and the material are different, test results can be automatically compensated
- Lift-off compensation function ensures accurate results when there are non-conductive layers such as coatings, dust, rough surfaces, etc., and reduces measurement error caused by operation as well
- Measure with high speed and efficiency, results show on screen after probe touch with the material in 1 second
- Data can be saved manually or automatically and exported to Excel with computer software
- Wear-resistant and heat-resistant probe
- Unit switch
- Display with backlight
- Language: English, Chinese, Japanese

SPECIFICATION

Conductivity	range	0.3MS/m~65MS/m or 0.51%IACS~112%IACS
	unit	MS/m, %IACS
	resolution	0.01 (<30MS/m or <30%IACS) 0.1 (30MS/m~65MS/m or 30%IACS~112%IACS)
	accuracy*	20°C: ±0.5%: 4.00MS/m~65.0MS/m or 6.90%IACS~112.0%IACS 0°C~40°C: ±(1.0%+1d): 0.30MS/m~4.00MS/m ±(1.0%+2d): 0.51%IACS~6.90%IACS ±1.0%: 4.00MS/m~65.0MS/m or 6.90%IACS~112.0%IACS
Resistivity	range	0.01538Ω·mm²/m~3.3333Ω·mm²/m
	unit	Ω·mm²/m
	resolution	0.00001 (<1.0000Ω·mm²/m) 0.0001 (1.0000~3.3333Ω·mm²/m)
Temperature	range	0°C~50°C
	resolution	0.1°C
	accuracy	±1.0°C
Test frequency		60kHz sinewave
Probe diameter		Ø14mm
Lift-off compensation		maximum 500μm
Storage capacity		16000 groups
Interface		USB, RS232 protocol
Calibration block		about 0.60MS/m, 4.10MS/m, 58.0MS/m refer to values marked on the supplied blocks
Operation environment		temperature: 5°C~45°C humidity: <95%RH, no condensation
Power supply		3.7V rechargeable Li-ion battery
Dimension		230×97×60mm
Net weight		370g

*d is resolution

calibration blocks
(included)

USB cable (included)

STANDARD DELIVERY

Main unit	1 pc
Probe (0420-TP01)	1 pc
Calibration block (0420-CB01)	3 pcs
USB cable	1 pc
AC/DC adapter	1 pc

DC TESLAMETERS

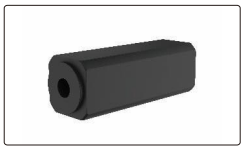
- Measure magnetic induction of DC magnetic field
- Directly display the N/S polarity of the measured magnetic field
- One-key zero function: eliminate the influence of zero drift before measurement
- Maximum value hold: record the maximum value of the changing magnetic field
- Unit switch between mT or G (1mT=10G)
- Auto ranging
- Built-in USB interface for data transmission
- Display with backlight
- Auto power off

0501-MA01

VIDEO

DATA OUTPUT

standard magnet (**optional**)



magnetic shielding cavity (**optional**)

SPECIFICATION

Code	0501-MA01	0501-MA05
Probe type*	radial probe	
Range	2000mT	
Resolution	0.01mT (0~200mT) 0.1mT (200mT~2000mT)	
Accuracy	±1.0%	±2.0% (≤1000mT) ±5.0% (1000mT~2000mT)
Temperature coefficient	±0.1%/K	
Zero drift	±0.5mT/h	
Interface	USB	
Power supply	3×1.5V AA batteries or USB	
Dimension (L×W×H)	165×90×40mm	
Net weight	350g	

* radial probe: suitable for measuring the surface magnetic field density of permanent magnets, DC constant magnetic field, etc.

STANDARD DELIVERY

Main unit	1 pc
Probe	1 pc
Battery (AA)	3 pcs

OPTIONAL ACCESSORY

Magnetic shielding cavity	0501-SHIELD
Standard magnet	0501-CT□□□, for verifying accuracy, not for calibration (□□□ is DC magnetic field specification, 100~600mT customizable)

AC/DC TESLAMETERS

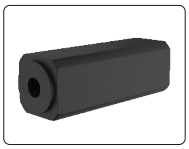
- Switch between DC or AC measurement mode
- Display N/S polarity of DC magnetic field
- Zero function: eliminate the influence of zero drift before measurement
- Maximum value hold: record the maximum value of the changing magnetic field
- Auto ranging
- Relative measurement mode
- Set upper and lower alarm limit
- Built-in USB interface for data transmission
- Display with backlight
- Auto power off

axial probe (**optional**)

0502-MC01

VIDEO

DATA OUTPUT



magnetic shielding cavity (**optional**)

standard magnet (**optional**)

SPECIFICATION

Code	0502-MC01	0502-MC02
Range	2500mT	
Resolution	0.001mT (<30mT) 0.01mT (30~300mT) 0.1mT (300~2500mT)	
Unit	mT, G, Oe, kA/m (1mT=10G=10Oe=0.8kA/m)	
Accuracy	DC: ±1.0% AC: ±5.0%	DC: ±2.0% AC: ±5.0%
Frequency range	DC, 40~500Hz	
Temperature coefficient	±0.1%/K	
Zero drift	±0.1mT/h	
Interface	USB	
Operation environment	temperature: 0°C~45°C; humidity: 20%~80%RH, non-condensing	
Storage environment	temperature: -20°C~70°C; humidity: <85%RH, non-condensing	
Power supply	3×1.5V AA batteries or USB	
Dimension (L×W×H)	165×90×40mm	
Net weight	350g	

STANDARD DELIVERY

Main unit	1 pc
Radial probe (0502-PR)	1 pc
Battery (AA)	3 pcs

OPTIONAL ACCESSORY

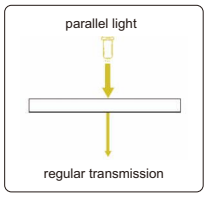
Axial probe	0502-PA
Magnetic shielding cavity	0501-SHIELD
Standard magnet	0501-CT□□□, for verifying accuracy, not for calibration (□□□ is DC magnetic field specification, 100~600mT customizable)

LIGHT TRANSMITTANCE METER
CODE 5804-LT21

VIDEO

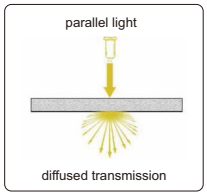
- Suitable for light transmittance testing of various “regular transmission materials”, such as building glasses, auto glasses, transparent films, plastic products, etc.
- With the design of parallel optical path of the light source and condensed light of the receiver, it can measure up to 100mm thickness
- Can measure the high transparent materials such as K9 glasses
- Two measuring modes, fixed base and handheld
- Conforming to CIE photopic luminosity function

regular transmission



when the light penetrates a flat and evenly textured transparent material, the light does not change its direction

diffused transmission



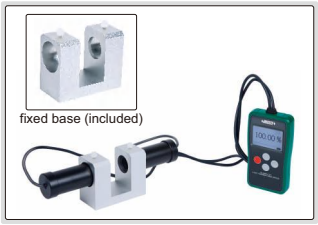
when the light penetrates a material with a rough surface or uneven texture, the light spreads out

SPECIFICATION

Optical source	380nm~760nm, conforming to CIE photopic luminosity function
Measuring range	0.001%~99.8%
Accuracy	±1%
Resolution	0.001% (0%~10%) , 0.01% (10%~100%)
Thickness to be measured	<100mm
Diameter to be measured	>10mm
Power supply	4×1.5V AAA batteries
Dimension	75×140×25mm
Net weight	634g

STANDARD DELIVERY

Main unit	1 pc
Transmitter	1 pc (connect to main unit)
Receiver	1 pc (connect to main unit)
Fixed base	1 pc
1.5V AAA battery	4 pcs



SALT SPRAY TEST CHAMBER
CODE SFT-S210R

CUSTOMIZABLE CHAMBER SIZE

COMPLY WITH ISO STANDARD SALT SPRAY TEST REQUIREMENT

VIDEO

- Using plastic precision nozzle and conical spray device, the salt spray drops evenly and rapidly, the nozzle has a long working life and does not crystallize
- The spraying time can be controlled internally without external time relay
- The flow rate of salt water and the pressure of compressed air are regulated by flow meter and pressure regulating valve to ensure uniform salt spray settlement
- Manual water adding system can automatically replenish when the water level is insufficient to ensure uninterrupted test

STANDARD DELIVERY

Main unit	1 pc
Sample holder	1 group
Sodium chloride NaCl	2 bottles
10L salt water preparation cup	1 pc
80cm² collection cup	2 pcs
50mL glass measure cylinder	2 pcs

OPTIONAL ACCESSORY

Nozzle	SFT-S210R-NOZZLE
Brine filter	SFT-S210R-FILTER
Reference samples	SFT-SAMPLE

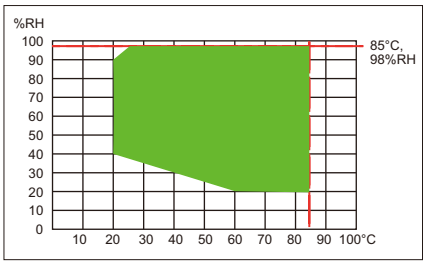
SPECIFICATION

Test condition	NSS (Neutral), AASS (Acid) test only
Chamber dimension (L×W×H)	900×600×500mm
Chamber volume	270L
Saline tank volume	25L
Chamber temperature	(NSS, AASS) test temperature: 35°C±1°C
Saturated barrel temperature	(NSS, AASS) test temperature: 47°C±1°C
Saline temperature	(NSS, AASS) test temperature: 35°C±1°C
Heat type	basic type: steam heat
Test fluid	NSS: pure water+NaCl (pH 6.5~7.2), AASS: pure water+NaCl+CH_3COOH (pH 3.0~3.3)
Compressed air pressure	0.2MPa
Power	2kW
Power supply	AC 220V, 1Ø, 50Hz
External dimension (L×W×H)	1460×910×1280mm
Net weight	108kg

DESKTOP TEMPERATURE AND HUMIDITY CHAMBER
CODE THT-Z158

VIDEO

temperature and humidity control range chart



- Table design, quiet and small
- Equipped with operation system with 7 inch touch screen controller
- Intelligent refrigeration and dehumidification system, it can save 30~45% of electricity compared with traditional machines
- Output excel data report through USB port

SPECIFICATION

Chamber dimension (L×W×H)		300×300×350mm
Chamber volume		30L
Temperature range		-40~120°C
Humidity range		20%RH~98%RH
Temperature deviation		±2.0°C
Temperature fluctuation		±0.5°C
Temperature uniformity		≤2.0°C
Humidity deviation		±3.0%RH (at 75%RH~98%RH), ±5.0%RH (at 20%RH~75%RH)
Humidity fluctuation		±3.0%RH
Humidity uniformity		≤5.0%RH (at 75%RH~98%RH), ≤7.0%RH (at 20%RH~75%RH)
Heating rate		1°C/min~3°C/min
Cooling rate		0.7°C/min~1°C/min
Operation environment	temperature	5~35°C
	humidity	≤85%RH
Material	case material	cold rolled steel plate+varnish
	chamber material	SUS#304 stainless steel
	thermal insulation material	polyurethane foam
Cooling system		air-cold compressor
Protector		compressor overload protection switch, refrigerant high pressure protection switch, ceramic fuse, water plate of water shortage protection switch, electromagnetic switch, air burn protection switch, alarm
Power supply		AC220V, 50/60Hz, 2kW
External dimension (L×W×H)		550×1050×850mm
Net weight		125kg

STANDARD DELIVERY

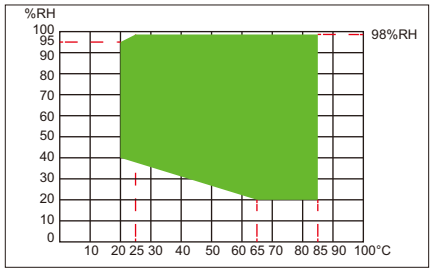
Main unit	1 pc
Test hole	1 pc
Shelf	2 pcs

TEMPERATURE AND HUMIDITY CHAMBER
CODE THT-D621

VIDEO

CUSTOMIZABLE

humidity control range diagram



THT-D621

- Suitable for automotive industry, electronic industry, electrical industry, material, aerospace, etc.
- Feature cold balance technology, saving 30% of electric energy and effectively reducing operational costs
- Automatic regulation of heating and cooling output via PID control
- Feature program editing function and power-off memory function, auto-resuming program execution after power restoration
- Multiple safety protections, such as leakage protection, overload protection, over-temperature protection, etc.
- Software is included: support remote control and data exporting

SPECIFICATION

Chamber dimension (L×W×H)	500×500×600mm
Chamber volume	150L
Temperature range*	-40°C~150°C
Humidity range	20%RH~98%RH
Temperature deviation	±2°C
Temperature fluctuation	±0.5°C
Temperature uniformity	≤2°C
Humidity deviation	±3%RH (>75%RH), ±5%RH (≤75%RH)
Humidity fluctuation	±3%RH
Humidity uniformity	≤5%RH (>75%RH), ≤7%RH (≤75%RH)
Heating rate	≥3°C/min (no-load)
Cooling rate	≥1°C/min (no-load)
Material	inside: stainless steel plate, outside: cold-rolled steel plate with powder coating
Cooling system	air-cooled
Operating environment	temperature: 5°C~30°C, humidity: ≤85%RH
Power	AC220V, 50Hz
Power supply	4.6kW
External dimension (L×W×H)	1020×1220×1500mm
Net weight	338kg

*Other temperature range can be customized

STANDARD DELIVERY

Main unit	1 pc
Sample holder	1 set

BENCHTOP ELECTRIC FORCED CONVECTION DRYING OVEN
CODE FCD-A102

VIDEO

SPECIFICATION

Temperature range	RT+10°C~200°C
Temperature resolution	0.1°C
Temperature deviation	±3°C
Temperature fluctuation	±1°C
Temperature uniformity	≤5°C
Timing range	0min~9999min
Material	outside: steel plate with powder coating; inside: stainless steel plate
Operating environment	5°C~40°C
Power supply	AC220V, 50Hz
Power	1090W
Chamber volume	52L
Chamber dimension (L×W×H)	420×350×350mm
External dimension (L×W×H)	720×585×520mm
Net weight	34kg

STANDARD DELIVERY

Main unit	1 pc
Sample holder	1 set

FCD-A102

- Suitable for electronic industry, biomedical industry, chemical industry and material, automotive industry, education and scientific research, etc.
- Stainless steel chamber with rounded corner design for easy cleaning
- Multi-layer tempered glass observation window for easy viewing
- Equipped with an air damper adjustment knob
- Features a forced convection system for rapid heating and uniform temperature distribution
- Intelligent temperature controller, provides precise and reliable temperature control, features timing and PID auto-tuning function
- Equipped with over-temperature alarm function to ensure samples safety

SEMIMICRO ELECTRONIC BALANCES

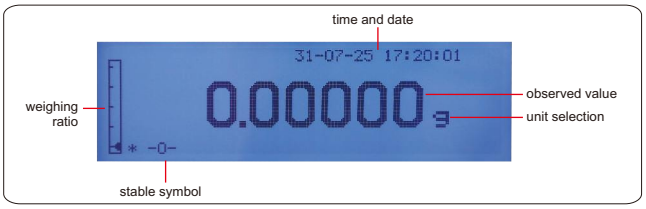
INSIZE PLUS

VIDEO

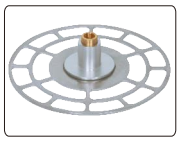
DATA OUTPUT | HIGH ACCURACY | INTERNAL CALIBRATION

- Downward-mounted electromagnetic sensor
- Aluminum alloy base, wind shield, three side glass sliding doors
- Zero-setting, weighing, subtracting tare value, counting
- Checking alarm, accumulation, animal scale, percentage display
- Peak (max.) and tracking mode
- Administrator permissions
- Recipe database: 99 recipes, up to 20 ingredients per recipe
- LCD display, with backlight
- Data output
- Automatic power off
- Unit: g, mg, ct, oz, ozt, dwt, mlb, GN, tj, gj, mo

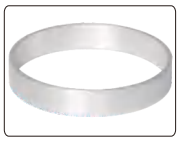
8313-62A



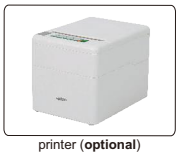
weighing test Interface



grid weighing pan (included)

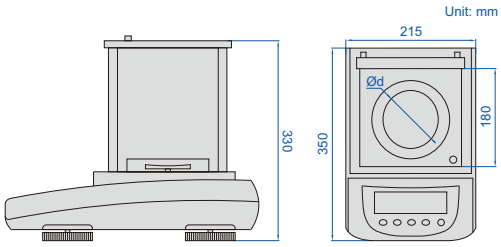


wind protection ring (included)



printer (**optional**)

portable ioniser (**optional**)



SPECIFICATION

Code	8313-42A	8313-62A
Calibration method	internal calibration	
Weighing capacity	42g	62g
Minimal load	1mg	1mg
Readability (d)	0.01mg	0.01mg
Repeatability	±0.03mg	
Linearity	±0.08mg	
Stabilization time	6s	
Dimension of pan (Ød)	Ø80mm	
Output	RS232	
Operation temperature	18~23°C	
Operation humidity	20~85%RH	
Power supply	power adapter (24V/1A)	
Dimension (L×W×H)	350×215×345mm	

STANDARD DELIVERY

Electronic balance	1 pc
Grid weighing pan	1 pc
Wind protection ring	1 pc
Gloves	1 pair

OPTIONAL ACCESSORY

RS232 cable	8311-CABLE*
Portable ioniser	8312-PI
Printer	8391-PRN10

*Used to connect with computers

ELECTRONIC ANALYTICAL BALANCES

INSIZE PLUS

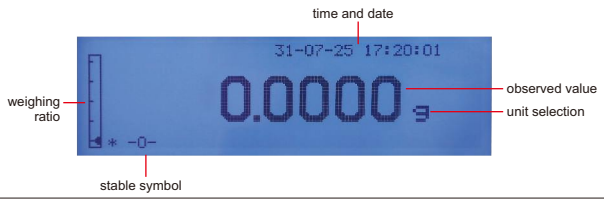
DATA OUTPUT

HIGH ACCURACY

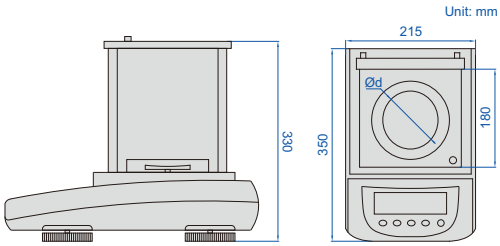
VIDEO

- Downward-mounted electromagnetic sensor
- Aluminum alloy base, wind shield, three side glass sliding doors
- Zero-setting, weighing, subtracting tare value, counting
- Checking alarm, accumulation, animal scale, percentage display
- Peak (max.) and tracking mode
- Administrator permissions
- Recipe database: 99 recipes, up to 20 ingredients per recipe
- LCD display, with backlight
- Data output
- Automatic power off
- Unit: g, mg, ct, oz, ozt, dwt, mlb, GN, tj, gj, mo

8312-220



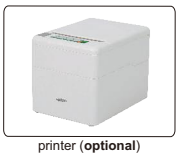
weighing test Interface



SPECIFICATION

Code	8312-120	8312-220	8312-120A	8312-220A	8312-310A
Calibration method	external calibration		internal calibration		
Weighing capacity	120g	220g	120g	220g	310g
Minimal load	10mg	10mg	10mg	10mg	10mg
Readability (d)	0.1mg	0.1mg	0.1mg	0.1mg	0.1mg
Repeatability	±0.1mg				
Linearity	±0.3mg				
Stabilization time	2.5s				
Dimension of pan (Ød)	Ø80mm				
Output	RS232				
Operation temperature	18~23°C				
Operation humidity	20~85%RH				
Power supply	power adapter (24V/1A)				
Dimension (L×W×H)	350×215×345mm				

portable ioniser **(optional)**



printer (**optional**)

OPTIONAL ACCESSORY

RS232 cable	8311-CABLE*
Portable ioniser	8312-PI
Printer	8391-PRN10

*Used to connect with computers

ELECTRONIC ANALYTICAL BALANCES (BASIC TYPE)

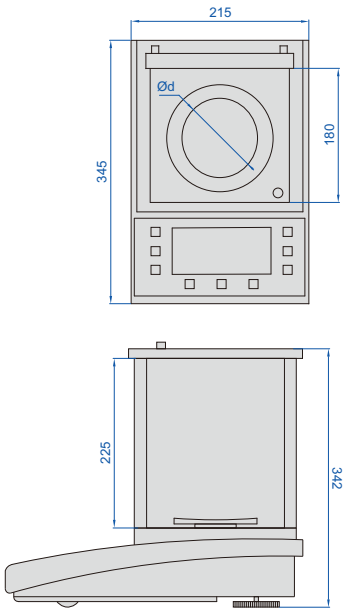
- Downward-mounted electromagnetic sensor
- Aluminum alloy base, wind shield, three side glass sliding doors
- Zero-setting, weighing, subtracting tare value, simple counting
- LCD display, with backlight
- Data output
- Unit: g, ct, oz, ozt

8311-220

class F1 calibration weight (included)

printer (**optional**)

Unit: mm



SPECIFICATION

Code	8311-60	8311-120	8311-220
Weighing capacity	60g	120g	220g
Minimal load	10mg	10mg	10mg
Readability (d)	0.1mg	0.1mg	0.1mg
Repeatability	±0.5mg		
Linearity	±0.5mg		
Stabilization time	2.5s		
Dimension of pan (Ød)	Ø80mm		
Output	RS232		
Operation temperature	10~30°C		
Operation humidity	20~85%RH		
Power supply	power adapter (12V/1A)		
Dimension (L×W×H)	345×215×342mm		

STANDARD DELIVERY

Main unit	1 pc
Calibration weight	1 pc

OPTIONAL ACCESSORY

RS232 cable	8311-CABLE*
Data output cable (keyboard format)	7302-8311
Wireless transmitter	7315-8311**
Printer	8391-PRN10

*Used to connect with computers
Receivers are needed: code **7315-2/3/6/7/8/9

ELECTRONIC PRECISION BALANCES

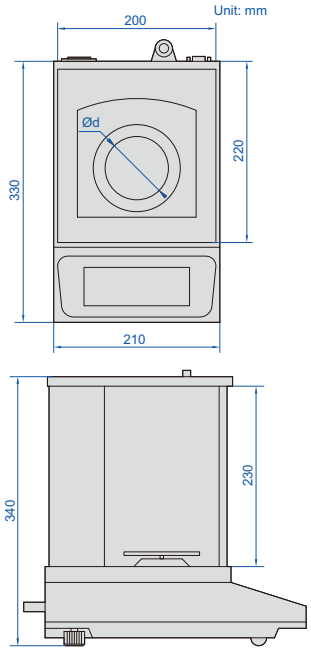
VIDEO

DATA OUTPUT | TOUCH SCREEN | INTERNAL CALIBRATION

class F1 calibration weight (included)

printer (**optional**)

8319-320



- Electromagnetic balanced sensor
- Built-in calibration weights, automatic internal calibration
- Aluminum alloy shell, wind shield, three side glass sliding doors
- Zero-setting, weighing, subtracting tare value, simple counting
- Animal scale, percentage display, density detection
- Large touchscreen display
- Data output
- Unit: g, ct, ozt, oz, GN, dwt, mg
- With a hook at the bottom

SPECIFICATION

Code	8319-220	8319-320	8319-520	8319-620	8319-1020	8319-1520
Weighing capacity	220g	320g	520g	620g	1020g	1520g
Minimal load	20mg	20mg	100mg	100mg	100mg	100mg
Readability (d)	1mg	1mg	1mg	1mg	1mg	1mg
Repeatability	±2mg	±2mg	±2mg	±2mg	±3mg	±3mg
Linearity	±3mg	±3mg	±3mg	±3mg	±4mg	±5mg
Stabilization time	2s		3s			5s
Dimension of pan (Ød)	Ø90mm				Ø120mm	
Output	RS232					
Operation temperature	15~30°C		18~23°C			
Operation humidity	40~80%RH		50~70%RH			
Power supply	220V, 50/60Hz					
Dimension (L×W×H)	330×210×340mm					

STANDARD DELIVERY

Main unit	1 pc
Calibration weight	1 pc

OPTIONAL ACCESSORY

RS232 cable	8301-CABLE*
Data output cable (keyboard format)	7302-8301
Wireless transmitter	7315-8301**
Printer	8391-PRN10

*Used to connect with computers
Receivers are needed: code **7315-2/3/6/7/8/9

ELECTRONIC PRECISION BALANCES

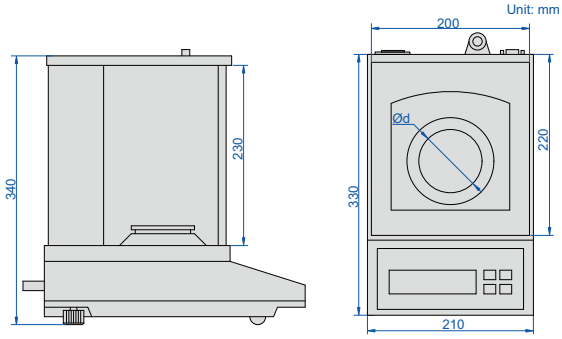
DATA OUTPUT

8303-520

class F1 calibration weight (included)

printer (**optional**)

- Electromagnetic balanced sensor
- Aluminum alloy shell, wind shield, three side glass sliding doors
- Zero-setting, weighing, subtracting tare value, simple counting
- LCD display, with backlight
- Data output
- Unit: g, ct, ozt, oz, GN, dwt, mg
- With a hook at the bottom



SPECIFICATION

Code	8303-220	8303-320	8303-520	8303-620	8303-1020
Weighing capacity	220g	320g	520g	620g	1020g
Minimal load	20mg	20mg	100mg	100mg	100mg
Readability (d)	1mg	1mg	1mg	1mg	1mg
Repeatability	±2mg	±2mg	±2mg	±2mg	±3mg
Linearity	±3mg	±3mg	±3mg	±3mg	±4mg
Stabilization time	2s		3s		
Dimension of pan (Ød)	Ø80mm				Ø120mm
Output	RS232				
Operation temperature	15~30°C		18~23°C		
Operation humidity	40~80%RH		50~70%RH		
Power supply	220V, 50/60Hz				
Dimension (L×W×H)	330×210×340mm				

STANDARD DELIVERY

Main unit	1 pc
Calibration weight	1 pc

OPTIONAL ACCESSORY

RS232 cable	8301-CABLE*
Data output cable (keyboard format)	7302-8301
Wireless transmitter	7315-8301**
Printer	8391-PRN10

*Used to connect with computers
Receivers are needed: code **7315-2/3/6/7/8/9

ELECTRONIC BALANCES (STANDARD TYPE)

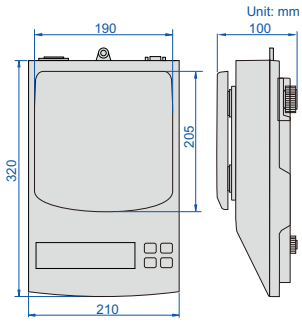
DATA OUTPUT

VIDEO

calibration weight (included in **8305-2000** and **8305-3000**)

printer (**optional**)

8305-5000



- Zero-setting, weighing, subtracting tare value, simple counting
- LCD display, with backlight
- Data output
- Unit: g, ct, ozt, oz, GN, dwt, lb, kg
- With a hook at the bottom

SPECIFICATION

Code	8305-2000	8305-3000	8305-5000	8305-6000
Weighing capacity	2kg	3kg	5kg	6kg
Minimal load	0.5g	0.5g	0.5g	0.5g
Readability (d)	0.01g	0.01g	0.01g	0.01g
Repeatability	±0.02g	±0.02g	±0.03g	±0.03g
Linearity	±0.03g	±0.04g	±0.05g	±0.05g
Stabilization time	3s		4s	
Dimension of pan	205×190mm			
Output	RS232			
Operation temperature	0~40°C			
Operation humidity	≤80%RH			
Power supply	220V, 50/60Hz			
Dimension (L×W×H)	320×210×100mm			

OPTIONAL ACCESSORY

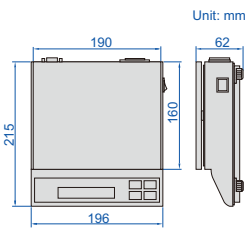
RS232 cable	8301-CABLE*
Data output cable (keyboard format)	7302-8301
Wireless transmitter	7315-8301**
Printer	8391-PRN10

*Used to connect with computers
Receivers are needed: code **7315-2/3/6/7/8/9

ELECTRONIC BALANCES

DATA OUTPUT

- Zero-setting, weighing, subtracting tare value, simple counting
- Data output
- Unit: g, ct, ozt



8301-3000

SPECIFICATION

Code	8301-300	8301-600	8301-1200	8301-3000	8301-6000
Weighing capacity	300g	600g	1200g	3000g	6000g
Minimal load	0.2g	0.2g	0.5g	2g	2g
Readability (d)	0.01g	0.01g	0.01g	0.1g	0.1g
Repeatability	±0.01g	±0.01g	±0.02g	±0.1g	±0.2g
Linearity	±0.02g	±0.02g	±0.03g	±0.2g	±0.4g
Stabilization time	2s		3s	2s	4s
Dimension of pan	Ø135mm			190×160mm	
Output	RS232				
Operation temperature	0~40°C				
Operation humidity	≤80%RH				
Power supply	220V, 50/60Hz				
Dimension (L×W×H)	215×196×62mm				

calibration weight (included in **8301-300**, **8301-600** and **8301-1200**)

printer (**optional**)

OPTIONAL ACCESSORY

RS232 cable	8301-CABLE*
Data output cable (keyboard format)	7302-8301
Wireless transmitter	7315-8301**
Printer	8391-PRN10

*Used to connect with computers
Receivers are needed: code **7315-2/3/6/7/8/9

windshield (included in **8301-300**, **8301-600** and **8301-1200**)

INDUSTRIAL ELECTRONIC BALANCES (BASIC TYPE)

POPULAR MODEL

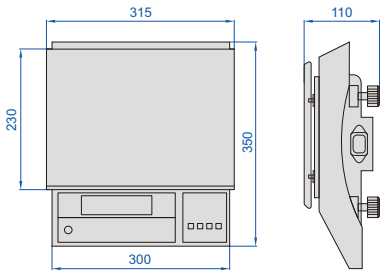
VIDEO

printer (**optional**)

8306-20AD

- Double weighing pan in 201 stainless steel and plastic
- Zero-setting, weighing, subtracting tare value, simple counting
- LCD display, with backlight
- Unit: g, lb, ct, oz

Unit: mm



SPECIFICATION

Dimension of pan	315×230mm
Operation temperature	-10~40°C
Operation humidity	≤85%RH
Power supply	rechargeable lead acid battery (6V/4Ah)
Dimension (L×W×H)	350×315×110mm

Code	Weighing capacity	Minimal load	Readability (d)	Repeatability	Linearity	Stabilization time	Output
8306-10	10kg	20g	1g	2g	±2g	2s	no
8306-15	15kg	20g	1g	2g	±4g	2s	
8306-20	20kg	20g	1g	2g	±5g	2s	
8306-30	30kg	20g	1g	3g	±5g	2s	
8306-5A	5kg	5g	0.1g	0.2g	±0.5g	2s	
8306-10A	10kg	5g	0.1g	0.2g	m≤5kg: ±0.5g; m>5kg: ±0.6g	3s	
8306-15A	15kg	5g	0.1g	0.3g	m≤5kg: ±0.5g; m>5kg: ±0.6g	3s	
8306-20A	20kg	5g	0.1g	0.3g	m≤5kg: ±0.5g; m>5kg: ±0.8g	4s	
8306-10D	10kg	20g	1g	2g	±2g	2s	RS232
8306-15D	15kg	20g	1g	2g	±4g	2s	
8306-20D	20kg	20g	1g	2g	±5g	2s	
8306-30D	30kg	20g	1g	3g	±5g	2s	
8306-5AD	5kg	5g	0.1g	0.2g	±0.5g	2s	
8306-10AD	10kg	5g	0.1g	0.2g	m≤5kg: ±0.5g; m>5kg: ±0.6g	3s	
8306-15AD	15kg	5g	0.1g	0.3g	m≤5kg: ±0.5g; m>5kg: ±0.6g	3s	
8306-20AD	20kg	5g	0.1g	0.3g	m≤5kg: ±0.5g; m>5kg: ±0.8g	4s	

OPTIONAL ACCESSORY (for scales with RS232)

RS232 cable	**8306-CABLE***
Printer	**8391-PRN10**

*Used to connect with computers

INDUSTRIAL ELECTRONIC BALANCES

DATA OUTPUT

VIDEO

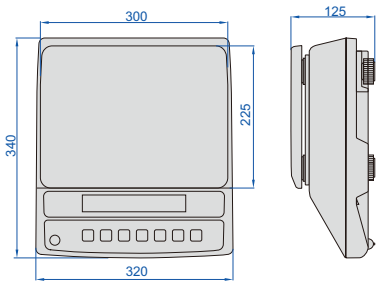
alarm light (**optional**)

printer (**optional**)

8307-15K

- Double weighing pan in 304 stainless steel and plastic
- Zero-setting, weighing, subtracting tare value, simple counting
- Checking alarm, accumulation, percentage display
- LCD display, with backlight
- Data output
- Automatic power off
- Unit: kg, lb, g, oz, t(ola)

Unit: mm



SPECIFICATION

Dimension of pan	300×225mm
Output	RS232
Operation temperature	-10~40°C
Operation humidity	30~80%RH
Power supply	rechargeable lead acid battery (6V/4Ah)
Dimension (L×W×H)	340×320×125mm

Code	Weighing capacity	Minimal load	Readability (d)	Repeatability	Linearity	Stabilization time
8307-15K	15kg	5g	0.1g	±0.3g	m≤5kg: ±0.4g; m>5kg: ±0.7g	3s
8307-30K	30kg	10g	0.2g	±0.2g	m≤5kg: ±0.4g; m>5kg: ±0.6g	3s
8307-6KA	6kg	5g	0.1g	±0.2g	±0.3g	2s
8307-15KA	15kg	10g	0.2g	±0.2g	±0.4g	2s
8307-3KB	3kg	2g	0.1g	±0.1g	±0.3g	2s
8307-6KB	6kg	10g	0.2g	±0.2g	±0.4g	2s
8307-30KB	30kg	20g	1g	±1g	±3g	2s

OPTIONAL ACCESSORY

Data output cable (keyboard format)	**7302-8001**
Wireless transmitter	**7315-8001***
Printer	**8391-PRN10**
Alarm light	**8001-ALARM**

*Receivers are needed: code **7315-2/3/6/7/8/9**

INDUSTRIAL ELECTRONIC BALANCES

VIDEO

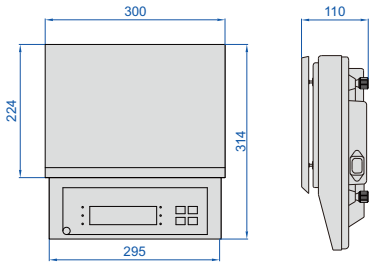
DATA OUTPUT

printer (**optional**)

8308-30KB

- Double weighing pan in 304 stainless steel and plastic
- Zero-setting, weighing, subtracting tare value, simple counting
- Data output
- Unit: kg, lb

Unit: mm



SPECIFICATION

Dimension of pan	300×224mm
Output	RS232
Operation temperature	0~40°C
Operation humidity	≤80%RH
Power supply	Input voltage: 220V, rechargeable lead acid battery (6V/4Ah)
Dimension (L×W×H)	314×300×110mm

Code	Weighing capacity	Minimal load	Readability (d)	Repeatability	Linearity	Stabilization time
8308-3K	3kg	2g	0.1g	±0.1g	±0.2g	2s
8308-6K	6kg	2g	0.1g	±0.2g	±0.3g	3s
8308-10K	10kg	20g	1g	±1g	±1g	3s
8308-15K	15kg	25g	0.5g	±0.5g	±0.5g	3s
8308-20K	20kg	20g	1g	±1g	±2g	3s
8308-30K	30kg	20g	1g	±1g	±2g	3s
8308-3KA	3kg	10g	0.5g	±0.5g	±0.5g	3s
8308-6KA	6kg	10g	0.5g	±0.5g	±0.5g	3s
8308-15KA	15kg	20g	1g	±1g	±2g	3s
8308-30KA	30kg	100g	5g	±5g	±5g	3s
8308-10KB	10kg	5g	0.1g	±0.1g	±0.3g	3s
8308-20KB	20kg	5g	0.1g	±0.2g	±0.4g	4s
8308-30KB	30kg	5g	0.1g	±0.2g	±0.5g	5s

OPTIONAL ACCESSORY

RS232 cable	**8301-CABLE***
Data output cable (keyboard format)	**7302-8301**
Wireless transmitter	**7315-8301****
Printer	**8391-PRN10**

*Used to connect with computers

Receivers are needed: code **7315-2/3/6/7/8/9

INDUSTRIAL ELECTRONIC BALANCES (ADVANCED TYPE)

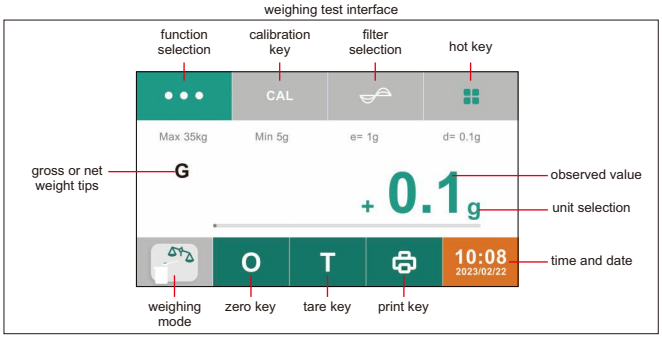
VIDEO

CAN BE CUSTOMIZED | TOUCH SCREEN | HIGH ACCURACY | DATA OUTPUT

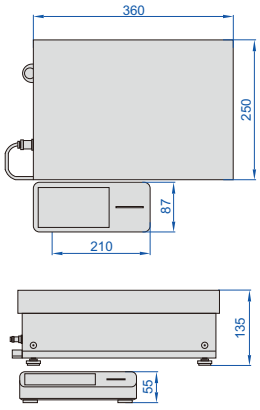
- Electromagnetic balanced sensor
- Compensates for zero stability and weighing accuracy by loading accurately at multiple temperature points
- 304 stainless steel weighing pan, acid and corrosion resistant
- Zero-setting, weighing, subtracting tare value
- Administrator permissions
- Split-type touchscreen display
- Data output
- Manual screen off, screen saver
- Unit: g, kg, lb, ct

8309-35

weighing test interface



Unit: mm



SPECIFICATION

Dimension of pan	360×250mm
Output	DB9, Type-C, Rs485
Operation temperature	compatible with SBI (RS232) and SICS communication protocols
Operation humidity	10~30°C
Power supply	30~80%RH
Dimension (L×W×H)	power adapter (5V/2A)

Code	Weighing capacity	Minimal load	Readability (d)	Repeatability	Linearity	Stabilization time	Calibration method	Weight of calibration
8309-16	16kg	5g	0.1g	±0.1g	±0.2g	1.5s	external calibration	10kg
8309-20	20kg	5g	0.1g	±0.1g	±0.2g	2s		
8309-30	30kg	5g	0.1g	±0.2g	±0.3g	2s		20kg
8309-35	35kg	5g	0.1g	±0.2g	±0.3g	3s		
8309-16A	16kg	5g	0.05g	±0.05g	±0.15g	2s		10kg
8309-20A	20kg	5g	0.05g	±0.05g	±0.15g	2s		
8309-30A	30kg	5g	0.05g	±0.1g	±0.25g	3s		20kg
8309-35A	35kg	5g	0.05g	±0.1g	±0.25g	4s		

printer (**optional**)

charge pal (**optional**)

Measurement functions:

Weighing	This application determines the weight of the object to be weighed within the specific weighing range of the device
Mixing	The application allows up to 99 ingredients for a mixture or recipe to be placed sequentially in a container. After each placement of an ingredient, the balance will automatically tare the weight and can display the individual or total weight of the ingredients
Statistic	The application can save up to 99 weighing values and calculated values, and perform statistical evaluations
Component	The application can sum up to 99 weighing values, can weigh components in different containers, and can tare each container before weighing each component
Density	The application can determine the density of solid materials based on the buoyancy method (**powder density cannot be tested, no density components are supplied as standard**)
Percentage	This application allows the determination of the percentage or percentage difference of the weighed object based on a reference weight
Transition	The application can multiply the weighing value with a customizable coefficient to obtain a converted measurement, the last entered coefficient is saved when the power supply is interrupted
Animal weighing	The application is suitable for moving weights (e.g. live animals) and for weighing in unstable environments, where a measuring cycle with a defined number of measurements is performed automatically for each object to be weighed, the average value is determined from the individual measurements and displayed as a result
Check weighing	The application checks that the weighing value is within the specified upper and lower limits and determines the test result, allowing weighing of a specific rated weight
Peak holding	This application determines the maximum weighing value (peak value) of a sample and displays the value for up to 5 seconds after the balance has been unloaded
Counting	The application counts almost identical piece weights by comparing them to a reference sample

STANDARD DELIVERY

Main unit	1 pc
RS232 cable*	1 pc
Touch screen indicator	1 pc

*Used to connect with computers

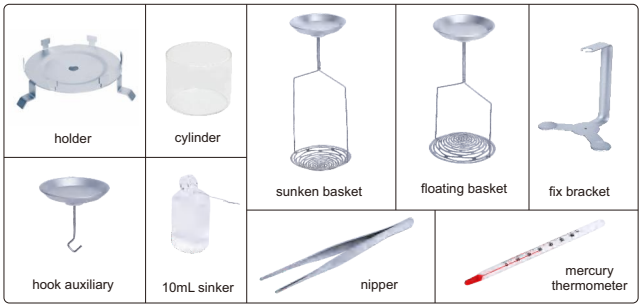
OPTIONAL ACCESSORY

Printer	**8309-PRINTER**
Charge pal	**1155-5-POB**

ELECTRONIC DENSITY BALANCES

INTERNAL CALIBRATION | TOUCH SCREEN | DATA OUTPUT | VIDEO

density accessories (included)

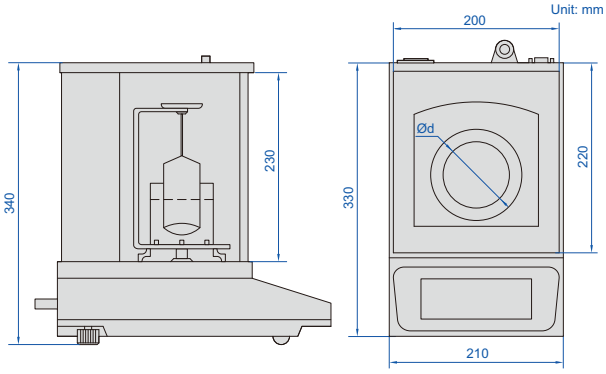


8102-320

- Electromagnetic balanced sensor
- Built-in calibration weights, automatic internal calibration
- Aluminum alloy shell, wind shield, three side glass sliding doors
- Suitable for measuring the density of solids and liquids
- Zero-setting, weighing, subtracting tare value, simple counting
- Animal scale, percentage display
- Large touchscreen display
- Data output
- Unit: g, ct, ozt, oz, GN, dwt, mg
- With a hook at the bottom

class F1 calibration weight (included)

printer (**optional**)



SPECIFICATION

Code	8102-220	8102-320	8102-520	8102-620	8102-1020	8102-1520
Weighing capacity	220g	320g	520g	620g	1020g	1520g
Minimal load	20mg	20mg	100mg	100mg	100mg	100mg
Readability (d)	1mg	1mg	1mg	1mg	1mg	1mg
Repeatability	±2mg	±2mg	±2mg	±2mg	±3mg	±3mg
Linearity	±3mg	±3mg	±3mg	±3mg	±4mg	±5mg
Stabilization time	2s		3s		5s	
Dimension of pan (Ød)	Ø90mm				Ø120mm	
Output	RS232					
Operation temperature	15~30°C		18~23°C			
Operation humidity	40~80%RH		50~70%RH			
Power supply	220V, 50/60Hz					
Dimension (L×W×H)	330×210×340mm					

STANDARD DELIVERY

Main unit	1 pc
Calibration weight	1 pc
Density accessories	1 set

OPTIONAL ACCESSORY

RS232 cable	8301-CABLE*
Data output cable (keyboard format)	7302-8301
Wireless transmitter	7315-8301**
Printer	8391-PRN10
Infrared and penetration thermometer	0321-IT42

*Used to connect with computers
Receivers are needed: code **7315-2/3/6/7/8/9

MOISTURE ANALYZERS

HEATING SOURCE: HALOGEN LAMP

DATA OUTPUT

VIDEO

- High sensitivity temperature and humidity sensor
- Ring halogen lamp heating evenly, shorten drying time
- Heating time and temperature are adjustable
- LCD display, with backlight
- Data output
- Unit: g, MC% (moisture content), DC% (dryness content), AD% (dryness ratio), AM% (moisture regain)

8701-RM30

accessory (included)

appearance

SPECIFICATION

Code		8701-RM20	8701-RM30
Weighing capacity		120g	120g
Readability (d)		5mg	1mg
Moisture readability		0.01%	0.01%
Repeatability for moisture	2g sample	±0.2%	±0.1%
	10g sample	±0.1%	±0.05%
Heating source		halogen lamp	
Stabilization time		2.5s	
Dimension of pan		Ø90mm	
Range for heating temperature		60~200°C	
Operation temperature		13~25°C	
Heating mode		standard heating, step heating, rapid heating	
Shutdown mode		automatic shutdown, manual shutdown, timed shutdown	
Output		RS232	
Power supply		220V, 50/60Hz	
Dimension (L×W×H)		330×210×340mm	

STANDARD DELIVERY

Main unit	1 pc
Calibration weight	1 pc
Triangular support	1 pc
Pan support	1 pc
Wind deflector	1 pc
Stainless steel sample tray	2 pcs

OPTIONAL ACCESSORY

RS232 cable	8304-CABLE *
Printer	8303-PRINTER
Aluminum sample tray (50 pcs)	8702-ALP
Test paper (50 pcs)	8702-PAPER
Stainless steel sample tray (1 pc)	8701-SSP

*Used to connect with computers

INFRARED MOISTURE ANALYZER
CODE 8702-110

HEATINGSOURCE: INFRARED LAMP | DATA OUTPUT | HIGH ACCURACY

VIDEO

- Cast aluminium housing, multi-layer stainless steel heating chamber
- Radiation-proof, interference-resistant
- Capable of storing multiple drying process sequences
- Heating time and temperature are adjustable
- LCD display, with backlight
- Data output
- Unit: g, MC% (moisture content), DC% (dryness content)

8702-110

accessory (included)

printer **(optional)**

appearance

SPECIFICATION

Weighing capacity		110g
Resolution (d)		1mg
Moisture readability		0.01%
Repeatability for moisture	2g sample	±0.06%
	10g sample	±0.2%
Heating source		infrared lamp
Temperature sensor		high-precision thermoresistors
Stabilization time		2.5s
Dimension of pan		Ø90 mm
Range for heating temperature		40~160°C
Operation temperature		15~30°C
Heating mode		standard heating, rapid heating, gentle heating
Shutdown mode		automatic shutdown, manual shutdown, timed shutdown
Output		RS232
Power supply		220V, 50/60Hz
Dimension (L×W×H)		365×235×185mm

STANDARD DELIVERY

Main unit	1 pc
Calibration weight	1 pc
Triangular support	1 pc
Pan support	1 pc
Wind deflector	1 pc
Aluminum sample tray	50 pcs
Test paper	50 pcs

OPTIONAL ACCESSORY

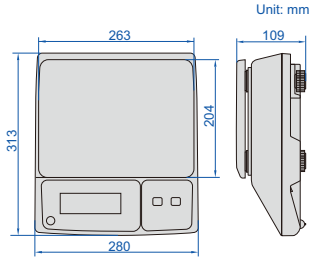
RS232 cable	8306-CABLE *
Printer	8306-PRINTER
Thermocouple thermometers	0326-CT31
Aluminum sample tray (50 pcs)	8702-ALP
Test paper (50 pcs)	8702-PAPER

*Used to connect with computers

WEIGHING SCALES (OIML CERTIFICATE)

- LCD display, with backlight
- Zero-setting, subtracting tare value
- Overload alarm
- Automatic power off
- OIML certificate (No. 0200-NAWI-04601)

8002-30M



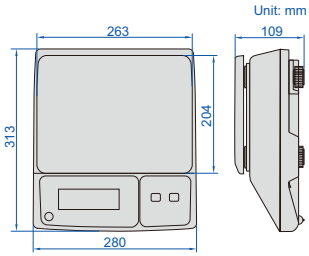
SPECIFICATION

Code	8002-6M	8002-15M	8002-30M
Maximum weighing	3/6kg	6/15kg	15/30kg
Minimum weighing	20g	40g	100g
Resolution (d)	1/2g	2/5g	5/10g
Verification interval (e)	2g	5g	10g
Accuracy (m is load)	m≤3kg: ±1g 3kg<m≤6kg: ±2g	m≤6kg: ±2g 6kg<m≤15kg: ±5g	m≤15kg: ±5g 15kg<m≤30kg: ±10g
Operation temperature	-10~40°C		
Power supply	rechargeable battery (6V/3.2Ah), power adapter (12V/500mA)		
Dimensions of pan	263×204mm		

WEIGHING SCALES

- Zero-setting, weighing, subtracting tare value
- LCD display, with backlight
- Automatic power off
- Unit: kg, lb

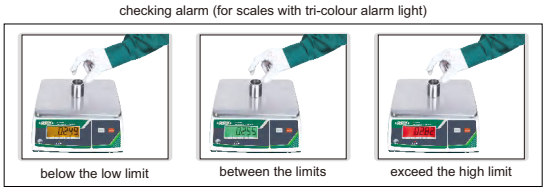
8001-6



SPECIFICATION

Code	8001-6	8001-15	8001-30
Weighing capacity	6kg	15kg	30kg
Minimal load	4g	10g	20g
Readability (d)	0.2g	0.5g	1g
Repeatability	±0.4g	±0.5g	±1g
Linearity	±1g	±1.5g	±3g
Stabilization time	1.5s		
Dimension of pan	263×204mm		
Checking alarm	tri-colour alarm light		
Operation temperature	-10~40°C		
Operation humidity	≤85%RH		
Power supply	rechargeable lead acid battery (6V/3.2Ah)		
Dimension (L×W×H)	313×280×109mm		

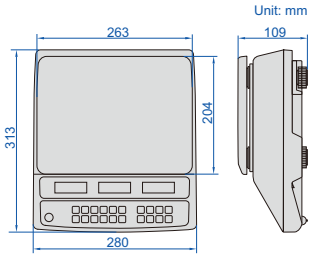
checking alarm (for scales with tri-colour alarm light)



COUNTING SCALES

- Zero-setting, weighing, subtracting tare value
- Accumulation, counting
- Upper and lower limit alarms: quantity, weight
- LCD display, with backlight
- Unit: kg, g, lb, tj, hj, lb-oz

8101-30



SPECIFICATION

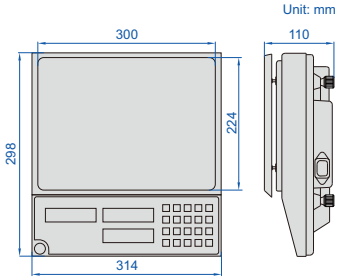
Code	8101-6	8101-15	8101-30
Weighing capacity	6kg	15kg	30kg
Minimal load	4g	10g	20g
Readability (d)	0.2g	0.5g	1g
Repeatability	±0.4g	±0.5g	±1g
Linearity	±1g	±1.5g	±3g
Stabilization time	2s		
Dimension of pan	263×204mm		
Operation temperature	-10~40°C		
Operation humidity	≤85%RH		
Power supply	rechargeable lead acid battery (6V/3.2Ah)		
Dimension (L×W×H)	313×280×109mm		

COUNTING SCALES

DATA OUTPUT

- Double weighing pan in 304 stainless steel and plastic
- Zero-setting, weighing, subtracting tare value, counting
- Checking alarm, accumulation
- Data output
- Unit: kg, lb

8107-3



VIDEO

printer (**optional**)

SPECIFICATION

Code	8107-3	8107-6	8107-15	8107-30
Weighing capacity	3kg	6kg	15kg	30kg
Minimal load	2g	4g	25g	20g
Readability (d)	0.1g	0.2g	0.5g	1g
Repeatability	±0.1g	±0.2g	±0.5g	±1g
Linearity	±0.3g	±0.4g	±1g	±2g
Stabilization time	2s			
Dimension of pan	300×224mm			
Output	RS232			
Operation temperature	0~40°C			
Operation humidity	≤80%RH			
Power supply	Input voltage: 220V, rechargeable lead acid battery (6V/4Ah)			
Dimension (L×W×H)	314×298×110mm			

OPTIONAL ACCESSORY

RS232 cable	8301-CABLE *
Printer	8303-PRINTER

*Used to connect with computers

MULTI-FUNCTIONAL SCALES

VIDEO

DATA OUTPUT

TOUCH SCREEN

- Zero-setting, weighing, subtracting tare value, counting
- Checking alarm, accumulation, percentage display
- Upper and lower limit alarms: quantity, percentage, weight
- Peak (max.) and tracking mode
- Administrator permissions
- 7-inch resistive touch color screen
- Data output
- Unit: kg, g, lb, oz, t

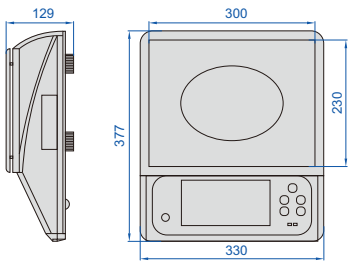
8005-30

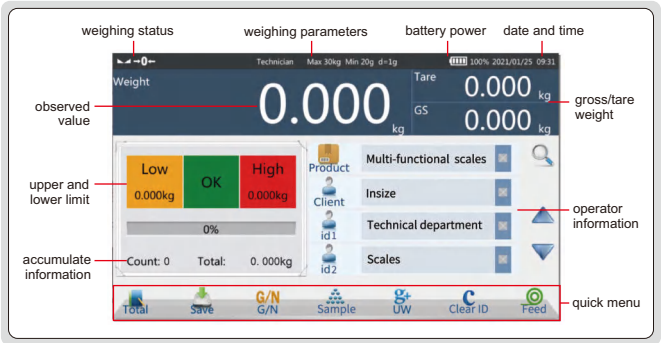
alarm light (**optional**)

scanner (**optional**)

printer (**optional**)

Unit: mm





SPECIFICATION

Code	8005-3	8005-6	8005-15	8005-30
Weighing capacity	3kg	6kg	15kg	30kg
Minimal load	2g	4g	10g	20g
Readability (d)	0.1g	0.2g	0.5g	1g
Repeatability	±0.2g	±0.4g	±0.5g	±1g
Linearity	±0.5g	±1g	±1g	±3g
Stabilization time	3s			
Dimension of pan	300×230mm			
Output	RS232, USB, RJ45			
Operation temperature	0~40°C			
Operation humidity	≤80%RH			
Power supply	7.4V rechargeable Li-ion battery			
Dimension (L×W×H)	377×330×129mm			

OPTIONAL ACCESSORY

Printer	8303-PRINTER
Scanner	7328-SCAN
Alarm light	8001-ALARM

WEIGHING SCALES (ECONOMIC TYPE)

ATTENTION: LOW ACCURACY

VIDEO

- Zero-setting, weighing, subtracting tare value
- Unit: g, oz, lb, tl

SPECIFICATION

Code	8003-3	8003-6	8003-10
Weighing capacity	3kg	6kg	10kg
Minimal load	2g	10g	20g
Readability (d)	0.1g	0.5g	1g
Repeatability	±0.2g	±1g	±3g
Linearity	±0.5g	±2.5g	±5g
Stabilization time	4s		
Dimension of pan	157×157mm		
Operation temperature	5~35°C		
Operation humidity	≤80%RH		
Power supply	2xAAA batteries, power adapter		
Dimension (L×W×H)	160×225×45mm		

8003-3

ELECTRONIC POCKET SCALE (ECONOMIC TYPE) CODE 8602-200

ATTENTION: LOW ACCURACY

- Zero-setting, weighing, subtracting tare value
- LCD display, with backlight
- Automatic power off
- Unit: g, oz, dwt, ozt

SPECIFICATION

Weighing capacity	200g
Minimal load	0.2g
Readability (d)	0.02g
Repeatability	±0.06g
Linearity	±0.1g
Stabilization time	3s
Dimension of pan	64×55mm
Operation temperature	-10~40°C
Operation humidity	≤80%RH
Power supply	2×CR2032 batteries
Dimension (L×W×H)	120×70×17mm

8602-200

use of pan

BUILT-IN BLUETOOTH FOLDING SCALE CODE 8605-60

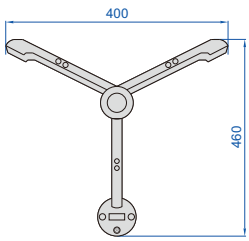
ATTENTION: LOW ACCURACY | DATA OUTPUT | BUILT-IN BLUETOOTH

VIDEO

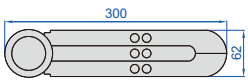
- Zero-setting, weighing, subtracting tare value
- Voice to report the result
- Unit: kg, g

8605-60

Unit: mm



foldable and portable



SPECIFICATION

Weighing capacity	60kg
Minimal load	400g
Readability (d)	20g
Repeatability	±40g
Linearity	±100g
Stabilization time	2s
Output	bluetooth
Operation temperature	-10~40°C
Operation humidity	20~90%RH
Power supply	3.7V rechargeable Li-ion battery
Dimension (L×W×H)	300×62×50mm

PLATFORM SCALES (BASIC TYPE)

DATA OUTPUT

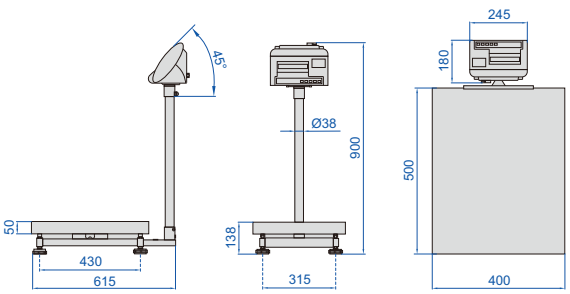
CAN BE CUSTOMIZED

VIDEO

printer (**optional**)

8508-61KA

Unit: mm



- Zero-setting, weighing, subtracting tare value, simple counting
- Data output
- Unit: kg, lb

SPECIFICATION

Dimension of pan	500×400mm
Output	RS232
Material	platform: stainless steel, base: carbon steel
Operation temperature	-10~40°C
Operation humidity	30~80%RH
Power supply	rechargeable lead acid battery (6V/4Ah)
Dimension (L×W×H)	580×400×900mm

Code	Weighing capacity	Minimal load	Readability (d)	Repeatability	Linearity	Stabilization time
8508-61KA	61kg	20g	1g	±2g	±3g	3s
8508-110KA	110kg	50g	1g	±2g	±3g	
8508-160KA	160kg	50g	1g	±3g	±5g	
8508-61K	61kg	200g	10g	±20g	±30g	2s
8508-110K	110kg	200g	10g	±20g	±30g	
8508-160K	160kg	200g	10g	±20g	±30g	
8508-210K	210kg	200g	10g	±20g	±30g	
8508-310K	310kg	200g	10g	±30g	±50g	

OPTIONAL ACCESSORY

RS232 cable	**8306-CABLE***
Printer	**8391-PRN10**

*Used to connect with computers

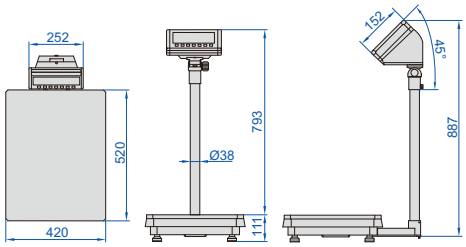
PLATFORM SCALES

DATA OUTPUT | CAN BE CUSTOMIZED

- Zero-setting, weighing, subtracting tare value, simple counting
- Checking alarm, accumulation, animal scale, keyboard lock
- LCD display, with backlight
- Data output
- Automatic power off
- Unit: kg, lb, g, oz, t(ola)

8501-AL150

Unit: mm



printer (**optional**)

alarm light (**optional**)

SPECIFICATION

Code	8501-AL60	8501-AL150	8501-AL300
Weighing capacity	60kg	150kg	300kg
Minimal load	100g	200g	400g
Readability (d)	5g	10g	20g
Repeatability	±5g	±10g	±20g
Linearity	±10g	±20g	±40g
Stabilization time	3s		
Dimension of pan	520×420mm		
Material	platform: stainless steel, base: die-cast aluminum		
Output	RS232		
Operation temperature	-10~40°C		
Operation humidity	≤80%RH		
Power supply	rechargeable lead acid battery (6V/4Ah)		
Dimension (L×W×H)	520×420×887mm		

OPTIONAL ACCESSORY

Data output cable (keyboard format)	7302-8001
Wireless transmitter	7315-8001*
Printer	8391-PRN10
Alarm light	8001-ALARM

*Receivers are needed: code **7315-2/3/6/7/8/9**

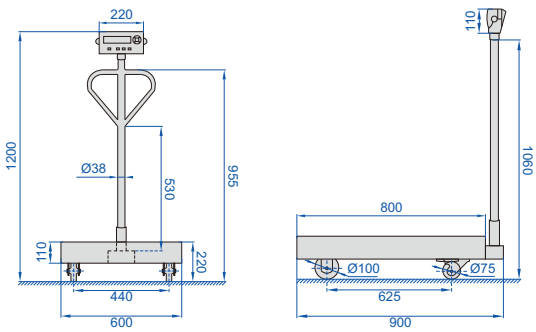
SCALE CARTS

ATTENTION: DO NOT MOVE DURING WEIGHING | CAN BE CUSTOMIZED | DATA OUTPUT

VIDEO

- Zero-setting, weighing, subtracting tare value, simple counting
- Checking alarm, accumulation, animal scale
- Upper and lower limit alarms: quantity, weight
- Resistant rubber with cloverleaf handle-bar
- LCD display, with backlight
- Data output
- Automatic power off
- Unit: kg, lb, g, oz

Unit: mm



8802-300

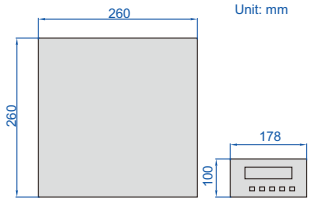
SPECIFICATION

Material of platform	201 stainless steel
Material of indicator	ABS plastic
Output	RS232
Operation temperature	-10~40°C
Operation humidity	≤85%RH
Power supply	7.4V rechargeable Li-ion battery
Dimension (L×W×H)	900×600×1200mm

Code	Weighing capacity	Minimal load	Readability (d)	Repeatability	Linearity	Dimension of platform (L×W)
8802-300	300kg	1kg	50g	±100g	±250g	800×600mm
8802-600	600kg	2kg	100g	±200g	±500g	

PARCEL SCALES

8502-30



- Zero-setting, weighing, subtracting tare value, simple counting
- Automatic power off
- Unit: kg, lb

OPTIONAL ACCESSORY

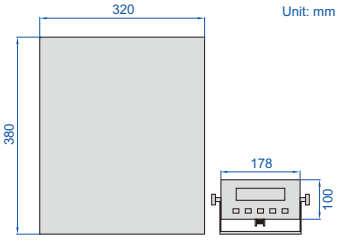
Cast iron weights	**8913**

SPECIFICATION

Code	**8502-30**	**8502-50**	**8502-60**	**8502-75**
Weighing capacity	30kg	50kg	60kg	75kg
Minimal load	2g	20g	20g	20g
Resolution (d)	m≤3kg: 0.1g; 3kg<m≤30kg: 1g	1g	1kg	1g
Repeatability	m≤3kg: ±0.1g; m≥3kg: ±1g	±2g	±2g	±2g
Linearity	m≤3kg: ±0.2g; m≥3kg: ±2g	±3g	±3g	±4g
Stabilization time	2s			
Dimension of pan	260×260mm			
Material	platform: ABS plastic, base: die-cast aluminum			
Operation temperature	5~35°C			
Operation humidity	30~80%RH			
Power supply	power adapter (6V/300mA) or 4×1.5V AA batteries			
Dimension (L×W×H)	260×260×110mm			

PARCEL SCALES

8503-30



- Zero-setting, weighing, subtracting tare value, simple counting
- LCD display, with backlight
- Automatic power off
- Unit: kg, lb

OPTIONAL ACCESSORY

Cast iron weights	**8913**

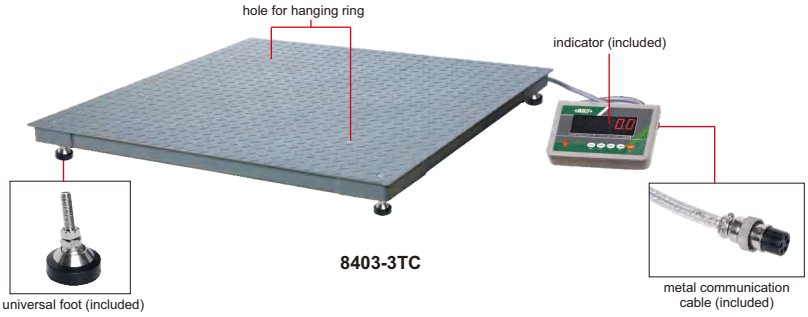
SPECIFICATION

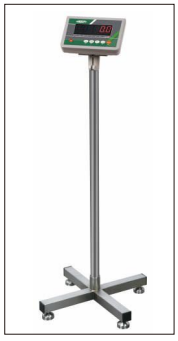
Code	**8503-30**	**8503-60**	**8503-120**	**8503-200**
Weighing capacity	30kg	60kg	120kg	200kg
Minimal load	20g	100g	200g	400g
Resolution (d)	1g	5g	10kg	20g
Repeatability	±2g	±10g	±20g	±40g
Linearity	±3g	±15g	±30g	±60g
Stabilization time	2s			
Dimension of pan	380×320mm			
Material	platform: stainless steel, base: die-cast aluminum			
Operation temperature	5~35°C			
Operation humidity	30~80%RH			
Power supply	power adapter (6V/300mA) or 4×1.5V AA batteries			
Dimension (L×W×H)	380×320×110mm			

FLOOR SCALES (STANDARD TYPE)

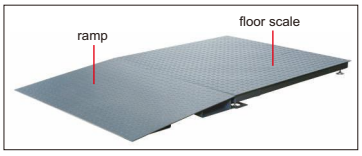
CAN BE CUSTOMIZED | DATA OUTPUT | BUILT-IN BLUETOOTH

VIDEO

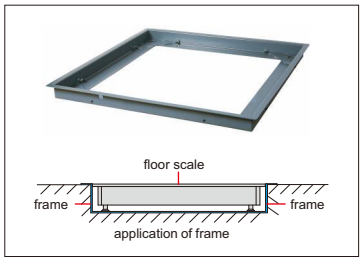




stainless steel stand (**optional**)



ramp (**optional**)



frame (**optional**)

printer (**optional**)

- Zero-setting, weighing, subtracting tare value, simple counting
- Checking alarm, animal scale
- Peak (max.) and tracking mode
- Data output
- Automatic power off
- Unit: kg, lb

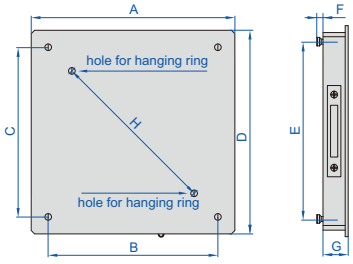
SPECIFICATION

Material of platform	carbon steel
Material of indicator	ABS plastic
Output	RS232
Operation temperature	-10~40°C
Operation humidity	30~80%RH
Power	3.7V rechargeable Li-ion battery

STANDARD DELIVERY

Main unit	1 pc
Indicator	1 pc
Power adapter	1 pc
Universal foot	4 pcs
Hanging ring	2 pcs

Code	Weighing capacity	Minimal load	Readability (d)	Repeatability	Linearity	Dimension of platform
8403-1TA	1t	10kg	0.5kg	±0.5kg	±1.5kg	800×800mm
8403-2TA	2t	10kg	0.5kg	±0.5kg	±1.5kg	
8403-3TA	3t	10kg	0.5kg	±1kg	±2.5kg	
8403-1TC	1t	10kg	0.5kg	±0.5kg	±1.5kg	1200×1200mm
8403-2TC	2t	10kg	0.5kg	±0.5kg	±1.5kg	
8403-3TC	3t	10kg	0.5kg	±1kg	±2.5kg	



OPTIONAL ACCESSORY

Ramp	can be customized
Frame	can be customized
Alarm light	**8403-ALARM** (must be supplied with scales together)
Stainless steel stand	**8403-STAND**
Printer	**8403-PRINTER**

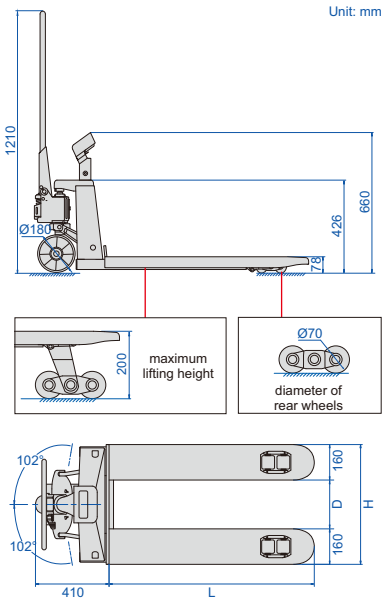
(mm)

Dimension of platform	A	B	C	D	E	F	G	H
800×800	800	640	640	800	640	45	76	640
1000×1000	1000	840	840	1000	840	45	76	848
1200×1200	1200	1040	1040	1200	1040	45	76	1131
1500×1500	1500	1340	1340	1500	1340	45	76	1555

FORKLIFT SCALES

VIDEO

8801-A20



- Zero-setting, weighing, subtracting tare value, simple counting
- Accumulation, animal scale, percentage display
- Automatic power off
- Unit: kg, lb

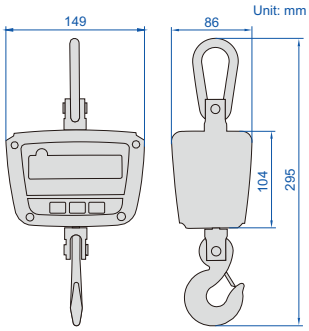
SPECIFICATION

Code	8801-A15	8801-A20	8801-A25	8801-B15	8801-B20	8801-B25
Weighing capacity	1500kg	2000kg	2500kg	1500kg	2000kg	2500kg
Minimal load	10kg	20kg	20kg	10kg	20kg	20kg
Readability (d)	0.5kg	1kg	1kg	0.5kg	1kg	1kg
Repeatability	±1kg	±1kg	±2kg	±1kg	±1kg	±2kg
Linearity	±1.5kg	±1.5kg	±3kg	±1.5kg	±1.5kg	±3kg
Limited load	2500kg	3000kg	3000kg	2500kg	3000kg	3000kg
Forklift arm length (L)	1150mm			1220mm		
Forklift arm distance (D)	220mm			360mm		
Overall forklift width (H)	540mm			680mm		
Material	mild steel					
Operation temperature	-10~50°C					
Operation humidity	30~90%RH					
Power supply	rechargeable lead acid battery (6V/4Ah)					
Dimension (L×W×H)	1560×540×1210mm			1630×680×1210mm		

DIRECT VIEW ELECTRONIC CRANE SCALES

IP65 WATERPROOF

- Dust/waterproof level: IP65
- Aluminum alloy die casting case with high strength
- 360° safe rotary hook and shackle
- Zero-setting, weighing, subtracting tare value
- Remote control
- Overload alarm
- Automatic power off
- Unit: lb, kg



remote controller (included)

8201-150KG

SPECIFICATION

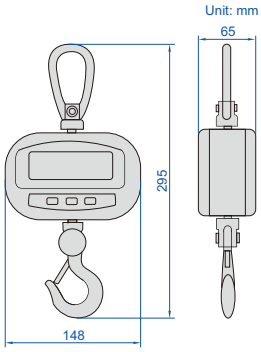
Code	8201-50KG	8201-150KG	8201-300KG
Weighing capacity	50kg	150kg	300kg
Minimal load	0.4kg	1.0kg	2.0kg
Readability (d)	0.02kg	0.05kg	0.10kg
Selectable resolution	0.01kg	0.02kg	0.05kg
Repeatability	±0.02kg	±0.05kg	±0.10kg
Linearity	±0.04kg	±0.1kg	±0.2kg
Stabilization time	8s		
Operating temperature	-10~40°C		
Operating humidity	30~90%RH		
Overload alarm	100%FS+9d		
Maximum safe load	125%FS		
Limited overload	400%FS		
Power supply	6V rechargeable Li-ion battery		
Dimension (L×W×H)	149×86×295mm		

STANDARD DELIVERY

Main unit	1 pc
Remote controller	1 pc

DIRECT VIEW ELECTRONIC CRANE SCALES (BASIC TYPE)

- Plastic case
- 360° safe rotary hook and shackle
- Zero-setting, weighing, subtracting tare value
- Remote control
- Overload alarm
- Automatic power off
- Unit: lb, kg



remote controller (included)

8202-150KG

SPECIFICATION

Code	8202-50KG	8202-150KG	8202-300KG
Weighing capacity	50kg	150kg	300kg
Minimal load	0.4kg	1.0kg	2.0kg
Readability (d)	0.02kg	0.05kg	0.10kg
Selectable resolution	0.01kg	0.02kg	0.05kg
Repeatability	±0.02kg	±0.05kg	±0.10kg
Linearity	±0.04kg	±0.1kg	±0.2kg
Stabilization time	8s		
Operating temperature	-10~40°C		
Operating humidity	30~90%RH		
Overload alarm	100%FS+9d		
Maximum safe load	125%FS		
Limited overload	400%FS		
Power supply	4×1.5V AA batteries		
Dimension (L×W×H)	148×65×295mm		

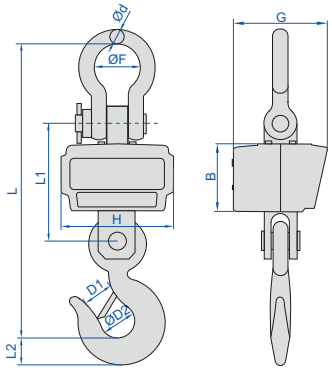
STANDARD DELIVERY

Main unit	1 pc
Remote controller	1 pc

ELECTRONIC CRANE SCALES

VIDEO

- Aluminum alloy die casting case with high strength
- Zero-setting, weighing, subtracting tare value
- Remote control
- Overload alarm
- Automatic power off
- Unit: lb, kg



8204-CS3T

remote controller (included)

(mm)

Code	B	G	H	L	L1	L2	D1	ØD2	Ød	ØF
8204-CS06T	120	163	198	420	190	33	40	47	21	76
8204-CS1T	120	163	198	420	190	33	40	47	21	76
8204-CS2T	120	163	198	420	190	33	50	47	21	76
8204-CS3T	120	163	198	462	196	40	50	50	23	76
8204-CS5T	120	163	198	511	204	47	52	60	26	80
8204-CS10T	135	181	206	589	239	66	52	70	36	90
8204-CS15T	135	181	206	727	257	77	60	85	47	135

SPECIFICATION

Operation temperature	-10~40°C
Operation humidity	≤85%RH
Overload alarm	100%FS+9d
Maximum safe load	150%FS
Limited overload	400%FS
Power supply	rechargeable lead acid battery (6V/4Ah)

handheld display (**optional**)

large display (**optional**)

Code	Weighing capacity	Minimal load	Readability (d)	Selectable resolution	Repeatability	Linearity	Stabilization time
8204-CS06T	600kg	5kg	0.2kg	0.1kg	±0.2kg	±0.4kg	10s
8204-CS1T	1000kg	10kg	0.5kg	0.2kg	±0.5kg	±1kg	
8204-CS2T	2000kg	20kg	1kg	0.5kg	±1kg	±2kg	
8204-CS3T	3000kg	30kg	1kg	0.5kg	±1kg	±1kg	
8204-CS5T	5000kg	50kg	2kg	1kg	±2kg	±4kg	
8204-CS10T	10000kg	100kg	5kg	2kg	±5kg	±10kg	
8204-CS15T	15000kg	100kg	5kg	2kg	±5kg	±10kg	

STANDARD DELIVERY

Main unit	1 pc
Remote controller	1 pc

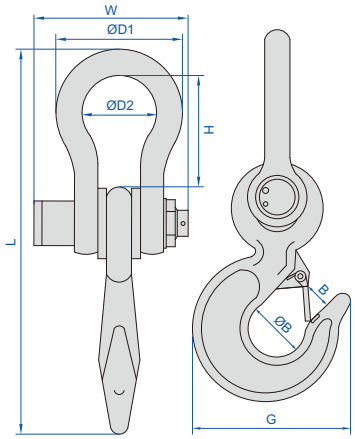
OPTIONAL ACCESSORY

Handheld display	**8204-INDICATOR** (must be supplied with scales together)
Large display	**8204-SCREEN** (must be supplied with scales together)

BUILT-IN WIRELESS CRANE SCALES

IP65 WATERPROOF

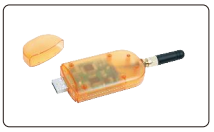
VIDEO



remote controller (included)

8205-3T

wireless printer (**optional**)



wireless receiver (**optional**)

large display (**optional**)

- Wireless zero-setting, weighing, subtracting tare value, accumulation
- Remote reading, wireless transmission distance up to 100 meters
- Overload alarm
- Automatic power off
- Unit: lb, kg

SPECIFICATION

Operation temperature	-10~40°C
Operation humidity	≤85%RH
Overload alarm	100%FS+9d
Maximum safe load	150%FS
Limited overload	400%FS
Power supply	6V rechargeable Li-ion battery

(mm)

Code	L	H	ØD1	ØD2	W	G	B	ØB
8205-2T	319	88	132	72	198	126	34	48
8205-3T	319	88	132	72	198	126	34	48
8205-5T	407	105	160	88	219	161	42	57
8205-10T	465	105	170	95	246	202	46	65
8205-15T	520	130	215	120	263	203	60	77
8205-20T	621	135	251	142	294	284	75	105
8205-30T	770	205	325	180	356	305	85	125
8205-50T	1020	340	360	200	436	470	135	170

Code	Weighing capacity	Minimal load	Readability (d)	Repeatability	Linearity	Stabilization time
8205-2T	2t	10kg	0.5kg	±0.5kg	±1kg	8s
8205-3T	3t	20kg	1kg	±1kg	±2kg	
8205-5T	5t	40kg	2kg	±2kg	±4kg	
8205-10T	10t	100kg	5kg	±5kg	±10kg	
8205-15T	15t	100kg	5kg	±5kg	±10kg	
8205-20T	20t	200kg	10kg	±10kg	±20kg	
8205-30T	30t	200kg	10kg	±10kg	±20kg	
8205-50T	50t	400kg	20kg	±20kg	±40kg	

STANDARD DELIVERY

Main unit	1 pc
Remote controller	1 pc

OPTIONAL ACCESSORY

Wireless printer	**8205-PRINTER** (must be supplied with scales together)
Large display	**8205-SCREEN** (must be supplied with scales together)
Wireless receiver (serial port signal, connect to computers)	**8205-RECEIVER** (must be supplied with scales together)

HANG SCALES

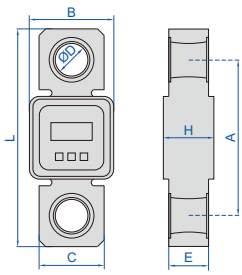
VIDEO

CAN BE CUSTOMIZED

hang scale pull rings (**optional**)

remote controller (included)

8206-3T



- Zero-setting, weighing, subtracting tare value, accumulation
- Peak (max.) and tracking mode
- Remote control
- Built-in buzzer
- Overload alarm
- Automatic power off
- Unit: kg, N

SPECIFICATION

Stabilization time	8s
Material	alloy steel
Operation temperature	-10~55°C
Operation humidity	≤85%RH
Overload alarm	100%FS+9d
Maximum safe load	150%FS
Limited overload	300%FS
Power supply	3×1.5V AA batteries

Code	Dimension (mm)						
	L	B	C	H	E	A	ØD
8206-05T	204	99	46	50	30	158	26
8206-1T	204	99	46	50	30	158	26
8206-2T	204	99	46	50	30	158	26
8206-3T	204	99	46	54	30	158	26
8206-5T	222	99	60	58	35	162	31
8206-10T	268	104	80	62	49	192	41
8206-15T	304	110	92	66	58	212	46.5
8206-20T	344	120	120	66	66	232	56.5
8206-30T	394	132	132	73	73	264	66
8206-50T	500	150	150	100	100	340	80

Code	Weighing capacity		Minimal load		Readability (d)		Selectable resolution		Accuracy	
	mass values	force values	mass values	force values	mass values	force values	mass values	force values	mass values	force values
8206-05T	0.5t	5kN	4kg	40N	0.2kg	2N	0.1kg	1N	±0.2kg	±1%
8206-1T	1t	10kN	10kg	100N	0.5kg	5N	0.2kg	2N	±0.5kg	
8206-2T	2t	20kN	20kg	200N	1kg	10N	0.5kg	5N	±1kg	
8206-3T	3t	30kN	20kg	200N	1kg	10N	0.5kg	5N	±1.5kg	
8206-5T	5t	50kN	40kg	400N	2kg	20N	1kg	10N	±2kg	
8206-10T	10t	100kN	100kg	1kN	5kg	50N	2kg	20N	±5kg	
8206-15T	15t	150kN	100kg	1kN	5kg	50N	2kg	20N	±7.5kg	
8206-20T	20t	200kN	200kg	2kN	10kg	100N	5kg	50N	±10kg	
8206-30T	30t	300kN	200kg	2kN	10kg	100N	5kg	50N	±15kg	
8206-50T	50t	500kN	400kg	4kN	20kg	200N	10kg	100N	±20kg	

STANDARD DELIVERY

Main unit	1 pc
Remote controller	1 pc

OPTIONAL ACCESSORY

Hang scale pull rings	**8290**

BUILT-IN WIRELESS HANG SCALES

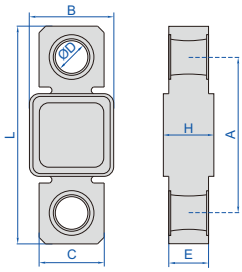
VIDEO

CAN BE CUSTOMIZED

hang scale pull rings (**optional**)

8207-3T

LCD remote controller (included)



- Wireless zero-setting, weighing, subtracting tare value, accumulation
- Peak (max.) and tracking mode
- Wireless transmission distance up to 100 meters
- LCD handheld display, remote control
- Built-in buzzer
- Overload alarm
- Automatic power off
- Unit: kg, N

SPECIFICATION

Stabilization time	8s
Material	alloy steel
Operation temperature	-10~55°C
Operation humidity	≤85%RH
Overload alarm	100%FS+9d
Maximum safe load	150%FS
Limited overload	300%FS
Power supply	3×1.5V AA batteries

Code	Dimension (mm)						
	L	B	C	H	E	A	ØD
8207-05T	204	99	46	50	30	158	26
8207-1T	204	99	46	50	30	158	26
8207-2T	204	99	46	50	30	158	26
8207-3T	204	99	46	54	30	158	26
8207-5T	222	99	60	58	35	162	31
8207-10T	268	104	80	62	49	192	41
8207-15T	304	110	92	66	58	212	46.5
8207-20T	344	120	120	66	66	232	56.5
8207-30T	394	132	132	73	73	264	66
8207-50T	500	150	150	100	100	340	80

Code	Weighing capacity		Minimal load		Readability (d)		Selectable resolution		Accuracy	
	mass values	force values	mass values	force values	mass values	force values	mass values	force values	mass values	force values
8207-05T	0.5t	5kN	4kg	40N	0.2kg	2N	0.1kg	1N	±0.2kg	±1%
8207-1T	1t	10kN	10kg	100N	0.5kg	5N	0.2kg	2N	±0.5kg	
8207-2T	2t	20kN	20kg	200N	1kg	10N	0.5kg	5N	±1kg	
8207-3T	3t	30kN	20kg	200N	1kg	10N	0.5kg	5N	±1.5kg	
8207-5T	5t	50kN	40kg	400N	2kg	20N	1kg	10N	±2kg	
8207-10T	10t	100kN	100kg	1kN	5kg	50N	2kg	20N	±5kg	
8207-15T	15t	150kN	100kg	1kN	5kg	50N	2kg	20N	±7.5kg	
8207-20T	20t	200kN	200kg	2kN	10kg	100N	5kg	50N	±10kg	
8207-30T	30t	300kN	200kg	2kN	10kg	100N	5kg	50N	±15kg	
8207-50T	50t	500kN	400kg	4kN	20kg	200N	10kg	100N	±20kg	

STANDARD DELIVERY

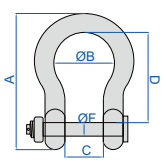
Main unit	1 pc
LCD remote controller	1 pc

OPTIONAL ACCESSORY

Hang scale pull rings	**8290**

HANG SCALE PULL RINGS

- Used with **8206** series and **8207** series hang scales



8290-1

application

SPECIFICATION

Code	Material	Dimension (mm)					Adapted products
		A	ØB	C	D	ØF	
8290-1	alloy steel	169	76	33	107	25	**8207-05T**, **8207-1T**, **8207-2T**, **8207-3T**, **8206-05T**, **8206-1T**, **8206-2T**, **8206-3T**
8290-2		192	90	38	125	30	**8206-5T**, **8207-5T**
8290-3		241	100	52	145	40	**8206-10T**, **8207-10T**
8290-4		318	135	65	202	45	**8206-15T**, **8207-15T**
8290-5		355	150	69	221	55	**8206-20T**, **8207-20T**
8290-6		448	150	76	279	65	**8206-30T**, **8207-30T**
8290-7		504	214	125	313	79	**8206-50T**, **8207-50T**

STANDARD DELIVERY

Main unit	1 pair

PORTABLE CRANE SCALE
CODE 8604-40

ATTENTION:
LOW ACCURACY

SPECIFICATION

Weighing capacity	40kg
Minimal load	1kg
Readability (d)	50g
Repeatability	±100g
Linearity	±200g
Stabilization time	5s
Operation temperature	-10~45°C
Operation humidity	30~90%RH
Limited load	50kg
Power supply	2×AAA batteries

- Zero-setting, weighing, subtracting tare value
- LCD display, with backlight
- Automatic power off
- Unit: kg

built-in measuring tape
(included)

WEIGHT SETS

INSPECTION CERTIFICATE

- Supplied with manufacturer inspection certificate

CLASS AND MATERIAL

Specification	Code				
	E2 (non-magnetic stainless steel)	F1 (non-magnetic stainless steel)	F1 (304 stainless steel)	F2 (304 stainless steel)	M1 (304 stainless steel)
1mg~100g	8910-100GE2	8910-100GF1	8910-100GF1S	8910-100GF2	8910-100GM1
1mg~200g	8910-200GE2	8910-200GF1	8910-200GF1S	8910-200GF2	8910-200GM1
1mg~500g	8910-500GE2	8910-500GF1	8910-500GF1S	8910-500GF2	8910-500GM1
1mg~1kg	8910-1KGE2	8910-1KGF1	8910-1KGF1S	8910-1KGF2	8910-1KGM1
1mg~2kg	8910-2KGE2	8910-2KGF1	8910-2KGF1S	8910-2KGF2	8910-2KGM1
1mg~5kg	8910-5KGE2	8910-5KGF1	8910-5KGF1S	8910-5KGF2	8910-5KGM1

8910-5KGF1

SPECIFICATION AND SHAPE

Weight	Specification					
	1mg~100g	1mg~200g	1mg~500g	1mg~1kg	1mg~2kg	1mg~5kg
1mg	⬟	⬟	⬟	⬟	⬟	⬟
2mg	⬟ ⬟*	⬟ ⬟*	⬟ ⬟*	⬟ ⬟*	⬟ ⬟*	⬟ ⬟*
5mg	⬟	⬟	⬟	⬟	⬟	⬟
10mg	⬟	⬟	⬟	⬟	⬟	⬟
20mg	⬟ ⬟*	⬟ ⬟*	⬟ ⬟*	⬟ ⬟*	⬟ ⬟*	⬟ ⬟*
50mg	⬟	⬟	⬟	⬟	⬟	⬟
100mg	⬟	⬟	⬟	⬟	⬟	⬟
200mg	⬟ ⬟*	⬟ ⬟*	⬟ ⬟*	⬟ ⬟*	⬟ ⬟*	⬟ ⬟*
500mg	⬟	⬟	⬟	⬟	⬟	⬟
1g	▮	▮	▮	▮	▮	▮
2g	▮ ▮*	▮ ▮*	▮ ▮*	▮ ▮*	▮ ▮*	▮ ▮*
5g	▮	▮	▮	▮	▮	▮
10g	▮	▮	▮	▮	▮	▮
20g	▮ ▮*	▮ ▮*	▮ ▮*	▮ ▮*	▮ ▮*	▮ ▮*
50g	▮	▮	▮	▮	▮	▮
100g	▮	▮	▮	▮	▮	▮
200g		▮ ▮*	▮ ▮*	▮ ▮*	▮ ▮*	▮ ▮*
500g			▮	▮	▮	▮
1kg				▮	▮	▮
2kg					▮ ▮*	▮ ▮*
5kg						▮
Quantity	21 pcs	23 pcs	24 pcs	25 pcs	27 pcs	28 pcs
Total range	1mg~211.11g	1mg~611.11g	1mg~1111.11g	1mg~2111.11g	1mg~6111.11g	1mg~11111.11g

⬟ sheet ▮ cylinder

⬟* sheet, with mark ▮* cylinder, with mark

STAINLESS STEEL WEIGHTS

INSPECTION CERTIFICATE

- Supplied with manufacturer inspection certificate

aluminum box (included)

8912-10KM1

SPECIFICATION

Weight	Class		
	F1	F2	M1
500g	8912-500F1	8912-500F2	8912-500M1
1kg	8912-1KF1	8912-1KF2	8912-1KM1
2kg	8912-2KF1	8912-2KF2	8912-2KM1
5kg	8912-5KF1	8912-5KF2	8912-5KM1
10kg	8912-10KF1	8912-10KF2	8912-10KM1
15kg	8912-15KF1	8912-15KF2	8912-15KM1
20kg	8912-20KF1	8912-20KF2	8912-20KM1
25kg	8912-25KF1	8912-25KF2	8912-25KM1

OIML R111-2004 TOLERANCE

Weight	F1	F2	M1
500g	2.5mg	8.0mg	25mg
1kg	5.0mg	16mg	50mg
2kg	10mg	30mg	100mg
5kg	25mg	80mg	250mg
10kg	50mg	160mg	500mg
20kg	100mg	300mg	1000mg

CLASS SELECTION

Resolution of the weighing instruments	Required class of weights
0.1mg	F1
1mg	F2
0.01g/0.1g	M1

CAST IRON WEIGHTS

INSPECTION CERTIFICATE

- Supplied with manufacturer inspection certificate

8913-10M2

SPECIFICATION

Weight	Class	
	M1	M2
1kg	8913-1M1	8913-1M2
2kg	8913-2M1	8913-2M2
5kg	8913-5M1	8913-5M2
10kg	8913-10M1	8913-10M2
20kg	8913-20M1	8913-20M2
25kg	8913-25M1	8913-25M2
50kg	8913-50M1	8913-50M2
100kg	8913-100M1	8913-100M2
200kg	8913-200M1	8913-200M2
500kg	8913-500M1	8913-500M2
1000kg	8913-1000M1	8913-1000M2

OIML R111-2004 TOLERANCE

Weight	M1	M2
1kg	50mg	160mg
2kg	100mg	300mg
5kg	250mg	800mg
10kg	500mg	1600mg
20kg	1000mg	3000mg
50kg	2500mg	8000mg
100kg	5000mg	16000mg
200kg	10000mg	30000mg
500kg	25000mg	80000mg
1000kg	50000mg	160000mg

CLASS SELECTION

Resolution of the weighing instruments	Required class of weights
0.01g/0.1g	M1
0.1g	M2

PEN-TYPE CONDUCTIVITY TESTER (BASIC TYPE)
CODE 0416-EB01

VIDEO

- Suitable for water quality testing, aquaculture, food processing, scientific research, etc.
- Mini design with an electrode diameter of 10mm
- Manual temperature compensation
- With reading stabilization reminder function
- Replaceable electrodes
- Low voltage alarm
- CR2032 battery, automatic power off
- Probe protection level: IP54

SPECIFICATION

Measuring range	(0~99.9)μS/cm, (100~999)μS/cm, (1.00~9.99) mS/cm, (10.00~99.99)mS/cm, (100~199.9)mS/cm
Resolution	0.01μS/cm, 0.1μS/cm, 1μS/cm, 0.01mS/cm
Accuracy	±1.5%FS
Temperature compensation range	0~99.9°C (manual)
Calibration mode	1 point (automatic recognition), electrode constant calibration
Standard solution	1413μS/cm
Power supply	CR2032 battery
Dimension (L×W×H)	50×188×17mm
Net weight	60g

STANDARD DELIVERY

Main unit	1 pc
Conductivity electrode (0416-EB01-E)	1 pc
Calibration powder (0416-EB01-S) *	2 pcs

* Dissolve in distilled water to 50mL

PEN-TYPE CONDUCTIVITY/TDS/SALINITY TESTER
CODE 0412-EB32

VIDEO

- Can measure the conductivity, TDS and salinity
- Suitable for water quality testing, aquaculture, food processing, scientific research, etc.
- The same series of electrodes can be replaced with each other
- Automatic temperature compensation
- With the stabilizing and locking functions of the reading
- Can be used normally in any environment with the background light
- Automatic power off
- Probe protection level: IP67
- Lightweight, easy to carry and operate

electrodes can be replaced

SPECIFICATION

Measuring range	conductivity 0~200.0μS/cm, 0~2000μS/cm, 0~20.00mS/cm
	TDS 0~100.0ppm, 0~1000ppm, 0~10.00ppt
	salinity 0~10.00ppt
	temperature 0~50°C
Resolution	conductivity 0.1μS/cm, 1μS/cm, 0.01mS/cm
	TDS 0.1ppm, 1ppm, 0.01ppt
	salinity 0.01ppt
	temperature 0.1°C
Accuracy	conductivity ±1%FS
	temperature ±0.5°C
Calibration mode	1~3 points
Power supply	4×1.5V AAA batteries
Dimension (L×W×H)	178×40×40mm
Net weight	133g

STANDARD DELIVERY

Main unit	1 pc
Standard solution	2 bottles
Test cup	2 pcs
1.5V AAA battery	4 pcs
Platinum black needle electrode	1 pc

PORTABLE CONDUCTIVITY METER
CODE 0413-EC33

VIDEO

- 1~4 points automatic calibration, with calibration guidance and automatic inspection function
- The meter can recognize conductivity standard solutions automatically
- Manual and automatic temperature compensation functions for more accurate measurement
- The meter can be switched between conductivity and TDS
- 50 sets of data storage
- Featuring a foldable stand, suitable for multi scenario applications
- Probe protection level: IP57

plastic conductivity elctrode (included)

SPECIFICATION

Conductivity	range	0~200mS/cm, divided into five ranges (0.00~19.99)μS/cm, (20.0~199.9)μS/cm, (200~1999)μS/cm, (2.00~19.99)mS/cm, (20.0~199.9)mS/cm
	resolution	0.01/0.1/1μS/cm, 0.01/0.1mS/cm
	accuracy *	±(1.0%FS+1d)
	temperature compensation	0°C~100°C (manual or automatic)
	calibration mode	1~4 points
	electrode constant	0.1/1/10cm^{-1}
TDS	range	(0~100)g/L
	resolution	0.01/0.1/1mg/L, 0.01/0.1g/L
	accuracy *	±(1.0%FS+1d)
	TDS conversion factor	0.40~1.00
Temperature	range	0°C~100°C
	resolution	0.1°C
	accuracy *	±(0.5°C+1d)
Standard solution		84μS/cm, 1413μS/cm, 12.88mS/cm
Power supply		3×1.5V AA batteries
Dimension (L×W×H)		86×196×33mm
Net weight		286g

*d is the resolution

standard solution (included)

glass conductivity electrode (**optional**)

high conductivity electrode (**optional**)

STANDARD DELIVERY

Main unit	1 pc
Standard solution	3 bottles
1.5V AA battery	3 pcs
Plastic conductivity electrode	1 pc

OPTIONAL ACCESSORY

Glass conductivity electrode	0413-EC33-01
High conductivity electrode	0413-EC33-10

PORTABLE CONDUCTIVITY/TDS METER
CODE 0411-0200

VIDEO

IP65 WATERPROOF

- Reading mode: auto-read and continuous-read
- Automatic/manual temperature compensation
- Auto-hold feature senses and locks the measurement endpoint
- Cell constant is settable
- 1 point calibration with standard recognition
- Data capacity up to 200 sets for each parameter
- IP65 dust/waterproof
- Automatic power off

standard solution (included)

wristband (included)

SPECIFICATION

Conductivity	range	0.00μS/cm~200mS/cm
	resolution	0.01μS/cm minimum
	electronic unit accuracy	±1.0%FS
	measurement accuracy	±1.5%FS
	reference temperature	25°C/77°F
	calibration point	1
	standard recognition	84μS/cm, 1413μS/cm, 12.88mS/cm
TDS	range	0.00mg/L~300g/L
	resolution	0.01mg/L minimum
	accuracy	±1.0%FS
Temperature	range	-5~110°C/23~230°F
	resolution	0.1°C/0.2°F
	accuracy	±0.4°C/±0.7°F
Input		electrode with 5-pin aviation connector
Power supply		rechargeable battery
Dimension (L×W×H)		80×225×35mm
Net weight		400g

STANDARD DELIVERY

Main unit	1 pc
Electrode	1 pc
Electrode holder	2 pcs
Wristband	1 pc
Silicone rubber case	1 pc
AC/DC adapter and charging cable	1 pc
Standard solution	1 bottle

CONDUCTIVITY METER
CODE 0414-ED34

DATA OUTPUT

VIDEO

- Equipped with rugged platinum-black conductivity electrode (K=1), rugged platinum-black coating, not only increases the surface area of the electrode and reduces the polarisation effect, but also improves the adhesion of the platinum-black to the metal, corrosion-resistant POM housing, built-in thermistor, automatic temperature compensation
- GLP data storage and management, USB data output
- 1~4 points automatic calibration, with calibration guidance and automatic inspection function
- The meter can recognize conductivity standard solutions automatically
- Manual and automatic temperature compensation functions for more accurate measurement
- The meter can switch conductivity, TDS, salinity
- Equipped with flexible electrode holder, easy to operate with one hand

standard solution (included)

SPECIFICATION

Conductivity	range	(0.00~19.99)μS/cm, (20.0~199.9)μS/cm (200~1999)μS/cm, (2.00~19.99)mS/cm, (20.0~199.9)mS/cm
	resolution	0.01/0.1/1μS/cm, 0.01/0.1mS/cm
	accuracy*	±(1.0%FS+1d)
	temperature compensation	0°C~50°C (manual or automatic)
	calibration mode	1~4 points
	electrode constant	0.1/1/10cm^{-1}
TDS	range	(0~100)g/L
	resolution	0.01/0.1/1mg/L, 0.01/0.1g/L
	accuracy*	±(1.0%FS+1d)
	TDS conversion factor	0.40~1.00
Temperature	range	0°C~100°C
	resolution	0.1°C
	accuracy*	±(0.5°C+1d)
Salinity	range	(0~100)ppt
Data storage		200 groups of USB data
Standard solution		84μS/cm, 1413μS/cm, 12.88mS/cm
Power supply		AC/DC adapter (9V)
Dimension (L×W×H)		195×215×100mm
Net weight		950g

*d is the resolution

STANDARD DELIVERY

Main unit	1 pc
Standard solution	3 bottles
Power adapter	1 pc
Plastic conductivity electrode	1 pc
Flexible electrode holder	1 pc
USB flash disk	1 pc
USB cable	1 pc

ON-LINE CONDUCTIVITY METER
CODE 0415-EZ41

IP65 WATERPROOF

CAN BE CUSTOMIZED

VIDEO

conductivity electrode (**optional**)

- Suitable for water quality testing of surface water, sewage plant output, distilled seawater, pollution source waste, softened water, steam condensate, etc.
- Wall-mounted instrument, flow-through or input electrode
- Optional conductivity electrodes with different conductivity ranges are available
- The meter can switch between conductivity and resistivity
- Upper and lower limit alarms can be set
- With power failure data protection
- Automatic temperature compensation
- Auto ranging
- Protection level: IP65

SPECIFICATION

Conductivity	range	0~10mS/cm, divided into six ranges (0.000~0.199)μS/cm, (0.20~1.99)μS/cm, (2.0~19.9)μS/cm, (20.0~199.9)μS/cm, (0.200~1.999)mS/cm, (2.00~10.00)mS/cm
	resolution	0.001/0.01/0.1μS/cm, 0.01/0.1mS/cm
	accuracy	±2.0%FS
Temperature	range	-10.0°C~120.0°C
	resolution	0.1°C
	accuracy	±0.5°C (at 0.0°C~60.0°C), ±1.0°C (other range)
Automatic temperature compensation range		-10.0°C~120.0°C
Temperature coefficient compensation range		(0~10)%/°C
Output signal		(4~20)mA
Operating environment		temperature: (-5~50)°C, relative humidity: ≤90%
Power supply		AC 220V, 50Hz
Hole-opening size		140×140mm
Dimension (L×W×H)		166×166×110mm
Net weight		2kg

STANDARD DELIVERY

Main unit	1 pc
Assembly parts *	1 pc

*Including mounting bracket, mounting screws, fuses

OPTIONAL ACCESSORY

Conductivity electrode*	0415-EZ41-01	10~10000μs/cm (K=1cm^{-1})
	0415-EZ41-02	1~199.9μs/cm (K=0.1cm^{-1})
	0415-EZ41-03	0~19.9μs/cm (K=0.01cm^{-1})

* Flow-through installation, inlet Ø6mm, outlet Ø10mm, cable length can be customized

PEN-TYPE pH TESTERS (BASIC TYPE)

INSPECTION CERTIFICATE

VIDEO

- Suitable for water quality testing, sewage treatment, food and cosmetic testing, agriculture, scientific research, etc.
- Mini design with an electrode diameter of 10mm
- Manual temperature compensation
- With reading stabilization reminder function
- Electrode failure alert, replaceable electrodes
- Low voltage alarm
- CR2032 battery, automatic power off
- Probe protection level: IP54

0436-HB01

SPECIFICATION

Code	0436-HB01	0436-HB02
Measuring range	0.0~14.0pH	0.00~14.00pH
Resolution	0.1pH	0.01pH
Accuracy	±0.5pH	±0.05pH
Temperature compensation range	0~99.9°C (manual)	
Calibration mode	1~3 points	
Calibration point	CH (4.00, 6.86, 9.18) USA (4.00, 7.00, 10.01) NIS (4.01, 6.86, 9.18)	
Power supply	CR2032 battery	
Dimension (L×W×H)	50×188×17mm	
Net weight	60g	

STANDARD DELIVERY

Main unit	1 pc
pH electrode (0436-HB-E)	1 pc
pH buffer powder (0436-HB-S)*	6 pcs (CH)

* Dissolve in distilled water to 250mL

PEN-TYPE pH TESTER CODE 0432-HB22

INSPECTION CERTIFICATE

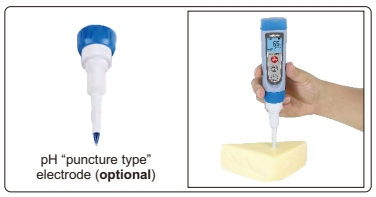
VIDEO

- 3 types of pH electrodes: bulb type, plane type and puncture type
- Suitable for water quality testing, sewage treatment, food and cosmetics testing, agriculture and scientific research, etc.
- Can measure the ORP, the same series of electrodes can be replaced with each other
- Automatic temperature compensation
- Alarm function: the red backlight displays alarm mode
- With the stabilizing and locking functions of the reading
- Probe protection level: IP67
- Can be used normally in any environment with three colors of backlight
- Automatic power off
- Lightweight, easy to carry and operate

pH "bulb type" electrode (included)

ORP "platinum needle" electrode (**optional**)

pH "plane type" electrode (**optional**)



pH "puncture type" electrode (**optional**)

SPECIFICATION

Measuring range	-2.00~16.00pH
	temperature 0~50°C
	ORP -1000mV~+1000mV
Resolution	0.01pH
	temperature 0.1°C
	ORP 1mV
Accuracy	±0.02pH
	temperature ±0.5°C
	ORP ±0.2%FS
Calibration mode	1~3 points
Calibration point	USA (pH buffers: 4.00, 7.00, 10.01) NIST (pH buffers: 4.01, 6.86, 9.18)
Power supply	4×1.5V AAA batteries
Dimension (L×W×H)	178×40×40mm
Net weight	133g

STANDARD DELIVERY

Main unit	1 pc
Standard solution	3 bottles (USA)
Test cup	3 pcs
KCl powder	1 bottle
1.5V AAA battery	4 pcs
pH bulb type electrode	1 pc

OPTIONAL ACCESSORY

pH plane type electrode	0432-HB-F
pH puncture type electrode	0432-HB-P
ORP electrode	0432-HB-O

PORTABLE pH METER
CODE 0430-HA21

INSPECTION CERTIFICATE

VIDEO

- 1~3 points automatic calibration, with calibration guidance and automatic inspection function
- Manual and automatic temperature compensation functions for more accurate measurement
- The meter provides three types of reading stability criteria
- 50 sets of data storage
- Featuring a foldable stand, suitable for multi scenario applications
- Probe protection level: IP57

standard solution (included)

plastic pH elctrode (included)

hydrofluoric acid/strong acid resistant glass pH electrode unit (**optional**)

SPECIFICATION

pH	range	0.00~14.00pH
	resolution	0.1/0.01pH
	accuracy*	±(0.01pH+1d)
	temperature compensation	0°C~100°C (manual or automatic)
	calibration mode	1~3 points
mV	range	-1000mV~+1000mV
	resolution	1mV
	accuracy*	±(0.2%FS+1d)
Temperature	range	0°C~100°C
	resolution	0.1°C
	accuracy*	±(0.5°C+1d)
Calibration point		USA (4.00, 7.00, 10.01) NIST (4.01, 6.86, 9.18)
Power supply		3×1.5V AA batteries
Dimension (L×W×H)		86×196×33mm
Net weight		292g

*d is the resolution

STANDARD DELIVERY

Main unit	1 pc
Standard solution	3 bottles
1.5V AA battery	3 pcs
Plastic pH electrode	1 pc

OPTIONAL ACCESSORY

Hydrofluoric acid/strong acid resistant glass pH electrode	0430-HA21-A
Strong alkali/high salt/high temperature pH electrode	0430-HA21-B

PORTABLE pH METER
CODE 0431-0018

IP65 WATERPROOF

VIDEO

- Reading mode: auto-read and continuous-read
- Automatic/manual temperature compensation
- Auto-hold feature senses and locks the measurement endpoint
- 1 or 2 points calibration with standard recognition
- Data capacity up to 200 sets for each parameter
- IP65 dust/waterproof
- Automatic power off

wristband (included)

KCl powder (included)

standard solution (included)

SPECIFICATION

pH	range	-2.00~18.00pH
	resolution	0.01pH
	electronic unit accuracy	±0.01pH
	measurement accuracy	±0.02pH
	calibration point	1 or 2
	standard recognition	NIST pH buffers: 4.01, 7.00, 10.01
Voltage	range	-1999~1999mV
	resolution	1mV
	accuracy	±0.1%FS
Temperature	range	-5~110°C/23~230°F
	resolution	0.1°C/0.2°F
	accuracy	±0.4°C/±0.7°F
Inputs		pH electrode: BNC (Q9)
		temp. probe: 4-pin aviation connector
Power supply		rechargeable battery
Dimension (L×W×H)		80×225×35mm
Net weight		400g

STANDARD DELIVERY

Main unit	1 pc
Electrode	1 pc
Electrode holder	2 pcs
Wristband	1 pc
Silicone rubber case	1 pc
AC/DC adapter and charging cable	1 pc
Standard solution	3 bottles
KCl powder	1 bottle

BENCHTOP pH METER
CODE 0434-HD24

INSPECTION CERTIFICATE | DATA OUTPUT | VIDEO

- Equipped with glass pH electrode, using a special gelation process, the solution inside the electrode will not flow, no air bubbles even when inverted, and the electrode glass adopts a thick film process, so there is no need to worry about the sphere rupture caused by ordinary collision
- GLP data storage and management, USB data output
- 1~3 points automatic calibration, with calibration guidance and automatic inspection function
- Automatic recognition of pH buffers, automatic display of slope at the end of calibration
- Manual and automatic temperature compensation functions for more accurate measurement
- Equipped with flexible electrode holder, easy to operate with one hand

SPECIFICATION

pH	range	-2.00~20.00pH
	resolution	0.1/0.01pH
	accuracy*	±(0.01pH+1d)
	temperature compensation	0°C~100°C (manual or automatic)
	calibration mode	1~3 points
mV	range	-2000mV~+2000mV
	resolution	1mV
	accuracy*	±(0.1%FS+1d)
Temperature	range	0°C~100°C
	resolution	0.1°C
	accuracy*	±(0.5°C+1d)
Data storage		200 groups of USB data
Calibration point		USA (pH buffers: 4.00, 7.00, 10.01) NIST (pH buffers: 4.01, 6.86, 9.18) China series, user-defined solutions
Power supply		AC/DC adapter (9V)
Dimension (L×W×H)		195×215×100mm
Net weight		950g

*d is the resolution

STANDARD DELIVERY

Main unit	1 pc
Standard solution	3 bottles (USA)
Power adapter	1 pc
Glass pH electrode	1 pc
Temperature electrode	1 pc
Flexible electrode holder	1 pc
USB flash disk	1 pc
USB cable	1 pc

standard solution (included)

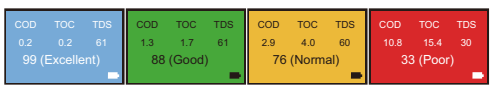
WATER QUALITY TESTER
CODE 0410-EA31

VIDEO

SPECIFICATION

Measuring range	COD	0~50mg/L
	TOC	0~50mg/L
	conductivity	0~4000μS/cm
	TDS	0~2000ppm
	UV275	0~1au/cm
	temperature	0-50°C
Resolution	COD	0.01mg/L
	TOC	0.01mg/L
	conductivity	1μS/cm
	TDS	1ppm
	UV275	0.001au/cm
	temperature	0.1°C
Accuracy	COD	0~5mg/L, ±0.5mg/L 5~50mg/L, ±10%
	TOC	0~5mg/L, ±0.5mg/L 5~50mg/L, ±10%
	conductivity	±3.5%FS
	TDS	±3.5%FS
	UV275	0~0.1au/cm, ±0.01au/cm 0.1~1au/cm, ±10%
	temperature	±1°C
Power supply		2×1.5V AAA batteries
Dimension (L×W×H)		157×37×14mm
Net weight		68g

water quality grade



COD (mg/L)	TOC (mg/L)	TDS (ppm)	Colour	Score	Grade
0~0.75	0~1.25	0~250	blue	90~100	Excellent
0.75~1.5	1.25~2.5	250~500	green	80~90	Good
1.5~3	2.5~5	500~1000	yellow	60~80	Normal
3~7.5	5~12.5	1000~2000	red	0~60	Poor

- Suitable for measuring tap water, purified water, underground water, surface water (unpolluted) and other drinking water, to determine microorganisms and pesticide residues in water
- Use UV absorption method to measure COD, TOC, UV275 parameters of drinking water, and measure the conductivity to determine TDS of drinking water
- Can simultaneously measure 6 parameters: COD (chemical oxygen demand), TOC (total organic carbon), UV275 (ultraviolet wavelength 275nm), TDS (total dissolved solids), EC (electric conductivity), T (temperature) for comprehensive evaluation of water quality
- With intelligent scoring feature: 4 colors backlight indicate 4 grades of water quality
- Automatic temperature compensation
- Probe protection level: IP67

STANDARD DELIVERY

Main unit	1 pc
Pure water calibration cup	1 pc

PORTABLE DENSITY METER
CODE MDY-PD30

DATA OUTPUT

IP67 WATERPROOF

VIDEO

- Rapid measurement of petroleum products, beverages, alcohol, pharmaceuticals, coolants, etc.
- It can measure density, temperature, concentration and specific gravity of liquids
- 5000 data sets can be stored and uploaded
- The display can rotate in response to gravity
- 2mL of sample is needed each time
- Probe protection level: IP67
- Explosion proof level: Ex ia IIC T4 Ga

SPECIFICATION

Density	range	0.0000g/cm³ ~3.0000g/cm³
	accuracy	±0.001g/cm³
	repeatability	0.0002g/cm³
	resolution	0.0001g/cm³
Temperature	range	0°C~55°C
	accuracy	±0.2°C
	repeatability	0.1°C
	resolution	0.01°C
Power supply		3.7V rechargeable Li-ion battery
Work time		20 hours
Data port		bluetooth
Operation environment		-10°C~60°C
Dimension (L×W×H)		245×95×125mm
Net weight		650g

STANDARD DELIVERY

Main unit	1 pc
Injection tube	2 pcs
Power adapter	1 pc
Bluetooth receiver	1 pc
Software	1 set

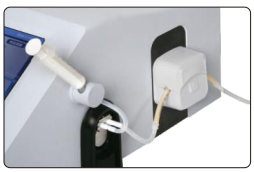
AUTOMATIC DENSITY METER
CODE MDY-MD30

VIDEO

DATA OUTPUT

- According to GB/T 29617, GB/T 2013, ISO 12185, ASTM D4052, ASTM D5002, ASTM D3505
- Rapid measurement of liquids such as sugar solutions, fruit juices, alcohols, oils, food additives, metalworking cleaners, etc.
- 2~3mL of sample is needed each time
- Built-in peltier temperature control device for more accurate measurements
- Dry air and distilled water can be used for daily calibration
- Compatible with automatic sampling and manual sampling
- Rapid pre-test mode and precision mode
- Data can be saved and reports can be exported

drying barrel (included)



manual sampling

automatic sampling

SPECIFICATION

Density range	0.0000g/cm³~3.0000g/cm³
Measurement method	density g/cm³, density kg/m³, specific gravity of water
Density resolution	0.0001g/cm³
Density accuracy	±0.0005g/cm³
Density repeatability	≤0.0002g/cm³
Temperature resolution	0.01°C
Temperature control range	5°C~50°C
Temperature control precision	±0.05°C
Temperature control accuracy	±0.1°C
Observation	high definition camera/video observation
Data storage	128G
Display	10.1 inch color LCD touch screen
Power supply	100V~240V, 50Hz~60Hz
Dimension (L×W×H)	439×350×217mm
Net weight	9kg

STANDARD DELIVERY

Main unit	1 pc
Power adapter	1 pc
PP syringe (MDY-MD30-ZSQ1)	3 pcs
Drying barrel	1 pc
Waste liquid bottle	1 pc
Silicone tube connector	1 set
Silicone tube	1 pc
Dust cover	1 pc

OPTIONAL ACCESSORY

Stylus printer	MDY-MD30-PRINTER-A
Thermal printer	MDY-MD30-PRINTER-B
PTFE syringe	MDY-MD30-ZSQ2
Glass syringe	MDY-MD30-ZSQ3

HEATING MAGNETIC STIRRER (BASIC TYPE)
CODE MSH-B210

VIDEO

- Widely used for pharmaceutical industry, chemical industry, environmental engineering, food industry, bioengineering, etc.
- Suitable for low-viscosity liquids or solid-liquid mixtures
- The stainless steel ceramic-coated working plate is extremely resistant to chemical corrosion
- Can be heated up to 280°C
- Optional external temperature sensor, the temperature control accuracy can reach ±0.2°C

stirrer (included)

external temperature sensor (**optional**)

stand (**optional**)

SPECIFICATION

Work disc diameter	135mm
Work disc material	ceramic-coated stainless steel
Motor	brushless DC motor
Stirring point	1
Stirring volume	maximum 3L
Rotational speed range	200~1500rpm
Heating temperature range	RT~280°C
Heating temperature accuracy	±1°C (≥100°C) ±1% (<100°C)
Temperature resolution	1°C
Overheat protection	320°C
Residual heat warning	50°C
Enclosure protection grade	IP42
Work environment	5~40°C, <80%RH
Power supply	220V, 50Hz
Dimension (L×W×H)	150×260×100mm
Net weight	1.8kg

STANDARD DELIVERY

Main unit	1 pc
Stirrer (MSH-B210-MSB50)	1 pc

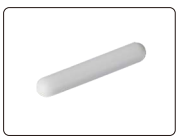
OPTIONAL ACCESSORY

External temperature sensor	MSH-B210-PT1000
Stand (450mm)	MSH-B210-SF450

HEATING MAGNETIC STIRRER (STANDARD TYPE)
CODE MSH-B320

VIDEO

- Widely used for pharmaceutical industry, chemical industry, environmental engineering, food industry, bioengineering, etc.
- Digital temperature control, with the maximum temperature up to 340°C
- The maximum stirring capacity (H2O) can reach up to 20L
- The screen can display the sample temperature and the stirring speed in real time
- Three heating speeds (fast heating, standard heating, smooth heating)
- Optional external temperature sensor, the temperature control accuracy can reach ±0.2°C



stirrer (included)

SPECIFICATION

Work disc diameter	135mm
Work disc material	ceramic-coated aluminum
Motor	brushless DC motor
Stirring point	1
Stirring volume	maximum 20L
Rotational speed range	100~1500rpm
Heating temperature range	RT~340°C
Heating temperature accuracy	±1°C (≥100°C) ±1% (<100°C)
Heating speed	fast heating standard heating smooth heating
Temperature resolution	0.1°C
Overheat protection	420°C
Residual heat warning	50°C
Enclosure protection grade	IP21
Timer function	1min~99h59min
Work environment	5~40°C, <80%RH
Power supply	220V, 50Hz
Dimension (L×W×H)	320×160×100mm
Net weight	2.8kg

STANDARD DELIVERY

Main unit	1 pc
Stirrer (MSH-B210-MSB50)	1 pc

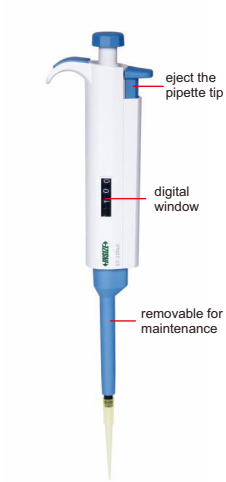
OPTIONAL ACCESSORY

External temperature sensor	MSH-B210-PT1000
Stand (450mm)	MSH-B320-SF450

SINGLE-CHANNEL ADJUSTABLE PIPETTES

VIDEO

- According to EN/ISO 8655
- Lightweight and ergonomic design
- Wide measuring range from 0.1μL to 10mL
- Digital window, the range is displayed clearly
- Tools for calibration and maintenance are included
- Sterilizable lower half



LMP-SC05

wrench (included)

6-posotion linear stand **(optional)**

6-posotion round stand **(optional)**

SPECIFICATION

Code	Range	Increment	Nominal volume	Maximum permissible systematic error		Maximum permissible random error	
	μL	μL	μL	μL	%	μL	%
LMP-SC05	10~100	1	100	±0.8	±0.80	±0.15	±0.15
			50	±0.5	±1.00	±0.2	±0.40
			10	±0.3	±3.00	±0.15	±1.50
LMP-SC06	20~200	1	200	±1.2	±0.60	±0.3	±0.15
			100	±0.8	±0.80	±0.3	±0.30
			20	±0.6	±3.00	±0.2	±1.00
LMP-SC08	100~1000	5	1000	±6	±0.60	±2	±0.20
			500	±3.5	±0.70	±1.25	±0.25
			100	±2	±2.00	±0.7	±0.70
LMP-SC11	1000~10000	100	10000	±60	±0.60	±20	±0.20
			5000	±60	±1.20	±15	±0.30
			1000	±30	±3.00	±6	±0.60

STANDARD DELIVERY

Main unit	1 pc
Pipette tip	1 pc
Wrench	1 pc
Simple stand	1 pc

OPTIONAL ACCESSORY

6-position linear stand	LMP-LS01
6-position round stand	LMP-RS01
Pipette tip	LMP-SC□□*-PT

*LMP-SC□□ is pipette code

DIGITAL REFRACTOMETER CODE ISQ-DRM31

VIDEO

SUITABLE FOR WATER BASED COOLANT

- Quickly measure the concentration of coolant, sugar solution, juice and drinks
- Two measurement modes: single measurement and automatic average multiple measurement
- Two units: brix and refractive index
- Refer to the refraction factor of coolant, for example: the refraction factor of grinding emulsion is 2.1, the reading value is 6%, so the actual concentration is (2.1×6%)=12.6%
- Automatic power off

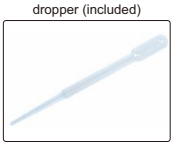
SPECIFICATION

Measuring range	0~50% (1.3330~1.4200RI)
Accuracy	±0.2% (±0.0003RI)
Resolution	0.1% (0.0001RI)
Power supply	1×AAA battery
Dimension (L×W×H)	121×58×25mm
Net weight	90g

STANDARD DELIVERY

Main unit	1 pc
Dropper	1 pc
Battery (AAA)	1 pc

dropper (included)



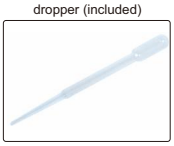
MINI DIGITAL REFRACTOMETER
CODE 5801-A55

VIDEO

SUITABLE FOR WATER BASED COOLANT

- Quickly measure the concentration of coolant
- Automatic temperature compensation
- Brix and refractive index can be displayed
- Refer to the refraction coefficient of coolant, for example: the refraction coefficient of grinding emulsion is 2.1, the reading value is 6%, so the actual concentration is (2.1×6%)=12.6%
- Automatic power off

dropper (included)



SPECIFICATION

Measuring range	0~50% (1.3330~1.4200RI)
Accuracy	±0.2% (±0.0003RI)
Resolution	0.1% (0.0001RI)
Power supply	built-in 3.7V rechargeable lithium battery
Dimension (L×W×H)	147×46×27mm
Net weight	115g

STANDARD DELIVERY

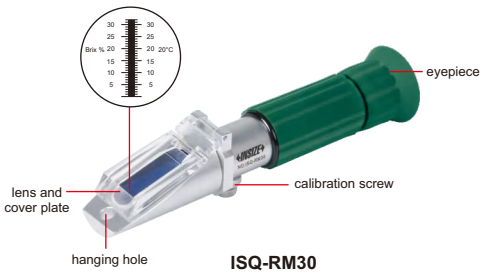
Main unit	1 pc
Dropper	1 pc

PORTABLE REFRACTOMETERS

VIDEO

SUITABLE FOR WATER BASED COOLANT

- Quickly measure the concentration of coolant, sugar solution, juice and drinks
- Unique hanging hole design for easy storage
- No tools are required for zero adjustment, convenient and quick
- Refer to the refraction factor of coolant, for example: the refraction factor of grinding emulsion is 2.1, the reading value is 6%, so the actual concentration is (2.1×6%)=12.6%



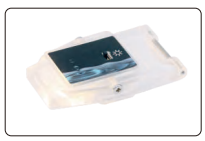
ISQ-RM30

SPECIFICATION

Code	ISQ-RM10	ISQ-RM30	ISQ-RM80
Measuring range	0~10%	0~32%	0~80%
Accuracy (20°C)	±0.1%	±0.2%	±0.5%
Resolution	0.1%	0.2%	0.5%
Dimension (L×W×H)	30×40×150mm	30×40×175mm	30×40×200mm
Net weight	183g	162g	137g

OPTIONAL ACCESSORY

Lighting cover plate	ISQ-RM-LIGHT

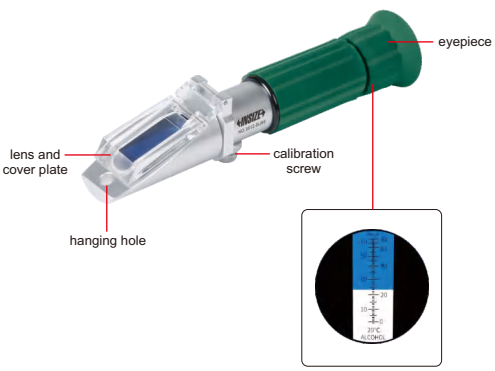


lighting cover plate **(optional)**

HANDHELD ALCOHOL REFRACTOMETER
CODE 5812-BJ80

VIDEO

- Quickly measure the alcohol concentration of white wine, vodka, whisky, etc.
- Unique hanging hole design for easy storage
- No tools are required for zero adjustment, convenient and quick



reading scale

SPECIFICATION

Measuring range	0~60%V/V	60~80%V/V
Accuracy (20°C)	±1%V/V	±2%V/V
Resolution	1%V/V	2%V/V
Dimension (L×W×H)	30×40×200mm	
Net weight	160g	

OPTIONAL ACCESSORY

Lighting cover plate	ISQ-RM-LIGHT

lighting cover plate **(optional)**

ULTRAVIOLET-VISIBLE SPECTROPHOTOMETER (STANDARD TYPE)
CODE UVS-B205

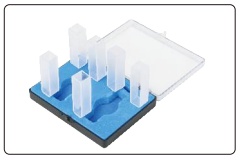
VIDEO

DATA OUTPUT

- Widely used in organic chemistry, biochemistry, pharmaceutical analysis, food testing, environmental protection, life science, etc.
- Built-in quantitative analysis software for easy operation
- Optional software to extend the range of applications, such as photometric measurement, quantitative measurement, kinetics, spectrum scan, DNA/protein test, mult-wavelength test, etc.
- Large sample chamber can accommodate 5~100mm cuvettes of all kinds
- Self-fault diagnosis function
- Provide power failure protection

SPECIFICATION

Optical system	automatic wavelength
Wavelength range	190~1100nm
Spectral bandwidth	2nm
Wavelength accuracy	±1nm
Wavelength repeatability	≤0.2nm
Wavelength resolution	0.1nm
Stray light	≤0.2%T @220nm/360nm
Noise	0.001A/2min @500nm
Baseline flatness	±0.002A/h
Photometric range	0~200%T, -3~3A, 0~9999C (0~9999F)
Photometric accuracy	±0.5%T
Photometric repeatability	≤0.2%T
Work mode	T, A, C, E
Light source	deuterium lamp, tungsten lamp
Display	128×64 LCD
Data storage	200 test data or 100 working curves
Power supply	AC 220V, 50Hz
Dimension (L×W×H)	420×510×240mm
Net weight	15.5kg

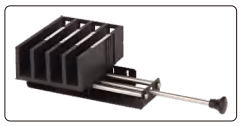


glass cuvette, quartz cuvette
(included)

manual 4-position film holder
(optional)

STANDARD DELIVERY

Main unit	1 pc
Glass cuvette (10mm)	1 set
Quartz cuvette (10mm)	1 set



manual 4-cell holder
(optional)

OPTIONAL ACCESSORY

Computer	**UVS-B205-COMPUTER**
Software	**UVS-B205-SOFTWARE**
Printer	**UVS-B205-PRINTER**
Manual 4-position film holder	**UVS-B205-BM4**
Manual 4-cell holder (100mm)	**UVS-B205-BSM10**

ULTRAVIOLET-VISIBLE SPECTROPHOTOMETER (ADVANCED TYPE)
CODE UVS-B103

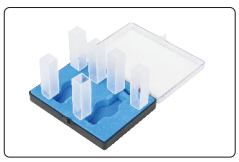
VIDEO

DATA OUTPUT

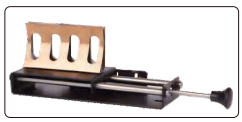
- Widely used in organic chemistry, biochemistry, pharmaceutical analysis, food testing, environmental testing, life sciences, etc.
- Photometric measurement, quantitative measurement, kinetics, spectrum scan, DNA/protein test, mult-wavelengti test, etc.
- Suspended optical system with thickened aluminum base plate to reduce the effects of vibration
- The dual-layer design separates optical and electrical circuits completely, improving instrument resolution and stability
- Adoption of photoelectric signal detection device for lower SNR
- Ultra-large screen shows various scan curves and graphs directly

SPECIFICATION

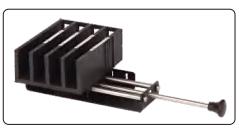
Optical system	double beam, grating 1200lines/mm
Wavelength range	190~1100nm
Spectral bandwidth	2.0nm
Wavelength accuracy	±0.3nm
Wavelength repeatability	≤0.1nm
Wavelength resolution	0.1nm
Stray light	≤0.1%T @420nm, ≤0.05%T @220nm/340nm
Noise	≤0.05%T (transmittance 0%), ≤0.1%T (transmittance 100%)
Baseline flatness	±0.001A/h
Photometric range	0~200%T, -3~3A, 0~9999C (0~9999F)
Photometric accuracy	±0.3%T
Photometric repeatability	≤0.1%T
Work mode	T, A, C, E
Light source	deuterium lamp, tungsten lamp
Display	7" TFT color screen
Data storage	2000 test data or 500 working curves
Data output	data export via U disk, supporting Excel, txt, and image
Power supply	AC 220V, 50Hz
Dimension (L×W×H)	450×580×210mm
Net weight	21kg



glass cuvette, quartz cuvette (included)



manual 4-position film holder **(optional)**



manual 4-cell holder **(optional)**

auto 8-cell holder **(optional)**

STANDARD DELIVERY

Main unit	1 pc
Glass cuvette (10mm)	1 set
Quartz cuvette (10mm)	1 set

OPTIONAL ACCESSORY

Computer	**UVS-B103-COMPUTER**
Software	**UVS-B103-SOFTWARE**
Printer	**UVS-B103-PRINTER**
Manual 4-position film holder	**UVS-B103-BM4**
Manual 4-cell holder (100mm)	**UVS-B103-BSM10**
Auto 8-cell holder	**UVS-B103-BSM08**

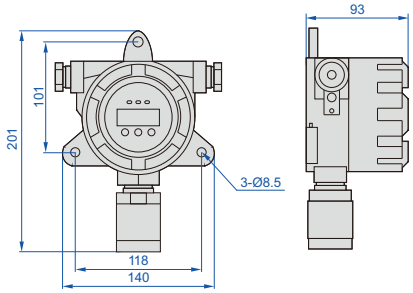
GAS DETECTION TRANSMITTER
CODE 0613-SG01

IP65 WATERPROOF

CAN BE CUSTOMIZED

VIDEO

Unit: mm



- Continuous detection of gas concentration
- Customized secondary alarm, light alarm indication, optional sound and light alarm lamp
- Can be customized other gases, such as O_2, CO, H_2S, NH_3, etc.
- Fixed installation, wall-mounted installation, longitudinal tube installation
- Quickly replaceable gas sensors
- Adjustable calibration values
- Sampling method: diffusion
- Protection level: IP65
- Explosion proof level: Exd II CT6 Gb

SPECIFICATION

Gas	CH_4*
Range	0~100%LEL
Resolution	1%LEL
Accuray	±5%FS
Response time	≤30s**
Alarm setting	primary alarm, secondary alarm
Alarm output	passive switching output (max: AC 220V 3A) independent sound and light alarm output
Signal output	RS485, (4~20)mA
Cable	3×1.5mm² or 4×2.5mm² shield cable
Transmission distance	≤1000m
Working environment	-40~70°C, <95%RH (no condensation)
Power supply	DC 24V
Dimension (L×W×H)	201×140×93mm
Net weight	1.2kg

*Other gases can be customized
**Different response times for different gases

STANDARD DELIVERY

Main unit	1 pc
Calibration remote control	1 pc

OPTIONAL ACCESSORY

Sound and light alarm lamp	**0613-SG01-AL**
8-position alarm controller	**0613-SG01-C08**
24-position alarm controller	**0613-SG01-C24**

SINGLE GAS DETECTORS

VIDEO

INSPECTION CERTIFICATE

IP64 WATERPROOF

- More than 30 types of gases can be customized, such as NO, NH_3, Cl_2, etc.
- Adjustable alarm level, alarm mode: sound, light, vibration
- Adjustable calibration level
- Sampling method: diffusion
- Self-test on startup
- Display with backlight
- Low battery indication

0611-SG01

SPECIFICATION

Code	0611-SG01	0611-SG02	0611-SG03	0611-SG04
Gas	combustible gas/EX	O_2	CO	H_2S
Range	0~100%LEL	0~30.0%VOL	0~1000ppm	0~100ppm
Resolution	1%LEL	0.1%VOL	1ppm	1ppm
Accuracy	±5%FS	±0.7%VOL	±5ppm or ±10%	±2ppm or ±10%
Response time	≤30s	≤20s	≤60s	≤60s
Sensor lifetime*	2 years			
Operation environment	-20°C~50°C, <95%RH, no condensation			
Power supply	3.7V rechargeable Li-ion battery, working time≥8h			
Dimension (L×W×H)	56×112×45mm			
Net weight	154g			

*Sensor lifetime depends on working environment

calibration cap (included)

STANDARD DELIVERY

Main unit	1 pc
Calibration cap	1 pc
Power adapter	1 pc

MULTI GAS DETECTOR CODE 0612-MG04

VIDEO

INSPECTION CERTIFICATE

IP64 WATERPROOF

- Customize more than 30 types of gases, such as NO, NH_3, Cl_2, etc.
- Adjustable alarm level, alarm mode: sound, light, vibration
- Adjustable calibration level
- Sampling method: diffusion
- Self-test on startup
- Display with backlight
- Low battery indication

SPECIFICATION

Gas	combustible gas/EX	O_2	CO	H_2S
Range	0~100%LEL	0~30.0%VOL	0~1000ppm	0~100ppm
Resolution	1%LEL	0.1%VOL	1ppm	1ppm
Accuracy	±5%FS	±0.7%VOL	±5ppm or ±10%	±2ppm or ±10%
Response time	≤30s	≤20s	≤60s	≤60s
Sensor lifetime*	2 years	5 years	2 years	2 years
Operation environment	-20°C~50°C, <95%RH, no condensation			
Power supply	3.7V rechargeable Li-ion battery, working time≥8h			
Dimension (L×W×H)	61×131×44mm			
Net weight	196g			

*Sensor lifetime depends on working environment

calibration cap (included)

STANDARD DELIVERY

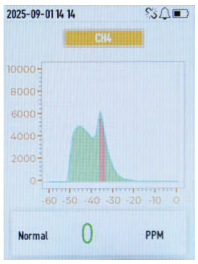
Main unit	1 pc
Calibration cap	1 pc
Power adapter	1 pc

GAS LEAK DETECTOR (RECORD TYPE)
CODE 0615-CP01

VIDEO

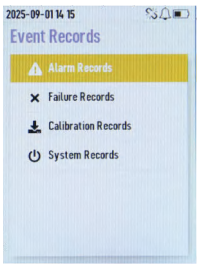
INSPECTION CERTIFICATE

digital mode



graph mode

one-point calibration or two-point calibration



event records

- Suitable for locating leak points and detecting leaks of flammable gases, including methane, propane, acetylene, hydrogen, etc.
- Non-slip rubber protective cover allows equipment use in all environments
- 14" flexible gooseneck probe can be bent in any direction
- Top lighting fixture illuminates dark environments
- Large-size TFT color display provides real-time readings, sound mode, alarm points, battery status, etc.
- Switchable display of numerical values and curve charts
- Alarm modes include light alarm, buzzer alarm, and vibrator alarm, supporting independent
- activation or simultaneous activation
- Alarm records, failure records, calibration records, and system records can be queried
- Features built-in zero calibration and zero suppression functions
- Customizable alarm values and calibration values

SPECIFICATION

Gas	combustible gas/EX (CH_4 calibrated)
Range	0~10000μmol/mol (0~20%LEL)
Resolution	1μmol/mol (1%LEL)
Accuray	±5%FS
Response time	≤45s
Indicator light mode	red: alarm, green: normal, yellow: failure
Sensor lifetime*	3 years
Work environment	-10°C~55°C, <95%RH, no condensation
Power supply	3.7V rechargeable Li-ion battery, working time≥8h
Dimension (L×W×H)	161×69×31mm (without gooseneck probe)
Net weight	270g

*Sensor lifetime depends on working environment

STANDARD DELIVERY

Main unit	1 pc
Power adapter	1 pc

HANDHELD AIRBORNE PARTICLE COUNTER
CODE 0811-CA01

VIDEO

DATA OUTPUT

high efficiency filter (included)

- Widely used in electronic production clean room testing, filter leakage detection, monitor biological safety, HVAC systems, computer rooms, food packaging environments, pharmaceutical and medical device production environments, hospital clean operating rooms, automotive spraying environments, etc.
- Using semiconductor laser sensor
- Measures the size and number of dust particles per unit volume of air in clean environments, and can be set to alarm at different purification levels
- Simultaneous counting of six counting channels (0.3μm, 0.5μm, 1μm, 3μm, 5μm, 10μm), and can be stored according to the room number respectively, according to the calculation of the upper confidence limit of 95% for each room (UCL value)
- It can be connected to a PC data acquisition system for remote control

SPECIFICATION

Sampling flow	range	2.83L/min (0.1ft³)
	accuracy	±5%
Particle	particle diameter passage	0.3μm, 0.5μm, 1μm, 3μm, 5μm, 10μm, simultaneous counting of six particle diameters
	repeatability	≤10%FS
	error of particle sizes	±30% (0.5μm, 5μm)
	accuracy	±30%FS (0.5μm)
Self-cleaning time		≤10min
Delay sampling time		0~99s
Sampling time		1s~9999s
Sampling mode		single, repeated, continuous, calculate, remote
Unit conversion		m³, ft³
Counting mode		cumulative value, difference value, concentration value
UCL setting*		sampling points (A): set from 2 to 9, sampling times per point (L): set from 2 to 9, location: set from 0 to 999
Alarm setting		the instrument is equipped with a clean room level alarm function, which will alarm when it exceeds the standard of class 100, 1000, 10000, 100000, 300000, 1000000, and will also alarm when the battery voltage is too low
Data storage		store 1000 sets of data (including particle size, data, environmental data, time, sample volume, data location), no data loss after power failure
Environmental requirement		temperature: 0~40°C, relative humidity: 20~90%, no condensation, the instrument should be used in a non-corrosive air environment
Power supply		16.8V rechargeable Li-ion battery, working time 8h
Dimension (L×W×H)		130×230×45mm
Net weight		900g

*Upper confidence limit of 95%

STANDARD DELIVERY

Main unit	1 pc
Isokinetic sampling port	1 pc
High efficiency filter (0811-CA01-F)	1 pc
Communication cable	1 set
Adapter	1 pc
USB disk	1 pc

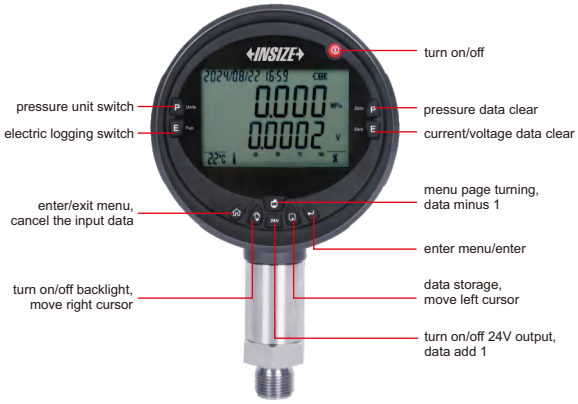
OPTIONAL ACCESSORY

Printer	0811-CA01-PRINTER
Temperature and humidity sensors	0811-CA01-THW
Tripod	0701-TR175

DIGITAL PRESSURE CALIBRATORS

BACKLIGHT

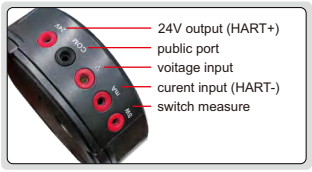
INSPECTION CERTIFICATE



5240-M20Y600

- Calibration of general pressure gauges, precision pressure gauges, pressure transmitters, pressure switches, sphygmomanometers, pressure transducers and other pressure instruments and meters
- Large white backlight LCD display with multiple measurements shown at the same time
- With standard HART interface, built-in HART communication, It can calibrate HART pressure transmitter
- RS232 interface for uploading stored files
- 11 pressure units can be switched
- With automatic temperature compensation function
- With data storage function, the data will not be lost when the pressure calibrator is switched off
- Other additional functions: pressure percentage display, pressure leakage detection, multiple triggering of pressure switches, pressure peak recording, 24V DC output

top



back

Range*	Connection*		
	M20	G1/2	NPT1/2
(-100-0)kPa/(-1~0)bar	5240-M20Y010A	5240-G12Y010A	5240-N12Y010A
(0-100)kPa/(0~1)bar	5240-M20Y010	5240-G12Y010	5240-N12Y010
(0-160)kPa/(0~1.6)bar	5240-M20Y016	5240-G12Y016	5240-N12Y016
(0-250)kPa/(0~2.5)bar	5240-M20Y025	5240-G12Y025	5240-N12Y025
(0-400)kPa/(0~4)bar	5240-M20Y04	5240-G12Y04	5240-N12Y04
(0-600)kPa/(0~6)bar	5240-M20Y06	5240-G12Y06	5240-N12Y06
(0-1)MPa/(0~10)bar	5240-M20Y10	5240-G12Y10	5240-N12Y10
(0-1.6)MPa/(0~16)bar	5240-M20Y16	5240-G12Y16	5240-N12Y16
(0-2.5)MPa/(0~25)bar	5240-M20Y25	5240-G12Y25	5240-N12Y25
(0-4)MPa/(0~40)bar	5240-M20Y40	5240-G12Y40	5240-N12Y40
(0-6)MPa/(0~60)bar	5240-M20Y60	5240-G12Y60	5240-N12Y60
(0-10)MPa/(0~100)bar	5240-M20Y100	5240-G12Y100	5240-N12Y100
(0-16)MPa/(0~160)bar	5240-M20Y160	5240-G12Y160	5240-N12Y160
(0-25)MPa/(0~250)bar	5240-M20Y250	5240-G12Y250	5240-N12Y250
(0-40)MPa/(0~400)bar	5240-M20Y400	5240-G12Y400	5240-N12Y400
(0-60)MPa/(0~600)bar	5240-M20Y600	5240-G12Y600	5240-N12Y600

*Other ranges and connection can be customized according to customer requirements

STANDARD DELIVERY

Main unit	1 pc
Power adapter	1 pc
Current and voltage test line	1 set

OPTIONAL ACCESSORY

Pressure gauge penumatic calibration pump	5220-PP06
Pressure gauge calibration pump	5230-HP□□□
Pressure adapter	5220-PA-□□□

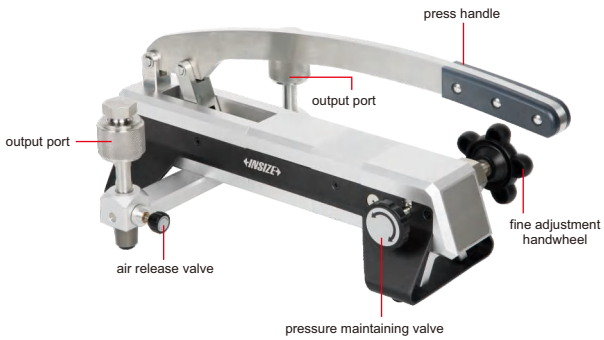
To be continued

Continued from previous page

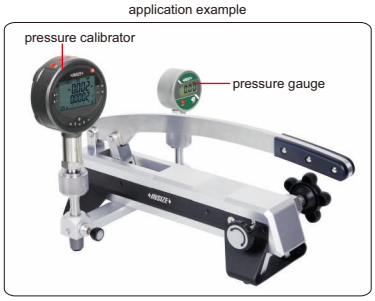
SPECIFICATION

Accuracy		0.05%FS
Overload pressure		120%FS
Long-term stability		±0.1%FS/year
Zero drift		±0.1%FS
Dial diameter		120mm
Pressure type		gauge pressure
Unit		MPa, kPa, inHg, inH₂o, kgf/cm², mmH₂o, mmHg, mbar, bar, psi, Pa
Electrical connection		measuring connection standard Ø4mm jack
Current measurement	range	(-30~30)mA
	resolution	0.1μA
	accuracy	±(0.01%RD+0.003%FS)
Voltage measurement	range	(-30~30)V
	resolution	0.1μV
	accuracy	±(0.01%RD+0.003%FS)
Pressure switch-off measurement		voltage range 3V~24V (if with electric)
Temperature measurement	range	0~50°C
	accuracy	±1°C
24V DC output		24V±0.5V, 50mA (max)
Operation environment	work temperature	0~50°C
	humidity	(0~90%)RH (non-condensing)
	atmospheric pressure	0.86~1.01bar/(86~101)kPa
Data interface		RS232
Power supply		rechargeable lithium battery, power adapter
Dimension		header Ø120×45mm, overall length 190mm
Net weight		0.70kg

PRESSURE GAUGE PENUMATIC CALIBRATION PUMP CODE 5220-PP06



application example



carrying case (**optional**)

- Energy-saving operation
- Two quick-connect ports
- Screw type fine adjustment
- All parts are made of aluminium alloy
- Easy maintenance and repair

SPECIFICATION

Pressure range	(-0.095~6)MPa (-0.95~70)bar/(-14~1000)psi
Adjustment resolution	10Pa
Output port	M20×1.5 female (Qty 2)*
Medium	air
Dimension (L×W×H)	450×262×170mm
Net weight	5.5kg

*Other output port (1/2G, 1/4G, 1/2NPT, 1/4NPT) can be customized

STANDARD DELIVERY

Main unit	1 pc
O-ring	20 pcs

OPTIONAL ACCESSORY

Pressure calibrator	5240-□□□
Pressure calibration adaptor	5220-PA-□□□
Carrying case	5220-CASE

PRESSURE GAUGE ADAPTERS

- The adapters are designed for the conversion connection between different types and specifications of threads during the testing of pressure gauge
- The M20×1.5 male thread is converted to a variety of different specifications and types of threads, which can meet most of the conversion connection needs

5220-PA-SET

Set

Code	Including 38 adapters	Pressure range
5220-PA-SET	5220-PA-M20M, 5220-PA-M20F, 5220-PA-M16M, 5220-PA-M16F, 5220-PA-M14M 5220-PA-M14F, 5220-PA-M12M, 5220-PA-M12F, 5220-PA-M10M, 5220-PA-M10F 5220-PA-G12M, 5220-PA-G12F, 5220-PA-G38M, 5220-PA-G38F, 5220-PA-G14M 5220-PA-G14F, 5220-PA-G18M, 5220-PA-G18F, 5220-PA-ZG12M, 5220-PA-ZG12F 5220-PA-ZG38M, 5220-PA-ZG38F, 5220-PA-ZG14M, 5220-PA-ZG14F, 5220-PA-ZG18M 5220-PA-ZG18F, 5220-PA-N12M, 5220-PA-N12F, 5220-PA-N38M, 5220-PA-N38F 5220-PA-N14M, 5220-PA-N14F, 5220-PA-N18M, 5220-PA-N18F, 5220-PA-6HB 5220-PA-8HB, 5220-PA-10HB, 5220-PA-M20RA	(-1-250) bar

Individual

Code	Specification
5220-PA-M20M	M20×1.5 male to M20×1.5 male
5220-PA-M20F	M20×1.5 male to M20×1.5 female
5220-PA-M16M	M20×1.5 male to M16×1.5 male
5220-PA-M16F	M20×1.5 male to M16×1.5 female
5220-PA-M14M	M20×1.5 male to M14×1.5 male
5220-PA-M14F	M20×1.5 male to M14×1.5 female
5220-PA-M12M	M20×1.5 male to M12×1.5 male
5220-PA-M12F	M20×1.5 male to M12×1.5 female
5220-PA-M10M	M20×1.5 male to M10×1.0 male
5220-PA-M10F	M20×1.5 male to M10×1.0 female
5220-PA-G12M	M20×1.5 male to G1/2 male
5220-PA-G12F	M20×1.5 male to G1/2 female
5220-PA-G38M	M20×1.5 male to G3/8 male
5220-PA-G38F	M20×1.5 male to G3/8 female
5220-PA-G14M	M20×1.5 male to G1/4 male
5220-PA-G14F	M20×1.5 male to G1/4 female
5220-PA-G18M	M20×1.5 male to G1/8 male
5220-PA-G18F	M20×1.5 male to G1/8 female
5220-PA-ZG12M	M20×1.5 male to ZG1/2 male

Code	Specification
5220-PA-ZG12F	M20×1.5 male to ZG1/2 female
5220-PA-ZG38M	M20×1.5 male to ZG3/8 male
5220-PA-ZG38F	M20×1.5 male to ZG3/8 female
5220-PA-ZG14M	M20×1.5 male to ZG1/4 male
5220-PA-ZG14F	M20×1.5 male to ZG1/4 female
5220-PA-ZG18M	M20×1.5 male to ZG1/8 male
5220-PA-ZG18F	M20×1.5 male to ZG1/8 female
5220-PA-N12M	M20×1.5 male to NPT1/2 male
5220-PA-N12F	M20×1.5 male to NPT1/2 female
5220-PA-N38M	M20×1.5 male to NPT3/8 male
5220-PA-N38F	M20×1.5 male to NPT3/8 female
5220-PA-N14M	M20×1.5 male to NPT1/4 male
5220-PA-N14F	M20×1.5 male to NPT1/4 female
5220-PA-N18M	M20×1.5 male to NPT1/8 male
5220-PA-N18F	M20×1.5 male to NPT1/8 female
5220-PA-6HB	M20×1.5 male to Ø6 hose barb
5220-PA-8HB	M20×1.5 male to Ø8 hose barb
5220-PA-10HB	M20×1.5 male to Ø10 hose barb
5220-PA-M20RA	M20×1.5 male to right angle M20×1.5 female

Gas pressure connection hose

Code	Application	Pressure range
5220-PA-GH	for remote calibration of gas pressure gauge, the gauge is connected to the calibrator	(-1-8) bar

5220-PA-GH

High gas pressure connection hose

Code	Application	Pressure range
5220-PA-HGH	for remote calibration of high gas pressure gauge, the gauge is connected to a calibrator	(-1-40) bar

5220-PA-HGH

High liquid pressure connection hose

Code	Application	Pressure range
5220-PA-LH	for remote calibration of high pressure liquid pressure gauge, the gauge is connected to the calibrator	(0-700) bar

5220-PA-LH

Gas-liquid separation filter

Code	Application	Pressure range
5220-PA-SF	when calibrating gauge with air pressure sources, the filter impurities and excludes oil	(-1-250) bar

5220-PA-SF

Liquid filter

Code	Application	Pressure range
5220-PA-LF	the filter impurities the pressure gauge lumen to prevent contamination of the pressure source	(0-700) bar

5220-PA-LF

Pressure gauge thread cleaner

Code	Application
5220-PA-TC	remove sealing wrappings such as twine and raw tape from threaded connections

5220-PA-TC

Oil-water separator

Code	Application
5220-PA-OWS	used to isolate the upper and lower two (or the same) liquid media, isolation film can also play a role in equipment maintenance and cleaning

5220-PA-OWS

PRESSURE TRANSMITTERS
CODE 5501-□□□□□

IP65 WATERPROOF (HIRSCHMANN)

IP67 WATERPROOF (STRAIGHT OUT)

- Compact structure design, small appearance, easy to install
- Digital circuit design, good appliance compatibility
- High-performance diffusion silicon sensor for high sensitivity
- Good long-term stability and high precision
- Circuit adopts anti-frequency interference design, stable output signal
- Anti-reverse connection protection
- 304 stainless steel material

5501-A2C2E1M1P3R11

Accuracy

A1	0.25%FS
A2	0.5%FS

Thread connection

C1	M20*1.5
C2	G1/4
C3	G1/2
C4	NPT1/4
C5	NPT1/2

Mating connection

M1	hirschmann
M2	aviation plug
M3	straight out

Output signal

E1	4-20mA
E2	RS485
E3	0-10V
E4	0-5V
E5	0.5-4.5V

Supply voltage

P1	5V DC
P2	24V DC
P3	12-28V DC
P4	3.3V DC

5501-A□C□E□M□P□R□

accuracy
connection thread
output signal
pressure range
supply voltage
mating connection

Positive pressure range

R1	(0~0.6)bar
R2	(0~1)bar
R3	(0~1.6)bar
R4	(0~2.5)bar
R5	(0~4)bar
R6	(0~6)bar
R7	(0~10)bar
R8	(0~16)bar
R9	(0~25)bar
R10	(0~40)bar
R11	(0~60)bar
R12	(0~100)bar
R13	(0~160)bar
R14	(0~250)bar
R15	(0~400)bar
R16	(0~600)bar

Compound pressure range

R18	(-0.5~0.5)bar
R19	(-1~1)bar

Code example:

5501-A2C2E1M1P3R11	**A2**-accuracy 0.5%FS
	C2-connection thread 1/4G
	E1-output signal 4~20mA
	M1-hirschmann mating connection
	P3-supply voltage 12-28V DC
	R11-pressure range (0~10bar)

Absolute pressure range

R20	(0~1)bar.a
R21	(0~1.6)bar.a
R22	(0~2)bar.a
R23	(0~2.5)bar.a
R24	(0~3)bar.a
R25	(0~4)bar.a
R26	(0~5)bar.a
R27	(0~6)bar.a
R28	(0~10)bar.a
R29	(0~16)bar.a
R30	(0~20)bar.a
R31	(0~25)bar.a

Vacuum pressure range

R17	(-1~0)bar

SPECIFICATION

Overload pressure	≤100bar 200%; >100bar 150%
Response time	≤5ms
Long-term stability	±0.25%/year
Working temperature	-20~80°C
Protection class	IP65 (hirschmann); IP67 (straight out)
Measurement medium	measurement medium is compatible with 316L stainless steel gas or liquid
Shell material	304 stainless steel
Net weight	200g

HIGH PRECISION DIGITAL PRESSURE GAUGES
CODE 5218-□□□□

IP65
WATERPROOF

5218-A2C2P2R6

- Dial rotates 330°
- 12 pressure units can be switched
- The main screen displays the pressure, the secondary screen displays the ambient temperature, maximum pressure value, minimum pressure value, range etc.
- Recording data can be collected at an adjustable rate
- Record up to 270,000 pieces of data per record, data can be exported

SPECIFICATION

Unit	MPa, kgf/cm², bar, psi, mH_2O, mbar, Tor, inHg, inH_2O, inWC, ATM, kPa
Overload pressure	150%
Dial diameter	85mm
Dial rotation angle	330°
Sampling rate	0.1~10s/time
Data interface	type-c
Protection level	IP65
Case material	zinc casting
Connection thread material	304 stainless steel
Measurement medium	compatible with 316L stainless steel gas or liquid
Working temperature	-5~40°C
Net weight	400g

Code explanation:

5218-A□C□P□R□

accuracy
connection thread
pressure range
power supply mode

Code example:

5218-A2C2P2R6	**A2**-accuracy 0.1%FS
	C2-connection thread G1/4
	P2-type-c external power supply + rechargeable battery power supply
	R6-pressure range (0~10)bar

Accuracy

A1	0.05%FS
A2	0.1%FS

Thread connection

C1	M20*1.5
C2	G1/4
C3	G1/2
C4	NPT1/4
C5	NPT1/2

Supply voltage

P1	type-c external power supply + 3 AAA batteries power supply
P2	type-c external power supply + rechargeable battery power supply

Positive pressure range

R1	(0~1)bar
R2	(0~1.6)bar
R3	(0~2.5)bar
R4	(0~4)bar
R5	(0~6)bar
R6	(0~10)bar
R7	(0~16)bar
R8	(0~25)bar
R9	(0~40)bar
R10	(0~60)bar
R11	(0~100)bar
R12	(0~160)bar
R13	(0~250)bar
R14	(0~400)bar
R15	(0~600)bar
R16	(0~700)bar

Vacuum pressure range

R17	(-1~0)bar

Compound pressure range

R18	(-1~1)bar
R19	(-1~1.6)bar
R20	(-1~2.5)bar
R21	(-1~6)bar
R22	(-1~10)bar
R23	(-1~16)bar
R24	(-1~25)bar

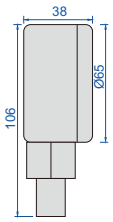
DIGITAL PRESSURE GAUGES (DIAL DIAMETER 60mm)
CODE 5202-□□□□□

INSPECTION CERTIFICATE | BACKLIGHT | IP50 WATERPROOF

- The case is made of 304 stainless steel
- Large LCD screen, support unit switching
- Zero, backlight, on/off functions
- Pressure bar display, indicating current pressure percentage
- Built-in high-precision pressure sensor, high accuracy, high long-term stability
- Measurement of gases, liquids, oils and other media that do not corrode stainless steel
- Anti-electromagnetic interference design, conforms to EN61326 standard

5202-M14Y60

Unit: mm



Code explanation:

5202-C□R□

connection thread — pressure range

Code example:

5202-C2R6	**C2**-connection thread G1/4
	R6-pressure range (0~10)bar

Thread connection

C1	M20*1.5
C2	G1/4 (BSPP1/4)
C3	G1/2 (BSPP1/2)
C4	R1/4 (BSPT1/4)
C5	NPT1/4
C6	NPT1/2

Positive pressure range

R1	(0~1)bar
R2	(0~1.6)bar
R3	(0~2.5)bar
R4	(0~4)bar
R5	(0~6)bar
R6	(0~10)bar
R7	(0~16)bar
R8	(0~25)bar
R9	(0~40)bar
R10	(0~60)bar
R11	(0~100)bar
R12	(0~160)bar
R13	(0~250)bar
R14	(0~400)bar
R15	(0~600)bar

Vacuum pressure range

R16	(-1~0)bar

SPECIFICATION

Accuracy		1%FS
Overload pressure		120% (≥10MPa); 150% (<10MPa)
Pressure type		gauge pressure
Unit		MPa, kPa, psi, kgf/cm², bar
Power supply		2×1.5V AAA batteries (for 12 months working)
Operation environment	**work temperature**	-10~60°C
	humidity	(0~100%)RH (non-condensing)
	storage temperature	-10~50°C
Dial diameter		60mm
Net weight		0.23kg

STANDARD DELIVERY

Main unit	1 pc
Battery (AAA)	2 pcs

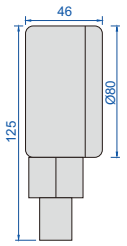
DIGITAL PRESSURE GAUGES (DIAL DIAMETER 80mm)
CODE 5203-□□□□□

INSPECTION CERTIFICATE | BACKLIGHT | IP50 WATERPROOF

- The case is made of 304 stainless steel
- Large LCD screen, support unit switching
- Zero, backlight, on/off, Low voltage alarm, extreme value recording functions
- Pressure bar display, indicating current pressure percentage
- Built-in high-precision pressure sensor, high accuracy, high long-term stability
- Measurement of gases, liquids, oils and other media that do not corrode stainless steel
- Anti-electromagnetic interference design, conforms to EN61326 standard

5203-M20Y60

Unit: mm



Code explanation:

5203-C□R□
connection thread — pressure range

Code example:

5203-C2R6	**C2**-connection thread G1/4
	R6-pressure range (0~10)bar

Thread connection

C1	M20*1.5
C2	G1/4 (BSPP1/4)
C3	G1/2 (BSPP1/2)
C4	R1/4 (BSPT1/4)
C5	NPT1/4
C6	NPT1/2

Positive pressure range

R1	(0~1)bar
R2	(0~1.6)bar
R3	(0~2.5)bar
R4	(0~4)bar
R5	(0~6)bar
R6	(0~10)bar
R7	(0~16)bar
R8	(0~25)bar
R9	(0~40)bar
R10	(0~60)bar
R11	(0~100)bar
R12	(0~160)bar
R13	(0~250)bar
R14	(0~400)bar
R15	(0~600)bar
R16	(0~700)bar

Vacuum pressure range

R17	(-1~0)bar

Compound pressure range

R18	(-1~1)bar
R19	(-1~1.6)bar
R20	(-1~2.5)bar
R21	(-1~6)bar
R22	(-1~10)bar

SPECIFICATION

Accuracy		0.5%FS
Overload pressure		150% (>10MPa); 200% (≤10MPa)
Pressure type		gauge pressure
Unit		MPa, kPa, psi, kgf/cm², bar, mH_2O, inHg
Power supply		2×1.5V AAA batteries (for 12 months working)
Operation environment	work temperature	-10~60°C
	humidity	(0~100%)RH (non-condensing)
	storage temperature	-10~50°C
Dial diameter		80mm
Net weight		0.38kg

STANDARD DELIVERY

Main unit	1 pc
Battery (AAA)	2 pcs

BOURDON TUBE PRESSURE GAUGES (DRY)
CODE 5204-□□□□□

BLACK STEEL CASE | BRASS BOURDON TUBE | BLACK STEEL RING | BRASS CONNECTION

5204-C4D3L1W1R11

- Black steel case, black steel ring, brass connection, brass bourdon tube
- Used for pneumatic systems, compressors, compressed air systems, non-vibration use
- Suitable for fluid medium which does not clog connection port or corrode brass

5204-C□D□L□W□R□

connection
dial size
connection position
window
pressure range

Code example:

5204-C4D3L1W1R11	**C4**-connection thread G1/4
	D3-dial size Ø63mm
	L1-bottom connection position
	W1-plastic material window
	R11-pressure range (0~10bar/0~150psi)

SPECIFICATION

Accuracy class	CL 2.5 for 40mm (1.5"), 50mm (2"); CL 1.6 for 63mm (2.5"), 100mm (4")
Ambient temperature	-40°C~60°C (-40°F~140°F)
Medium temperature	≤60°C (140°F)

Process connection

C1	G1/8 (Ø40mm, Ø50mm, Ø63mm)
C2	R1/8 (Ø40mm, Ø50mm, Ø63mm)
C3	NPT1/8 (Ø40mm, Ø50mm, Ø63mm)
C4	G1/4 (Ø40mm, Ø50mm, Ø63mm, Ø100mm)
C5	R1/4 (Ø40mm, Ø50mm, Ø63mm, Ø100mm)
C6	NPT1/4 (Ø40mm, Ø50mm, Ø63mm, Ø100mm)
C7	G3/8 (Ø100mm)
C8	R3/8 (Ø100mm)
C9	NPT3/8 (Ø100mm)
C10	G1/2 (Ø100mm)
C11	R1/2 (Ø100mm)
C12	NPT1/2 (Ø100mm)

Dial size

D1	Ø40mm (1.5")
D2	Ø50mm (2")
D3	Ø63mm (2.5")
D4	Ø100mm (4")

Connection position

L1	bottom
L2	back
L3	back connection with front flange
L4	bottom connection with back flange

Window

W1	plastic
W2	tempered glass

Pressure range

R1	(-1~0bar/-30~0inHg)
R2	(-1~2bar/-30~0inHg~30psi)
R3	(-1~4bar/-30~0inHg~60psi)
R4	(-1~7bar/-30~0inHg~100psi)
R5	(0~1bar/0~15psi)
R6	(0~1.4bar/0~20psi)
R7	(0~2bar/0~30psi)
R8	(0~2.5bar/0~35psi)
R9	(0~4bar/0~60psi)
R10	(0~7bar/0~100psi)
R11	(0~10bar/0~150psi)
R12	(0~11bar/0~160psi)
R13	(0~14bar/0~200psi)
R14	(0~16bar/0~230psi)
R15	(0~20bar/0~300psi)
R16	(0~25bar/0~350psi)
R17	(0~40bar/0~600psi)
R18	(0~55bar/0~800psi)
R19	(0~60bar/0~850psi)
R20	(0~70bar/0~1000psi)
R21	(0~100bar/0~1500psi)
R22	(0~140bar/0~2000psi)
R23	(0~160bar/0~2300psi)
R24	(0~200bar/0~3000psi)
R25	(0~250bar/0~3500psi)
R26	(0~280bar/0~4000psi)
R27	(0~350bar/0~5000psi)
R28	(0~400bar/0~6000psi)

BOURDON TUBE PRESSURE GAUGES (DRY)
CODE 5205-□□□□□

ELECTROPLATING CASE | ELECTROPLATING RING | BRASS CONNECTION | BRASS BOURDON TUBE

5205-C4D3L1W1R15

5205-C□D□L□W□R□

- connection
- dial size
- connection position
- window
- pressure range

Code example:

5205-C4D3L1W1R15	**C4**-connection thread G1/4
	D3-dial size Ø63mm
	L1-bottom connection position
	W1-plastic material window
	R15-pressure range (0~20bar/0~300psi)

- Electroplating case, electroplating ring, brass connection, brass bourdon tube
- Used for pneumatic systems, compressors, compressed air system, non-vibrating use
- Suitable for fluid medium which does not clog connection port or corrode brass

SPECIFICATION

Accuracy class	CL 2.5 for 40mm (1.5"), 50mm (2"); CL 1.6 for 63mm (2.5"), 100mm (4")
Ambient temperature	-40°C~60°C (-40°F~140°F)
Medium temperature	≤60°C (140°F)

Process connection

C1	G1/8 (Ø40mm, Ø50mm, Ø63mm)
C2	R1/8 (Ø40mm, Ø50mm, Ø63mm)
C3	NPT1/8 (Ø40mm, Ø50mm, Ø63mm)
C4	G1/4 (Ø40mm, Ø50mm, Ø63mm, Ø100mm)
C5	R1/4 (Ø40mm, Ø50mm, Ø63mm, Ø100mm)
C6	NPT1/4 (Ø40mm, Ø50mm, Ø63mm, Ø100mm)
C7	G3/8 (Ø100mm)
C8	R3/8 (Ø100mm)
C9	NPT3/8 (Ø100mm)
C10	G1/2 (Ø100mm)
C11	R1/2 (Ø100mm)
C12	NPT1/2 (Ø100mm)

Dial size

D1	Ø40mm (1.5")
D2	Ø50mm (2")
D3	Ø63mm (2.5")
D4	Ø100mm (4")

Connection position

L1	bottom
L2	back

Window

W1	plastic
W2	tempered glass

Pressure range

R1	(-1~0bar/-30~0inHg)
R2	(-1~2bar/-30~0inHg~30psi)
R3	(-1~4bar/-30~0inHg~60psi)
R4	(-1~7bar/-30~0inHg~100psi)
R5	(0~1bar/0~15psi)
R6	(0~1.4bar/0~20psi)
R7	(0~2bar/0~30psi)
R8	(0~2.5bar/0~35psi)
R9	(0~4bar/0~60psi)
R10	(0~7bar/0~100psi)
R11	(0~10bar/0~150psi)
R12	(0~11bar/0~160psi)
R13	(0~14bar/0~200psi)
R14	(0~16bar/0~230psi)
R15	(0~20bar/0~300psi)
R16	(0~25bar/0~350psi)
R17	(0~40bar/0~600psi)
R18	(0~55bar/0~800psi)
R19	(0~60bar/0~850psi)
R20	(0~70bar/0~1000psi)
R21	(0~100bar/0~1500psi)
R22	(0~140bar/0~2000psi)
R23	(0~160bar/0~2300psi)
R24	(0~200bar/0~3000psi)
R25	(0~250bar/0~3500psi)
R26	(0~280bar/0~4000psi)
R27	(0~350bar/0~5000psi)
R28	(0~400bar/0~6000psi)

BOURDON TUBE PRESSURE GAUGES (LIQUID FILLED)
CODE 5208-□□□□□

STAINLESS STEEL CASE | STAINLESS STEEL RING | STAINLESS STEEL CONNECTION | STAINLESS STEEL BOURDON TUBE | CRIMP RING

5208-C4D3L1W1R19

5208-C□D□L□W□R□
- connection
- dial size
- connection position
- window
- pressure range

Code example:

5208-C4D3L1W1R19	**C4**-connection thread G1/4
	D3-dial size Ø63mm
	L1-back connection position
	W1-polycarbonate material window
	R19-pressure range (0~60bar/0~850psi)

- Stainless steel case, stainless steel ring, stainless steel connection, stainless steel bourdon tube
- Used for hydraulic and pneumatic systems, compressors, compressed air system, shock-proof and pulse-proof
- Suitable for fluid medium which does not clog connection port or corrode stainless steel

SPECIFICATION

Accuracy class	CL 2.5 for 40mm (1.5"), 50mm (2"); CL 1.6 for 63mm (2.5"), 100mm (4")
Liquid	silicone
Ambient temperature	-20°C~60°C (-4°F~140°F)
Medium temperature	≤60°C (140°F)

Process connection

C1	G1/8 (Ø40mm, Ø50mm, Ø63mm)
C2	R1/8 (Ø40mm, Ø50mm, Ø63mm)
C3	NPT1/8 (Ø40mm, Ø50mm, Ø63mm)
C4	G1/4 (Ø40mm, Ø50mm, Ø63mm, Ø100mm)
C5	R1/4 (Ø40mm, Ø50mm, Ø63mm, Ø100mm)
C6	NPT1/4 (Ø40mm, Ø50mm, Ø63mm, Ø100mm)
C7	G3/8 (Ø100mm)
C8	R3/8 (Ø100mm)
C9	NPT3/8 (Ø100mm)
C10	G1/2 (Ø100mm)
C11	R1/2 (Ø100mm)
C12	NPT1/2 (Ø100mm)

Dial size

D1	Ø40mm (1.5")
D2	Ø50mm (2")
D3	Ø63mm (2.5")
D4	Ø100mm (4")

Connection position

L1	bottom
L2	back
L3	back connection with front flange
L4	bottom connection with back flange

Window

W1	polycarbonate
W2	tempered glass

Pressure range

R1	(-1~0bar/-30~0inHg)
R2	(-1~2bar/-30~0inHg~30psi)
R3	(-1~4bar/-30~0inHg~60psi)
R4	(-1~7bar/-30~0inHg~100psi)
R5	(0~1bar/0~15psi)
R6	(0~1.4bar/0~20psi)
R7	(0~2bar/0~30psi)
R8	(0~2.5bar/0~35psi)
R9	(0~4bar/0~60psi)
R10	(0~7bar/0~100psi)
R11	(0~10bar/0~150psi)
R12	(0~11bar/0~160psi)
R13	(0~14bar/0~200psi)
R14	(0~16bar/0~230psi)
R15	(0~20bar/0~300psi)
R16	(0~25bar/0~350psi)
R17	(0~40bar/0~600psi)
R18	(0~55bar/0~800psi)
R19	(0~60bar/0~850psi)
R20	(0~70bar/0~1000psi)
R21	(0~100bar/0~1500psi)
R22	(0~140bar/0~2000psi)
R23	(0~160bar/0~2300psi)
R24	(0~200bar/0~3000psi)
R25	(0~250bar/0~3500psi)
R26	(0~280bar/0~4000psi)
R27	(0~350bar/0~5000psi)
R28	(0~400bar/0~6000psi)
R29	(0~600bar/0~9000psi)
R30	(0~700bar/0~10000psi)

BOURDON TUBE PRESSURE GAUGES (LIQUID FILLED)
CODE 5209-□□□□□

STAINLESS STEEL CASE | STAINLESS STEEL RING | STAINLESS STEEL CONNECTION | STAINLESS STEEL BOURDON TUBE | BAYNOET RING

5209-C7D2L1W1R11

5209-C□D□L□W□R□
- connection
- dial size
- connection position
- window
- pressure range

Code example:

5209-C7D2L1W1R11	**C7**-connection thread G1/2
	D2-dial size Ø100mm
	L1-bottom connection position
	W1-tempered glass material window
	R11-pressure range (0~10bar/0~140psi)

- Stainless steel case, stainless steel ring, stainless steel connection, stainless steel bourdon tube
- Used for hydraulic and pneumatic systems, compressors, compressed air system, shock-proof and pulse-proof
- Suitable for fluid medium which does not clog connection port or corrode stainless steel

SPECIFICATION

Accuracy class	CL 1.6 for 63mm (2.5"); CL 1.0 for 100mm (4"), 150mm (6")
Ambient temperature	-20°C~60°C (-4°F~140°F)
Liquid	silicone
Medium temperature	≤60°C (140°F)

Process connection

C1	G1/4 (Ø63mm)
C2	R1/4 (Ø63mm)
C3	NPT1/4 (Ø63mm)
C4	G3/8 (Ø100mm, Ø150mm)
C5	R3/8 (Ø100mm, Ø150mm)
C6	NPT3/8 (Ø100mm, Ø150mm)
C7	G1/2 (Ø100mm, Ø150mm)
C8	R1/2 (Ø100mm, Ø150mm)
C9	NPT1/2 (Ø100mm, Ø150mm)

Dial size

D1	Ø63mm (2.5")
D2	Ø100mm (4")
D3	Ø150mm (6")

Connection position

L1	bottom
L2	back

Window

W1	tempered glass
W2	safety glass

Pressure range

R1	(-1~0bar/-30~0inHg)
R2	(-1~2bar/-30~0inHg~30psi)
R3	(-1~4bar/-30~0inHg~60psi)
R4	(-1~7bar/-30~0inHg~100psi)
R5	(0~1bar/0~15psi)
R6	(0~1.4bar/0~20psi)
R7	(0~2bar/0~30psi)
R8	(0~2.5bar/0~35psi)
R9	(0~4bar/0~60psi)
R10	(0~7bar/0~100psi)
R11	(0~10bar/0~150psi)
R12	(0~11bar/0~160psi)
R13	(0~14bar/0~200psi)
R14	(0~16bar/0~230psi)
R15	(0~20bar/0~300psi)
R16	(0~25bar/0~350psi)
R17	(0~40bar/0~600psi)
R18	(0~55bar/0~800psi)
R19	(0~60bar/0~850psi)
R20	(0~70bar/0~1000psi)
R21	(0~100bar/0~1500psi)
R22	(0~140bar/0~2000psi)
R23	(0~160bar/0~2300psi)
R24	(0~200bar/0~3000psi)
R25	(0~250bar/0~3500psi)
R26	(0~280bar/0~4000psi)
R27	(0~350bar/0~5000psi)
R28	(0~400bar/0~6000psi)
R29	(0~600bar/0~9000psi)
R30	(0~700bar/0~10000psi)

DIGITAL OSCILLOSCOPE
CODE 9530-WA10

VIDEO

passive probe (included)

- Analogue bandwidth: 100MHz
- Memory depth: 64kpts
- Sampling rate per channel: 1GSa/s (non-interleaved mode)
- Waveform capture rate: 5,000wfms/s
- Automatic measurement of multiple waveform parameters
- Multiple frequency standard square waves can be output:10Hz, 100Hz, 1kHz, 10kHz
- Sampling mode: real-time sampling and equivalent sampling
- Lissajous method: measuring the phase of a waveform

SPECIFICATION

Analogue bandwidth	100MHz
Channel	2
Maximum real-time sampling rate	1GSa/s (non-interleaved mode)
Rise time	≤3.5ns
Memory depth	64kpts
Waveform capture rate	5000wfms/s
Vertical scale (V/div)	1mV/div~20V/div
Time base scale (s/div)	2ns/div~50s/div
Storage method	setup, wave, bitmap
Trigger type	edge, pulse, alternate, slope, video
Trigger mode	auto, normal, single
Trigger coupling	DC, AC, HF, LF, noise
Cursor measurement	time, voltage, tracking
Parameter measurement	automatic measurement of multiple waveform parameters
Mathematical operation	+, -, ×, ÷, FFT, filter
Digital filter	low pass, high pass, band pass, band stop
Setting	internal: 20 groups, USB: 200 groups
Waveform	internal: 20 groups, USB: 200 groups
Recorded frame	1000 frames of screen data
Interface	USB Host, USB Device, Pass/Fail
Maximum input voltage	300Vrms, the transient over voltage is 1000 Vpk.
Probe compensator output	voltage: about 3Vp-p frequency: 10Hz, 100Hz, 1kHz, 10kHz
Power supply	AC 100V~240V, 50-60Hz
Dimension (L×W×H)	306×138×124mm
Net weight	2.5kg

STANDARD DELIVERY

Main unit	1 pc
Passive probe	2 pcs
USB cable	1 pc

BATTERY TESTER
CODE 9657-1000

VIDEO

- 5-inch LCD touch screen display
- AC four-terminal method sampling for more accurate test result
- Simultaneously measure resistance and voltage
- Supports storing data and saving screenshot with a USB flash drive
- High sampling rate and standard multiple communication interfaces suitable for automated testing

9657-1000

Kelvin test lead (included)

test probe (**optional**)

SPECIFICATION

Range	**voltage**	10V/100V/1000V
	resistance	3mΩ/30mΩ/300mΩ/3Ω/30Ω/300Ω/3000Ω
Range mode		auto range, manual range, nominal range
Calibration		short circuit clearing for full ranges
Test speed		slow: 4t/s, medium: 8t/s, fast: 20t/s, exfast: 55t/s
Comparing method		absolute tolerance, percentage tolerance, direct-reading comparison
Trig		internal and external
Interface		RS232/RS485/USB DEVICE/LAN interface, support SCPI and Modbus agreement
Power supply		AC: 100V~240V, 50~60Hz
Dimensions (L×W×H)		307×265×105mm
Net weight		2.8kg

RESISTANCE SPECIFICATION

Range		3mΩ	30mΩ	300mΩ	3Ω	30Ω	300Ω	3000Ω
Maximum display		3.1000mΩ	31.000mΩ	310.00mΩ	3.1000Ω	31.000Ω	310.00Ω	3200.0Ω
Resolution		0.1μΩ	1μΩ	10μΩ	100μΩ	1mΩ	10mΩ	100mΩ
Measurement current		100mA	100mA	10mA	1mA	100μA	10μA	1μA
Frequency of measurement current		1kHz						
Accuracy	**slow**	±(0.5%rdg+10dgt)	±(0.5%rdg+5dgt)					
	medium	±(0.5%rdg+15dgt)	±(0.5%rdg+10dgt)					
	fast	±(0.5%rdg+20dgt)	±(0.5%rdg+10dgt)					
Temperature coefficient		±(0.05%rdg+1dgt)/ºC	±(0.05%rdg+0.5dgt)/ºC					

VOLTAGE SPECIFICATION

Range		8V	80V	200V/400V/800V
Resolution		10V	100V	1000V
		10μV	100μV	1mV
Accuracy	**slow**	±(0.01%rdg+5dgt)		
	medium	±(0.01%rdg+7dgt)		
	fast	±(0.05%rdg+7dgt)		
Temperature coefficient		±(0.001%rdg+0.5dgt)/ºC		

STANDARD DELIVERY

Main unit	1 pc
Kelvin test lead	1 pc
RS232 cable	1 pc
HANDLER connector	1 pc

OPTIONAL ACCESSORY

Test probe	**9657-TL01**

DC RESISTANCE TESTER
CODE 9651-RM20

WIRELESS TRANSMISSION IS OPTIONAL

VIDEO

- Maximum reading: 220000
- Basic accuracy: 0.05%
- 3.5 inch LCD screen
- Temperature compensation function
- Short-circuit zeroing calibration
- Bad contact detection
- Comparator: pass or fail judge
- Keyboard lock function

test probe **9651-TL** (**optional**)

temperature probe (included)

test clip (included)

RS232 communication cable (included)

SPECIFICATION

Function	Range	Resolution	Accuracy
Slow test	20mΩ	0.001mΩ	±(0.1%+3d)
	200mΩ/2Ω/20Ω/200Ω/ 2kΩ/20kΩ/200kΩ	0.001mΩ/0.00001Ω/0.0001Ω/0.001Ω/ 0.00001kΩ/0.0001kΩ/0.001kΩ	±(0.05%+2d)
	2MΩ	0.0001MΩ	±(0.1%+5d)
Medium speed test	20mΩ	0.001mΩ	±(0.2%+5d)
	200mΩ/2Ω/20Ω/200Ω/ 2kΩ/20kΩ/200kΩ	0.001mΩ/0.00001Ω/0.0001Ω/0.001Ω/ 0.00001kΩ/0.0001kΩ/0.001kΩ	±(0.1%+3d)
	2MΩ	0.0001MΩ	±(0.2%+5d)
Fast test	20mΩ	0.01mΩ	±(0.8%+5d)
	200mΩ/2Ω/20Ω/200Ω/ 2kΩ/20kΩ/200kΩ	0.01mΩ/0.0001Ω/0.001Ω/0.01Ω/ 0.0001kΩ/0.001kΩ/0.01kΩ	±(0.5%+5d)
	2MΩ	0.001MΩ	±(0.8%+5d)
Range mode	auto range, manual range and nominal range		
Test speed	slow: 3t/s, medium speed: 18t/s, fast: 60t/s		
Trigger	internal trigger, manual trigger, external trigger		
Interface	handler interface, RS232 interface, RS485 interface, USB interface and temperature compensation interface		
Power supply	AC 100V~240V, 50Hz/60Hz		
Dimension (L×W×H)	307×264×107mm		
Net weight	2.5kg		

STANDARD DELIVERY

Main unit	1 pc
RS232 communication cable	1 pc
Temperature probe	1 pc
Test clip	1 pc

OPTIONAL ACCESSORY

Test probe	**9651-TL**
Data output cable (keyboard format)	**7302-9651**
Wireless transmitter (receiver is needed)*	**7315-9651**

* Receiver code **9651-REC**

DC RESISTANCE TESTER
CODE 9655-RM03

WIRELESS TRANSMISSION IS OPTIONAL

VIDEO

- Maximum reading: 30000
- Basic accuracy: 0.1%
- Short-circuit zero function
- Temperature compensation function
- Comparator: pass or fail judge

STANDARD DELIVERY

Main unit	1 pc
RS232 cable	1 pc
Temperature probe	1 pc
Test clip	1 pc

OPTIONAL ACCESSORY

Test probe	9651-TL
Data output cable (keyboard format)	7302-9651
Wireless transmitter (receiver is needed)*	7315-9651

* Receiver code **9651-REC**

SPECIFICATION

Function	Range	Resolution	Accuracy of medium speed test	Accuracy of slow speed test	Test current
Resistance test	30mΩ	0.001mΩ	±(0.2%+5d)	±(0.1%+3d)	1A
	300mΩ	0.01mΩ	±(0.2%+3d)	±(0.1%+2d)	1A
	3Ω	0.0001Ω	±(0.2%+3d)	±(0.1%+2d)	100mA
	30Ω	0.001Ω	±(0.2%+3d)	±(0.1%+2d)	10mA
	300Ω	0.01Ω	±(0.2%+3d)	±(0.1%+2d)	1mA
	3kΩ	0.0001kΩ	±(0.2%+3d)	±(0.1%+2d)	1mA
	30kΩ	0.001kΩ	±(0.2%+3d)	±(0.1%+2d)	100μA
Range mode	auto range, manual range and nominal range				
Test speed	slow: 2t/s, medium speed: 12t/s				
Trigger	internal trigger, manual trigger, bus trigger				
Interface	RS232/RS485 communication interface, USB storage interface, temperature compensation interface				
Power supply	AC: 220V±10%, 50Hz/60Hz				
Dimension (L×W×H)	349.5×264×107mm				
Net weight	3.5kg				

DC RESISTANCE TESTER (BASIC TYPE)
CODE 9654-LW50

VIDEO

- Maximum reading: 5000
- Basic accuracy: 0.2%
- 0.8 inch high brightness digital tube
- Full-range short-circuit zero function
- Comparator function: upper and lower limit alarms

test clip (included)

SPECIFICATION

Function	Range	Resolution	Accuracy
Slow test	50mΩ	0.01mΩ	±(0.2%+5d)
	500mΩ	0.1mΩ	±(0.2%+3d)
	5Ω/50Ω/500Ω/5kΩ	0.001Ω/0.01Ω/0.1Ω/0.001 kΩ	±(0.2%+2d)
	50kΩ	0.01kΩ	±(0.2%+3d)
	200kΩ	0.1kΩ	±(0.2%+5d)
Fast test	50mΩ	0.01mΩ	±(0.5%+5d)
	500mΩ/5Ω/50Ω/500Ω/ 5kΩ/50kΩ	0.1mΩ/0.001Ω/0.01Ω/ 0.1Ω/0.001kΩ/0.01kΩ	±(0.5%+3d)
	200kΩ	0.1kΩ	±(0.5%+5d)
Range mode	auto range and manual range		
Test speed	slow: 3t/s, fast: 10t/s		
Beep	OK, NG		
Power supply	AC 220V±10%, 50Hz		
Dimension (L×W×H)	259×220×85mm		
Net weight	2.1kg		

STANDARD DELIVERY

Main unit	1 pc
Test clip	1 pc

HANDHELD DC OHMMETER
CODE 9650-HA20

VIDEO

- Maximum reading: 20000
- Basic accuracy: 0.05%
- 3.5 inch LCD screen with adjustable backlight
- Temperature compensation function
- Full-range short-circuit zero function
- Comparator function: upper and lower limit alarms
- Data hold
- Keyboard lock function
- Automatic power off

test clip (included)

SPECIFICATION

Function		Range	Resolution	Accuracy
High current mode	Slow & medium speed test	20mΩ	0.01mΩ	±(0.5%+3d)
		200mΩ/2Ω/20Ω/200Ω/2kΩ/20kΩ/200kΩ	0.01mΩ/0.0001Ω/0.001Ω/0.01Ω/0.0001kΩ/0.001kΩ/0.01kΩ	±(0.05%+1d)
		2MΩ	0.0001MΩ	±(0.5%+1d)
		20MΩ	0.01MΩ	±(1%+3d)
	Fast speed test	20mΩ	0.01mΩ	±(0.5%+5d)
		200mΩ/2Ω/20Ω/200Ω/2kΩ/20kΩ/200kΩ	0.01mΩ/0.0001Ω/0.001Ω/0.01Ω/0.0001kΩ/0.001kΩ/0.01kΩ	±(0.1%+3d)
		2MΩ	0.0001MΩ	±(1%+3d)
		20MΩ	0.01MΩ	±(2%+5d)
Low current mode*	Slow, medium, fast speed test	20mΩ	0.01mΩ	±(0.5%+5d)
		200mΩ/2Ω/20Ω/200Ω/2kΩ/20kΩ/200kΩ	0.01mΩ/0.0001Ω/0.001Ω/0.01Ω/0.0001kΩ/0.001kΩ/0.01kΩ	±(0.1%+3d)
		2MΩ	0.0001MΩ	±(1%+3d)
		20MΩ	0.01MΩ	±(2%+5d)
Range mode		auto range, manual range and nominal range		
Test speed		slow: 3t/s, medium speed: 15t/s, fast: 30t/s		
Trigger		internal trigger, manual trigger, remote trigger		
Interface		Mini USB interface, compatible with SCPI command		
Power supply		rechargeable lithium battery (operation time ≥ 8 hours)		
Dimension		130×210×38mm		
Net weight		700g		

* When using the 2MΩ and 20MΩ ranges, it is recommended to select the high current mode

OPTIONAL ACCESSORY

Test probe	9650-TL

STANDARD DELIVERY

Main unit	1 pc
Power adapter	1 pc
Mini USB communication cable	1 pc
Test clip	1 pc

LCR METERS

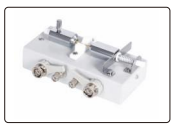
VIDEO

- 3.5-inch TFT LCD display
- Basic accuracy: 0.05%
- Auto level control
- Calibration function: full-scale open circuit and short-circuit sweep frequency clear, three groups of users point frequency calibration
- List test: cyclic scanning of up to 10 groups of frequency or level is performed and the results are compared to the set values
- Comparator: 11-level sorting function, up to 999,999 measured parts can be counted

9653-YS01

kelvin clip lead (include)

test fixture (include)


SMD test fixture (**optional**)

short-circuit plate (included)

SMD tweezer lead (**optional**)

SMD tweezer lead (**optional**)

SPECIFICATION

Code	9653-YS002	9653-YS01	9653-YS02	9653-YS03
Test frequency	10Hz~20kHz	10Hz~100kHz	10Hz~200kHz	10Hz~300kHz
Parameters	Cs-Rs, Cs-D, Cp-Rp, Cp-D, Lp-Rp, Lp-Q, Ls-Rs, Ls-Q, G-B, R-X, Z-θrad, Z-θdeg, DCR			
Monitor parameters	Z, D, Q, θrad, θdeg, R, X, G, B, Y, Vac, Iac, Δ, Δ%			
Signal level	voltage: 10mV~2V; current: 100μA~20mA			
DC bias	-2.5V~+2.5V			
Source resistance	30Ω, 50Ω, 100Ω			
Range	auto range, manual range and nominal range, 9 levels of ranges			
Maximum reading	main parameter: 999999; secondary parameter: 999999			
Test speed	fast: 40t/s; medium speed: 10t/s; slow: 3t/s			
Comparator	11-level sorting, 9-level GD, 1-level NG, 1-level AUX			
Interface	RS232 interface, RS485 interface, USB interface, HANDLER interface			
Power supply	AC 100V~240V, 50/60Hz			
Dimension (L×W×H)	350×264×107mm			
Net weight	2.6kg			

STANDARD DELIVERY

Main unit	1 pc
Kelvin clip lead	1 pc
Test fixture	1 pc
Short-circuit plate	1 pc

OPTIONAL ACCESSORY

SMD test fixture	9653-ST01
SMD tweezer lead	9653-ST02
SMD tweezer lead	9653-ST03*

* The **9652-YS02** and **9652-YS03** come standard with the **9653-ST03** test lead

HANDHELD LCR METER
CODE 9652-RC02

INSPECTION CERTIFICATE

DATA OUTPUT

VIDEO

- Automatic measure inductance (L), capacitance (C), resistance (R), impedance (Z), quality factor (Q), dissipation factor (D), phase (θ) and DC resistance (DCR)
- Internal trigger
- Data hold
- Full range open and short compensation
- Equivalent circuit: series and parallel
- Compare main parameter with nominal value and display percent deviation
- Built in USB-C interface for data transmission and charging
- Language: English, Chinese
- LCD touch screen with adjustable backlight
- Automatic power off

SMD tweezer lead (included)

short-circuit plate (included)

kelvin clip lead (included)

SPECIFICATION

Measuring parameters	C-D, C-Q, C-R, L-D, L-Q, L-R, L-Rdc, R-Q, R-X, R-Rdc, Rdc, Z-D, Z-Q, Z-θr, Z-θd
Range	8 levels, auto range or hold range
Basic accuracy	0.2%
Test frequency	50Hz, 60Hz, 100Hz, 120Hz, 200Hz, 400Hz, 500Hz, 1kHz, 2kHz, 4kHz, 5kHz, 10kHz, 20kHz, 40kHz, 50kHz, 100kHz accuracy: 0.02%
Signal level	0.1V, 0.3V, 0.7V, 1V; accuracy: 10%
Test speed	slow 2.5 times/sec, fast 10 times/sec
Interface	USB-C interface: support HID and VCOM communication, compatible with SCPI command
Operation environment	0°C~40°C, <80%RH
Working time	50% brightness: 9h; 100% brightness: 7h
Power supply	rechargeable Li-ion battery
Power	<1.5W
Dimension	195×90×41mm
Net weight	380g

STANDARD DELIVERY

Main unit	1 pc
Kelvin clip lead	1 pc
SMD tweezer lead	1 pc
Short-circuit plate	1 pc

AC GROUND RESISTANCE TESTER
CODE 9460-GR40

VIDEO

- 5-inch LCD touch screen display
- Comparator function: sound and light alarms for upper and lower limit
- User correction function
- Keyboard lock function

SPECIFICATION

Current	range	AC 5A~40A
	resolution	0.1A
	accuracy	±(2%+5d)
Resistance test	range	0~600mΩ
	resolution	0.1mΩ
	accuracy	±(2%+5d)
Frequency		50Hz, 60Hz
Output voltage		≤6V
Output power		when the input voltage is 110V, the output power≤75VA; when the input voltage is 220V, the output power≤150VA
Time		0~999.9s
Interface		HANDLER interface, RS-232C interface
Power supply		AC 110V/220V, 50Hz/60Hz
Dimension (L×W×H)		320×250×120mm
Net weight		7kg

test clamps (included)

STANDARD DELIVERY

Main unit	1 pc
Test clamp	2 pcs

AC/DC WITHSTANDING VOLTAGE INSULATION TESTER
CODE 9453-ST01

high voltage test clips (included)

high voltage test rod (included)

RS232 communication cable (included)

- 5-inch LCD touch screen display
- Arc detection function
- Electric shock protection function
- 10 test files can be stored, each file can be edited with 16 test steps
- Standard communication interface to meet automation test requirements
- Applications: home appliance, transformer, electrical device, component

SPECIFICATION

Withstand voltage test	output voltage	range	AC: 5kV; DC: 6kV
		resolution (d)	0.001kV
		accuracy	±(2%+5d)
	test current	range	AC: 10mA; DC: 5mA
		resolution (d)	AC: 0.001mA~0.01mA; DC: 0.1μA~0.01mA
		accuracy	±(2%+5d)
Insulation resistance test	output voltage	range	1kV
		resolution (d)	0.001kV
		accuracy	±(1%+2d)
	test resistance	range	10GΩ
		resolution (d)	0.001MΩ~0.01GΩ
		accuracy	output voltage≥500V, test resistance 1MΩ-1GΩ: ±(5%+5d); output voltage≥500V, test resistance 1GΩ-10GΩ: ±(10%+5d); output voltage<500V, test resistance 0.1MΩ-1GΩ: ±(10%+5d)
Discharge function			discharge after testing
Arc detection			1~9 level (AC/DC), factory default is 5
Time			voltage rising time: 0.1s~999.9s; voltage falling time: 0.1s~999.9s; voltage testing time: 0.1s~999.9s
Interface			HANDLER interface, RS232C interface, USB interface
Operation environment			temperature: 10°C~40°C; relative humidity: ≤70%
Power supply			AC 110V/220V, 50Hz/60Hz
Dimension (L×W×H)			450×270×130mm
Net weight			9.2kg

STANDARD DELIVERY

Main unit	1 pc
High voltage test clip	2 pcs
High voltage test rod	1 pc
RS232 communication cable	1 pc

INSULATION RESISTANCE TESTER
CODE 9456-DR01

VIDEO

- Rapidly assess in as fast as 50ms
- Quick discharge of residual voltage
- Charge timer function for capacitive loads
- Contact check function and short-circuit check function prevent errors due to poor contact and potential defects
- Comparator function, beep can be set
- Save 10 test files, USB supports file access
- Various communication interfaces to meet automation test requirements

SPECIFICATION

Output voltage	range	10V~1000V	
	resolution	1V	
	setting accuracy	±(1%+2d)	
	readback accuracy	±(2%+1d)	
Insulation resistance	range	0.000MΩ~9.99GΩ	
	resolution	0.001MΩ~1MΩ	
	basic accuracy	±2%	
Measurement speed	contact check	mode off	mode on
	auto range	slow: 2 times/sec medium: 13 times/sec fast: 18 times/sec	slow: 1.9 times/sec medium: 11 times/sec fast: 15 times/sec
	manual range	slow: 2.2 times/sec medium: 18 times/sec fast: 29 times/sec	slow: 2 times/sec medium: 15 times/sec fast: 22 times/sec
List sweep	list count	5 groups	
	discharge time	synchronized setup: 10ms~10s	
	charge time	independent setup: 0.1s~99s	
	test time	independent setup: 0.1s~99s	
	comparator	independent setup: 0.000MΩ~10GΩ	
Short-circuit current		<2mA	
Maximum of charging current		1.8mA	
Display result		reading, current, resistance, peak, sorting result, audible and visual alarm	
Interface		Handler interface, RS232 interface, USB interface, RS485 interface	
Operation environment		temperature: 10°C~40°C; relative humidity: 10%~85%	
Power supply		AC 100V~240V, 50Hz/60Hz, 20VA	
Dimension (LxWxH)		264×304×107mm	
Net weight		2.25kg	

Test voltage	Range	Accuracy	Resolution
10V≤Vx<100V	0MΩ~4MΩ	±(2%+5d)	0.001MΩ
	1.9MΩ~40MΩ		0.01MΩ
	19MΩ~400MΩ	±(5%+5d)	0.1MΩ
100V≤Vx<500V	0MΩ~4MΩ	±(2%+5d)	0.001MΩ
	1.9MΩ~40MΩ		0.01MΩ
	19MΩ~400MΩ	±(5%+5d)	0.1MΩ
	190MΩ~4GΩ	±(5%+10d)	1MΩ
500V≤Vx≤1000V	0MΩ~4MΩ	±(2%+5d)	0.001MΩ
	1.9MΩ~40MΩ		0.01MΩ
	19MΩ~400MΩ		0.1MΩ
	190MΩ~4GΩ	±(5%+5d)	1MΩ
	4GΩ~9.99GΩ	±(25%+10d)	

STANDARD DELIVERY

Main unit	1 pc
Test lead	2 pcs
HANDLER connector	1 pc
RS232 communication cable	1 pc

INSULATION RESISTANCE TESTERS

VIDEO

DATA OUTPUT

- Continuous measurement, comparative measurement
- Absorption ratio, polarization index measurement
- AC and DC voltage measurement
- Data storage, USB interface data transfer
- High voltage output warning, automatic discharge
- Battery level indication
- Backlight display function
- Auto power off function

9455-TR10

SPECIFICATION

Test voltage*	Insulation resistance	Accuracy**	Resolution
100V (only **9455-TR05**)	0.05MΩ~5MΩ	±(3%+5d)	0.01MΩ
	5MΩ~50MΩ	±(3%+5d)	0.01MΩ
	50MΩ~500MΩ	±(3%+5d)	0.1MΩ
	0.5GΩ~5GΩ	±(5%+5d)	0.01GΩ
	5GΩ~20GΩ	±(20%+5d)	0.1GΩ
250V	0.1MΩ~10MΩ	±(3%+5d)	0.01MΩ
	10MΩ~100MΩ	±(3%+5d)	0.1MΩ
	100MΩ~1000MΩ	±(3%+5d)	1MΩ
	1GΩ~10GΩ	±(5%+5d)	0.01GΩ
	10GΩ~30GΩ	±(20%+5d)	0.1GΩ
500V	0.2MΩ~20MΩ	±(3%+5d)	0.01MΩ
	20MΩ~200MΩ	±(3%+5d)	0.1MΩ
	200MΩ~2000MΩ	±(3%+5d)	1MΩ
	2GΩ~20GΩ	±(20%+5d)	0.01GΩ
	20GΩ~50GΩ	±(20%+5d)	0.1GΩ
1000V	0.5MΩ~50MΩ	±(3%+5d)	0.01MΩ
	50MΩ~500MΩ	±(3%+5d)	0.1MΩ
	500MΩ~5000MΩ	±(3%+5d)	1MΩ
	5GΩ~50GΩ	±(20%+5d)	0.01GΩ
	50GΩ~100GΩ	±(20%+5d)	0.1GΩ
2500V	1MΩ~10MΩ	±(3%+5d)	0.01MΩ
	10MΩ~100MΩ	±(3%+5d)	0.1MΩ
	100MΩ~1000MΩ	±(3%+5d)	1MΩ
	1GΩ~10GΩ	±(10%+5d)	0.01GΩ
	10GΩ~100GΩ	±(20%+5d)	0.1GΩ
	100GΩ~300GΩ	±(20%+5d)	1GΩ
5000V	2MΩ~20MΩ	±(3%+5d)	0.01MΩ
	20MΩ~200MΩ	±(3%+5d)	0.1MΩ
	200MΩ~2000MΩ	±(3%+5d)	1MΩ
	2GΩ~20GΩ	±(10%+5d)	0.01GΩ
	20GΩ~200GΩ	±(20%+5d)	0.1GΩ
	200GΩ~2000GΩ	±(20%+5d)	1GΩ
10kV (only **9455-TR10**)	5MΩ~50MΩ	±(3%+5d)	0.01MΩ
	50MΩ~500MΩ	±(3%+5d)	0.1MΩ
	500MΩ~5000MΩ	±(5%+5d)	1MΩ
	5GΩ~50GΩ	±(10%+5d)	0.01GΩ
	50GΩ~500GΩ	±(20%+5d)	0.1GΩ
	500GΩ~2000GΩ	±(20%+5d)	1GΩ

* Open-circuit voltage: DC voltage 0%~+10%

** Insulation resistance of 100GΩ or more should be measured under 50%RH humidity

high voltage test rod, test leads (included)

Code		9455-TR05	9455-TR10
Test voltage		100V~5000V	250V~10kV
Insulation resistance		0.05MΩ~2000GΩ	0.1MΩ~2000GΩ
DC voltage	range	±(0~1000)V	
	resolution	0.1V	
	accuracy	±(1.5%+3d)	
AC voltage (50/60Hz)	range	(0~750)V	
	resolution	0.1V	
	accuracy	±(1.5%+3d)	
Short-circuit current		≥5.0mA	
Operation environment		temperature: -10°C~40°C; humidity: ≤85%RH	
Power supply		rechargeable battery, power adapter	
Dimension (L×W×H)		277×227.5×153mm	
Net weight		2.75kg	

STANDARD DELIVERY

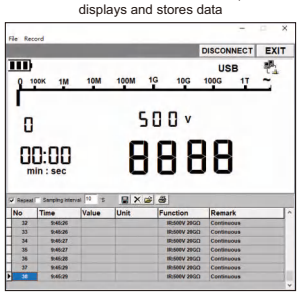
Main unit	1 pc
High voltage test rod	1 pc
Alligator clip test lead	2 pcs
Power adapter	1 pc
USB cable	1 pc
Software	1 pc

INSULATION RESISTANCE TESTER
CODE 9454-SR35

VIDEO

DATA OUTPUT

computer software (included):
connects to PC via USB cable,
displays and stores data



- Continuous measurement, comparative measurement
- Timed measurement, polarization index measurement
- AC and DC voltage measurement
- Data storage, USB interface data transmission
- High voltage output warning, automatic discharge
- Battery level indication
- Backlight display function
- Auto power off function

SPECIFICATION

Insulation resistance	test voltage*	500V	1000V	2500V	5000V
	range	0.5MΩ~20MΩ	1MΩ~40GΩ	2.5MΩ~100GΩ	5MΩ~1000GΩ
	resolution	0.5MΩ~99.9MΩ: 0.1MΩ 100MΩ~999MΩ: 1MΩ 1GΩ~9.99GΩ: 0.01GΩ 10GΩ~1000GΩ: 0.1GΩ			
	accuracy**	0.5MΩ~99.9MΩ: ±(3%+5d) 100MΩ~9.99GΩ: ±(5%+5d) 10GΩ~99.9GΩ: ±(10%+5d) 100GΩ~1000GΩ: ±(20%+5d)			
DC voltage	range	±(30~600)V			
	resolution	1V			
	accuracy	±(2%+3d)			
AC voltage (50/60Hz)	range	(30~600)V			
	resolution	1V			
	accuracy	±(2%+3d)			
Short-circuit current		>3.0mA			
Operation environment		temperature: -10°C~40°C; humidity: ≤85%RH			
Power supply		8 LR14 batteries or power adapter			
Dimension		202×155×94mm			
Net weight		1.28kg			

* Open-circuit voltage: DC voltage 0%~+20%

** Insulation resistance of 100GΩ or more should be measured under 50% RH humidity

STANDARD DELIVERY

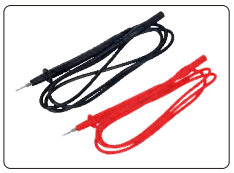
Main unit	1 pc
Alligator clip test lead	3 pcs
Battery (LR14)	8 pcs
Power adapter	1 pc
USB cable	1 pc

INSULATION RESISTANCE TESTER (BASIC TYPE)
CODE 9452-IR21

VIDEO

- Continuous measurement: press and rotate the test button to measure continuously
- Alarm function: the tester alerts with buzzer when the insulation resistance is less than 4MΩ
- Over-range indication
- Data hold
- High-voltage output alert
- Auto backlight display
- Low battery indication
- Auto power off

test clips (included)



test leads (included)

SPECIFICATION

Insulation resistance	test voltage*	100V	250V	500V	1000V
	range	100MΩ	500MΩ	2.00GΩ	5.00GΩ
	resolution	0.00MΩ~9.99MΩ: 0.01MΩ 10.0MΩ~99.9MΩ: 0.1MΩ 100MΩ~999MΩ: 1MΩ 1.00GΩ~5.00GΩ: 0.01GΩ			
	accuracy	0~99.9MΩ: ±(3%+5d); 100MΩ~5.00GΩ: ±(5%+5d)			
AC voltage	range	30~750V (50/60Hz)			
	resolution**	1V			
	accuracy	±(2%+3d)			
Short-circuit current		<2.0mA			
Operation environment		temperature: 0°C~35°C; humidity: <75%RH			
Power supply		6×1.5V AA batteries or AC/DC adapter (**optional**)			
Dimension		184×115×75mm			
Net weight		600g			

* Open-circuit voltage: DC voltage 0~+10%
** Data hold and backlight display function are not applicable for AC voltage measurement

STANDARD DELIVERY

Main unit	1 pc
Test lead	2 pcs
Test clip	2 pcs
Battery (AA)	6 pcs

OPTIONAL ACCESSORY

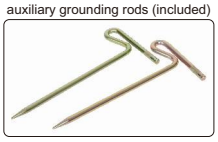
AC/DC adapter	9452-AP

EARTH RESISTANCE TESTER
CODE 0716-ER120

VIDEO

- Timed measurement function
- Auto power off
- Display with backlight
- Data hold
- Low battery indication

auxiliary grounding rods (included)



SPECIFICATION

Function	Range	Resolution	Accuracy
Earth resistance	20Ω	0.01Ω	±(2%+10d)
	200Ω/2000Ω	0.1Ω/1Ω	±(2%+3d)
AC earth voltage	1000V	1V	±(2%+5d)
DC voltage	1500V	1V	±(1%+5d)
Test methods	2-wire testing, 3-wire testing		
Power supply	8×1.5V AA batteries		
Dimension	178×110×59mm		
Net weight	600g		

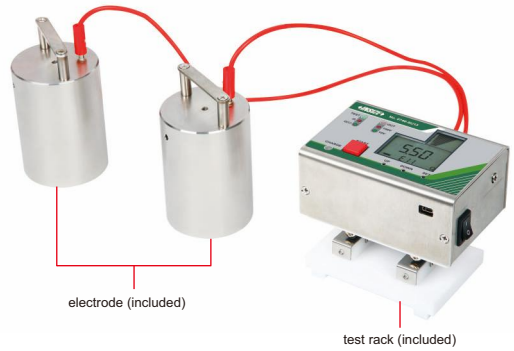
STANDARD DELIVERY

Main unit	1 pc
Test lead	5 pcs
Auxiliary grounding rod	2 pcs
Battery (AA)	8 pcs

SURFACE RESISTANCE TESTER
CODE 0740-SU13

VIDEO

DATA OUTPUT



- Designed to EOS/ESD, CECC, ASTM and UL standards
- Suitable for testing table mats, floors, paint, work clothes, bags, etc.
- Automatic selection of resistance range and test voltage

SPECIFICATION

Range	1×10^{3}~1×10^{13} Ω
Accuracy	$<10^{11}$: 10% $\geq10^{11}$: 20%
Test voltage	10V/100V, ±5%
Test time	15s, 30s, 60s
Working environment	temperature: 0ºC~49ºC, humidity: ≤80%RH
Power supply	rechargeable lithium battery: 3.7V, 1800mAh
Dimension (L×W×H)	115×79×69mm
Net weight	630g

STANDARD DELIVERY

Main unit	1 pc
Electrode	2 pcs
Conductive rubber	2 pcs
Test lead	3 pcs
Test rack	1 pc
Power adapter	1 pc

OPTIONAL ACCESSORY

Digital thermohygrometer	9362-TH27
Digital thermohygrometer	0317-TH37

DC POWER SUPPLY
CODE 9914-BP506

VIDEO

SPECIFICATION

Rate output voltage		0~50V
Rate output current		0~6A
Maximum output power		150W
Voltage	setting resolution	10mV
	setting accuracy	≤0.5%+50mV
	readback resolution	10mV
	readback accuracy	≤0.5%+50mV
	load regulation	≤0.05%+5mV
	line regulation	≤0.1%+3mV
	ripple	≤5mVrms
Current	setting resolution	1mA
	setting accuracy	≤0.5%+5mA
	readback resolution	1mA
	readback accuracy	≤0.5%+5mA
	load regulation	≤0.1%+3mA
	line regulation	≤0.1%+3mA
	ripple	≤20mArms
OVP		0~55V
OCP		0~6.5A
Work condition		temperature: 0°C~40°C, humidity: ≤75%RH
Storage condition		temperature: -20°C~50°C, humidity: ≤90%RH
Cool system		fan cool
Power supply		110V/220V±10%, 50Hz/60Hz
Dimension		200×80×155mm
Net weight		1.23kg

- Four-digit LED display
- Independent voltage and current control knob
- Output switch control
- Panel locking function to prevent misoperation
- USB interface for power supply
- OVP/OCP protection
- 3 shortcut keys for presetting

STANDARD DELIVERY

Main unit	1 pc
Test lead	2 pcs

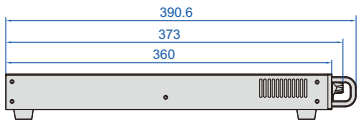
HIGH POWER DC POWER SUPPLIES

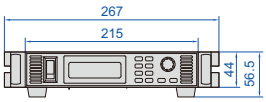
- High precision and low ripple
- OVP/OCP/OPP/OTP protection
- 1U half rack, suitable for system integration
- Remote compensation function
- Various communication interfaces

SPECIFICATION

Code		9915-NCK61	9915-NCK91	9915-NC1K1
Rate output voltage		0~30V	0~30V	0~100V
Rate output current		0~20A	0~30A	0~10A
Maximum output power		600W	900W	1000W
Voltage	setting resolution	1mV	1mV	10mV
	setting accuracy	≤0.05%+0.2%FS	≤0.05%+0.2%FS	≤0.05%+0.1%FS
	readback resolution	1mV	1mV	10mV
	readback accuracy	≤0.05%+0.2%FS	≤0.05%+0.2%FS	≤0.05%+0.1%FS
	load regulation	≤0.05%+20mV	≤0.05%+20mV	≤0.1%+30mV
	line regulation	≤0.05%+20mV	≤0.05%+20mV	≤0.1%+30mV
	ripple	≤30mVrms	≤30mVrms	≤80mVrms
Current	setting resolution	1mA		
	setting accuracy	≤0.1%+0.1%FS	≤0.1%+0.1%FS	≤0.1%+0.5%FS
	readback resolution	1mA		
	readback accuracy	≤0.1%+0.2%FS	≤0.1%+0.2%FS	≤0.1%+0.5%FS
	load regulation	≤0.05%+20mA	≤0.05%+20mA	≤0.1%+30mA
	line regulation	≤0.05%+20mA	≤0.05%+20mA	≤0.1%+30mA
	ripple	≤30mArms	≤30mArms	≤80mArms
Work condition		temperature: 0°C~40°C, humidity: 20%RH~80%RH		
Storage condition		temperature: -10°C~55°C, humidity: 10%RH~90%RH		
Cool system		fan cool		
Power supply		220V±10%, 50Hz/60Hz		
Dimension (L×W×H)		215×360×44mm		
Net weight		4kg		

Unit: mm





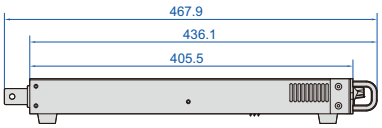
HIGH POWER DC POWER SUPPLIE CODE 9916-HC1K81

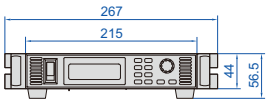
- High precision and low ripple
- OVP/OCP/OPP/OTP protection
- 1U half rack, suitable for system integration
- Remote compensation function
- Various communication interfaces
- Customized specifications are available

SPECIFICATION

Rate output voltage		0~30V
Rate output current		0~60A
Maximum output power		1800W
Voltage	setting resolution	1mV
	setting accuracy	≤0.05%+0.2%FS
	readback resolution	1mV
	readback accuracy	≤0.05%+0.2%FS
	load regulation	≤0.05%+20mV
	line regulation	≤0.05%+20mV
	ripple	≤30mVrms
Current	setting resolution	1mA
	setting accuracy	≤0.1%+0.05%FS
	readback resolution	1mA
	readback accuracy	≤0.1%+0.05%FS
	load regulation	≤0.05%+20mA
	line regulation	≤0.05%+20mA
	ripple	≤30mArms
Work condition		temperature: 0°C~40°C, humidity: 20%RH~80%RH
Storage condition		temperature: -10°C~55°C, humidity: 10%RH~90%RH
Cool system		fan cool
Power supply		220V±10%, 50Hz/60Hz
Dimension (L×W×H)		215×405.5×44mm
Net weight		4.5kg

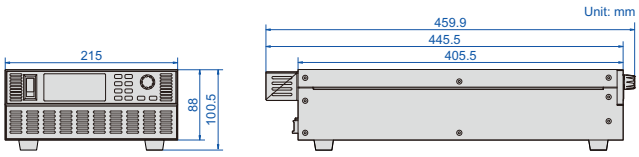
Unit: mm





HIGH POWER DC POWER SUPPLIES

VIDEO



- High precision and low ripple
- OVP/OCP/OPP/OTP protection
- 2U half rack, suitable for system integration
- Remote compensation function
- Various communication interfaces
- Customized specifications are available

SPECIFICATION

Code		9917-FC3K61	9917-FC3K62	9917-FC3K63	9917-FC3K64	9917-FC3K65
Rate output voltage		0~30V	0~60V	0~100V	0~150V	0~300V
Rate output current		0~120A	0~60A	0~36A	0~24A	0~12A
Maximum output power		3600W				
Voltage	setting resolution	1mV		10mV		
	setting accuracy	≤0.05%+0.2%FS	≤0.05%+0.1%FS			≤0.05%+0.05%FS
	readback resolution	1mV		10mV		
	readback accuracy	≤0.05%+0.2%FS	≤0.05%+0.1%FS			≤0.05%+0.05%FS
	load regulation	≤0.05%+20mV	≤0.1%+20mV	≤0.1%+30mV		
	line regulation	≤0.05%+20mV	≤0.1%+20mV	≤0.1%+30mV		
	ripple	≤50mVrms	≤60mVrms	≤100mVrms	≤150mVrms	≤300mVrms
Current	setting resolution	10mA	1mA			
	setting accuracy	≤0.1%+0.05%FS		≤0.1%+0.1%FS	≤0.1%+0.2%FS	≤0.05%+0.5%FS
	readback resolution	10mA	1mA			
	readback accuracy	≤0.1%+0.05%FS		≤0.1%+0.1%FS	≤0.1%+0.2%FS	≤0.1%+0.5%FS
	load regulation	≤0.1%+30mA	≤0.1%+20mA	≤0.1%+30mA		
	line regulation	≤0.1%+30mA	≤0.1%+20mA	≤0.1%+30mA		
	ripple	≤60mArms		≤100mArms	≤150mArms	≤300mArms
Work condition		temperature: 0°C~40°C, humidity: 20%RH~80%RH				
Storage condition		temperature: -10°C~55°C, humidity: 10%RH~90%RH				
Cool system		fan cool				
Power supply		220V±10%, 50Hz/60Hz				
Dimension (L×W×H)		215×405.5×88mm				
Net weight		7.5kg				

DIGITAL MULTIMETER
CODE 9258-KC550

VIDEO

DATA OUTPUT

- 6 ½ digits resolution
- Measuring speed up to 10k rdgs/s
- Built-in thermocouple cold-end compensator
- Support statistical analysis of data
- Support bar graph, trend graph, histogram display
- Rear panel test function
- Supports standard SCPI remote control commands

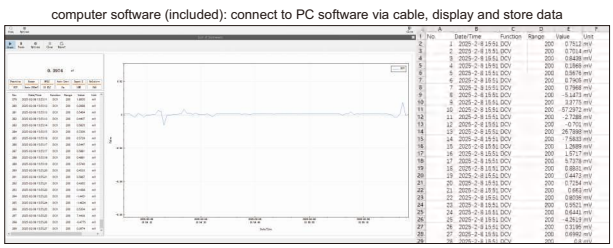
SPECIFICATION

Function	Range	Basic accuracy (reading%+range%)
DC voltage	200mV/2V/20V/200V/1000V	±(0.0035+0.0006)
AC voltage	200mV/2V/20V/200V/750V	±(0.06+0.03)
DC current	2μA/20μA /200μA/2mA/20mA/200mA/2A/10A	±(0.05+0.002)
AC current	200μA/2mA/20mA/200mA/2A/10A	±(0.1+0.04)
Resistance	20Ω/200Ω/2kΩ/20kΩ/200kΩ/2MΩ/10MΩ/100MΩ/1GΩ	±(0.01+0.001)
Capacitance	2nF/20nF/200nF/2μF/20μF/200μF/2mF/20mF/100mF	±(1+0.1)
Frequency	3Hz~1MHz	±(0.007)
Temperature	supports thermocouple and RTD testing	
Continuity check	adjustable from 0Ω~2000Ω, default is 30Ω	
Diode test	0V~4V	
Frequency response	300kHz	
Mathematical operation	maximum, minimum, average, standard deviation, relative, dBm, dB	
Trigger	automatic trigger, single trigger, external trigger	
Display	digital, dual-window, histogram, tendency chart, bar chart	
Interface	communication interface: USB/LAN/RS232; storage interface: U disk	
Operation environment	temperature: 0ºC~28ºC, humidity: <90%RH; temperature: 28ºC~40ºC, humidity: <75%RH; temperature: 40ºC~55ºC, humidity: <50%RH (non-condensation)	
Storage environment	temperature: -20ºC~70ºC, humidity: <95%RH (non-condensation)	
Power supply	100V~120V, 45~440Hz, 200V~240V, 45~66Hz	
Size (L×W×H)	378×256×113mm	
Net weight	3.4kg	

STANDARD DELIVERY

Main unit	1 pc
Test lead	2 pcs
Test clip	2 pcs
RS232 cable	1 pc
USB cable	1 pc
K-type thermocouple	1 pc

computer software (included): connect to PC software via cable, display and store data



PEN-TYPE DIGITAL MULTIMETER
CODE 9241-ML200

VIDEO

- Auto/manual ranging
- Maximum mode
- Data hold
- NCV detection
- Low battery indication
- Auto power off
- Safety rating: CAT III 600V

STANDARD DELIVERY

Main unit	1 pc
Test lead	1 pc
Clip	2 pcs
Battery (AAA)	2 pcs

test lead (included)

clips (included)

SPECIFICATION

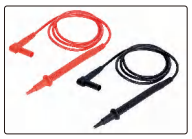
Function	Range	Resolution	Accuracy
DC Voltage	200mV/2V/20V/200V/600V	0.1mV/1mV/10mV/0.1V/1V	±(0.7%+2d)
AC Voltage	200mV/2V/20V/200V	0.1mV/1mV/10mV/0.1V	±(0.8%+3d)
	600V	1V	±(1.0%+3d)
DC Current	20mA/200mA	10μA/0.1mA	±(1.5%+3d)
AC Current	20mA/200mA	10μA/0.1mA	±(2.0%+3d)
Resistance	200Ω	0.1Ω	±(1.0%+3d)
	2kΩ/20kΩ/200kΩ/2MΩ	1Ω/10Ω/0.1kΩ/1kΩ	±(1.0%+1d)
	20MΩ	10kΩ	±(1.0%+5d)
Logic level test	<1.5V (green LED on); 1.5~3.5V (green & red LED off); >3.5V (red LED on)		
Diode	open circuit voltage 1.5V		
Continuity buzzer	<50Ω		
Power supply	2×1.5V AAA batteries		

DIGITAL MULTIMETER
CODE 9216-F520

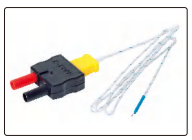
- 2000 counts digital display
- Auto ranging (except 200mV AC)
- Data hold
- Max hold
- Display with backlight
- Low battery indication
- Auto power off
- Safety rating: CAT III 600V

STANDARD DELIVERY

Main unit	1 pc
Thermocouple adapter	1 pc
Temperature probe	1 pc
9V battery	1 pc
Test lead	2 pcs



test leads (included)



temperature probe and adapter (included)

SPECIFICATION

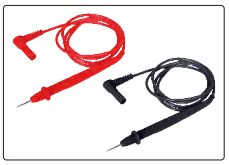
Function	Range	Resolution	Accuracy
DC Voltage	200mV	0.1mV	±(0.5%+2d)
	2V/20V/200V	0.001V/0.01V/0.1V	±(1.0%+2d)
	600V	1V	±(1.2%+2d)
AC Voltage (50~60Hz)	200mV	0.1mV	±(1.5%+30d)
	2V	0.001V	±(1.2%+3d)
	20V/200V	0.01V/0.1V	±(1.5%+3d)
	600V	1V	±(2.0%+4d)
DC Current	200μA	0.1μA	±(1.0%+3d)
	2000μA/20mA/200mA	1μA/0.01mA/0.1mA	±(1.5%+3d)
	10A	0.01A	±(2.5%+5d)
AC Current (50~60Hz)	200μA	0.1μA	±(1.5%+5d)
	2000μA/20mA/200mA	1μA/0.01mA/0.1mA	±(1.8%+5d)
	10A	0.01A	±(3.0%+7d)
Resistance	200Ω	0.1Ω	±(1.2%+4d)
	2kΩ	0.001kΩ	±(1.0%+2d)
	20kΩ/200kΩ/2MΩ	0.01kΩ/0.1kΩ/0.001MΩ	±(1.2%+2d)
	20MΩ	0.01MΩ	±(2.0%+3d)
Temperature (type-K)	-50°C to 1000°C	1°C	±(3.0%+5d)
	-58°F to 1832°F	1°F	±(3.0%+8d)
Diode test	test current: 0.3mA typical	1mV	±(10%+5d)
Continuity check	less than 100Ω		
Power supply	9V battery		
Dimension (L×W×H)	150×70×48mm		
Net weight	255g		

MINI DIGITAL MULTIMETER (BASIC TYPE)
CODE 9242-ML100A

VIDEO

POPULAR MODEL

- Portable size with protective case
- 1999 counts digital display
- Data hold
- Display with backlight
- Low battery indication
- Auto power off
- Safety rating: CAT II 600V



test leads (included)

SPECIFICATION

Function	Range	Resolution	Accuracy
DC Voltage	200.0mV	0.1mV	±(0.7%+3d)
	2000mV	1mV	±(0.5%+2d)
	20.00V/200.0V/600V	0.01V/0.1V/1V	±(0.7%+3d)
AC Voltage (40~400Hz)	200.0V/600V	0.1V/1V	±(1.2%+3d)
DC Current	200.0μA/200.0mA	0.1μA/0.1mA	±(1.0%+2d)
	10.00A	0.01A	±(1.2%+5d)
Resistance	200.0Ω	0.1Ω	±(1.0%+2d)
	2000Ω/20.00kΩ/200.0kΩ	1Ω/0.01kΩ/0.1kΩ	±(0.8%+2d)
	20.00MΩ	0.01MΩ	±(1.2%+3d)
Battery test	1.5V/9V/12V battery check		
Diode test	open circuit voltage: 2.1V DC		
Continuity test	<50Ω		
Power supply	2×1.5V AAA batteries		
Dimension (LxWxH)	134×77×47mm		
Net weight	206g		

STANDARD DELIVERY

Main unit	1 pc
Battery (AAA)	2 pcs
Test lead	2 pcs

SMART DIGITAL MULTIMETER
CODE 9247-190

VIDEO

- Automatically identify test modes for AC voltage/DC voltage/resistance/continuity
- NCV detection and judge the strength by light and buzzer
- Self-calibration when power on to ensure accuracy
- LIVE firewire recognition
- Display with backlight
- True RMS measurement
- Data hold
- Low battery indication
- Auto power off
- Safety rating: CAT III 600V

test leads (included)

STANDARD DELIVERY

Main unit	1 pc
Test lead	2 pcs
Battery (CR2032)	2 pcs

SPECIFICATION

Function	Range	Resolution	Accuracy
DC Voltage	60mV/600mV/6V/60V/600V	0.01mV/0.1mV/0.001V/0.01V/0.1V	±(0.5%+3d)
AC Voltage	60mV/600mV/6V/60V/600V	0.01mV/0.1mV/0.001V/0.01V/0.1V	±(1.0%+3d)
DC Current	6000μA/60mA/600mA	1μA/0.01mA/0.1mA	±(1.2%+5d)
AC Current	6000μA/60mA/600mA	1μA/0.01mA/0.1mA	±(1.5%+5d)
Resistance	600Ω/6kΩ/60kΩ/600kΩ	0.1Ω/0.001kΩ/0.01kΩ/0.1kΩ	±(1.0%+5d)
	6MΩ/60MΩ	0.001MΩ/0.01MΩ	±(1.5%+3d)
Capacitance	6nF/60nF/600nF/6μF/60μF/600μF	0.001nF/0.01nF/0.1nF/0.001μF/0.01μF/0.1μF	±(4.0%+5d)
	6mF/60mF	0.001mF/0.01mF	±(5.0%+5d)
Frequency	10Hz/100Hz/1000Hz/10kHz/ 100kHz/1000kHz	0.001Hz/0.01Hz/0.1Hz/0.001kHz/ 0.01kHz/0.1kHz	±(1.0%+5d)
	10MHz	0.001MHz	±(3.0%+5d)
Duty cycle	1~99%	0.1%	±(3.0%+5d)
Diode measurement	open circuit voltage 2.0V		
Continuity measurement	<50Ω		
Power supply	2×3V CR2032 batteries		
Dimension (L×W×H)	133×68×18mm		
Net weight	178g		

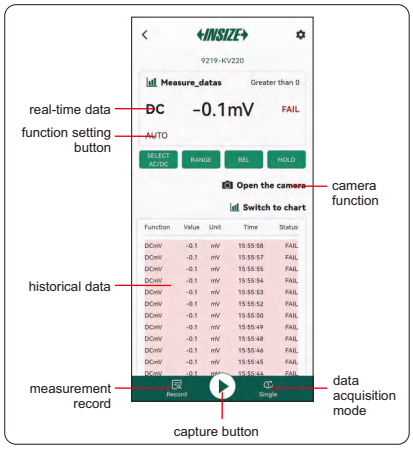
BUILT-IN BLUETOOTH DIGITAL MULTIMETER
CODE 9219-KV220

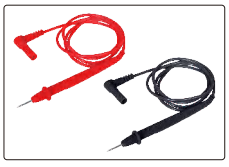
BUILT-IN BLUETOOTH

VIDEO

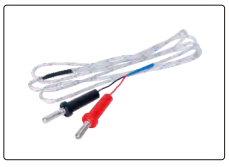
- Built-in bluetooth
- Mobile app is included
- 9999 counts digital display
- True RMS measurement
- Display with backlight
- Relative measurement mode
- Auto/manual ranging
- Auto power off
- Data hold
- NCV detection
- Low battery indication
- Safety rating: CAT III 600V

app (included)





test leads (included)



temperature probe (included)

STANDARD DELIVERY

Main unit	1 pc
Test lead	2 pcs
Temperature probe	1 pc
Battery (AAA)	3 pcs

SPECIFICATION

Function	Range		Resolution	Accuracy
DC Voltage	9.999mV/99.99mV		0.001mV/0.01mV	±(0.7%+8d)
	999.9mV/9.999V/99.99V/999.9V		0.1mV/0.001V/0.01V/0.1V	±(0.5%+3d)
AC Voltage (40~400Hz)	9.999mV/99.99mV		0.001mV/0.01mV	±(1.0%+3d)
	999.9mV/9.999V/99.99V/999.9V		0.1mV/0.001V/0.01V/0.1V	±(0.8%+3d)
DC Current	999.9μA		0.1μA	±(0.8%+3d)
	999.9mA/9.999A		0.1mA/0.001A	±(1.0%+3d)
AC Current (40~400Hz)	999.9μA		0.1μA	±(1.0%+3d)
	999.9mA/9.999A		0.1mA/0.001A	±(1.2%+3d)
Resistance	999.9Ω/9.999kΩ/99.99kΩ/999.9kΩ		0.1Ω/0.001kΩ/0.01kΩ/0.1kΩ	±(0.8%+2d)
	9.999MΩ		0.001MΩ	±(1.5%+3d)
	99.99MΩ		0.01MΩ	±(2.0%+5d)
Capacitance	9.999nF		0.001nF	±(4.0%+10d)
	9.999nF/99.99nF/999.9nF/9.999μF/ 99.99μF/999.9μF		0.001nF/0.01nF/0.1nF/0.001μF/ 0.01μF/0.1μF	±(4.0%+5d)
	9.999mF		0.001mF	±(10.0%)
Frequency	99.99Hz~9.999MHz		0.01Hz~0.001MHz	±(0.1%+5d)
Temperature	-40~1000°C	-40~0°C	1°C	±4°C
		>0~100°C	1°C	±(1.0%+5d)
		>100~1000°C	1°C	±(2.0%+5d)
	-40~1832°F	-40~32°F	1°F	±5°F
		>32~212°F	1°F	±(1.5%+5d)
		>212~1832°F	1°F	±(2.5%+5d)
Duty cycle	0.1%~99.9%		0.1%	±(3%+5d)
Diode test	open circuit voltage 3.3V, test current 1.5mA			
Continuity check	<30Ω			
Power supply	3×1.5V AAA batteries			
Dimension (L×W×H)	187×88×56mm			
Net weight	400g			

DIGITAL MULTIMETER
CODE 9215-E510

VIDEO

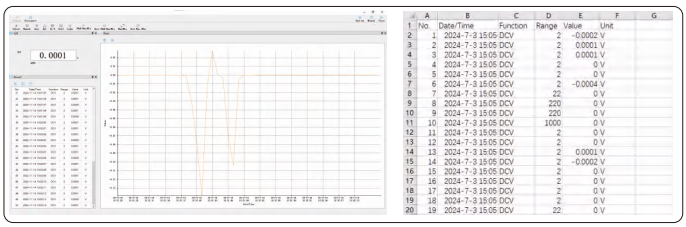
DATA OUTPUT

- 22000 counts digital display
- Data transmission via USB
- True RMS measurement
- Data hold
- Peak/Max/Min mode
- Low pass filter function
- NCV detection
- Low battery indication
- Auto power off
- Safety rating: CAT III 1000V, CAT IV 600V

conversion plug (transistor) (included)

USB connection cable (included)

computer software (included): connect to PC software via USB cable to collect, display and store data



STANDARD DELIVERY

Main unit	1 pc
Test lead	2 pcs
USB connection cable	1 pc
Conversion plug (transistor)	1 pc
Battery (AAA)	4 pcs

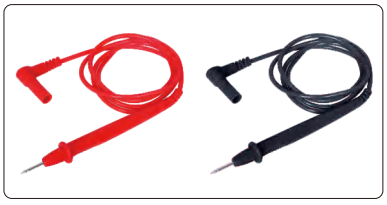
SPECIFICATION

Function	Range	Resolution	Accuracy
DC Voltage	220mV	0.01mV	±(0.1%+5d)
	2.2V/22V/220V	0.1mV/0.001V/0.01V	±(0.05%+5d)
	1000V	0.1V	±(0.1%+5d)
AC Voltage	220mV	0.01mV	±(1.0%+10d), 40Hz~1kHz
			±(1.5%+30d), 1kHz~10kHz
	2.2V/22V	0.1mV/1mV	±(0.8%+10d), 40Hz~1kHz
			±(1.2%+50d), 1kHz~10kHz
	220V	10mV	±(0.8%+10d), 40Hz~1kHz
			±(2.0%+50d), 1kHz~10kHz
	1000V	0.1V	±(1.2%+10d), 40Hz~1kHz
			±(3.0%+50d), 1kHz~10kHZ
DC Current	220μA/2200μA/22mA/220mA	0.01μA/0.1μA/0.001mA/0.01mA	±(0.5%+10d)
	20A	0.001A	±(1.2%+50d)
AC Current	220μA/2200μA	0.01μA/0.1μA	±(0.8%+10d), 40Hz~1kHz
			±(3.0%+50d), 1kHz~10kHz
	22mA/220mA/20A	0.001mA/0.01mA/0.001A	±(1.2%+10d), 40Hz~1kHz
			±(3.0%+50d), 40Hz~1kHz
Resistance	220Ω/2.2kΩ/22kΩ/220kΩ	0.01Ω/0.0001kΩ/0.001kΩ/0.01kΩ	±(0.5%+10d)
	2.2MΩ	0.0001MΩ	±(0.8%+10d)
	22MΩ	0.001MΩ	±(1.5%+10d)
	220MΩ	0.01MΩ	±(3.0%+50d)
Capacitance	22nF/220nF/2.2μF/22μF	0.001nF/0.01nF/0.0001μF/0.001μF	±(3.0%+5d)
	220μF/2.2mF	0.01μF/0.0001mF	±(4.0%+5d)
	22mF	0.001mF	±(10%+5d)
	220mF	0.01mF	±(20%+5d)
Frequency	10Hz~220MHz	0.01Hz~0.01MHz	±(0.01%+5d)
Duty cycle	0.1%~99.9%	0.1%	±(2.0%+5d)
Transistor hFE	range: 1β~1000β		
Diode test	open circuit voltage: 3V		
Continuity check	<50Ω		
Power supply	4×1.5V AAA batteries		
Dimension	186×89×49mm		
Net weight	400g		

AC DIGITAL CLAMP METER
CODE 9243-CA600

VIDEO

- 6000 counts display
- 28mm jaw opening
- NCV detection with light and sound alarm
- Live/neutral wire measurement function
- True RMS measurement
- Auto ranging
- REL (zero) function
- Data hold
- Polarity indication
- LCD screen with backlight
- Low battery indication
- Auto power off
- Safety rating: CAT III 300V/CAT II 600V



test leads (included)

STANDARD DELIVERY

Main unit	1 pc
Battery (AAA)	2 pcs
Test lead	2 pcs

SPECIFICATION

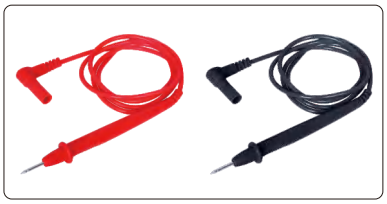
Function	Range	Resolution	Accuracy
AC current*	6.000A	0.001A	±(4.0%+10d)
	60.00A/600.0A	0.01A/0.1A	±(2.0%+10d)
AC current frequency	50Hz~100Hz	0.1Hz	±(1.0%+5d)
DC voltage	600.0mV	0.1mV	±(0.7%+3d)
	6.000V	0.001V	±(0.5%+2d)
	60.00V/600.0V	0.01V/0.1V	±(0.7%+3d)
AC voltag*	6.000V	0.001V	±(1.0%+5d)
	60.00V/600.0V	0.01V/0.1V	±(0.8%+5d)
AC voltage frequency	10Hz~10kHz	0.01Hz~0.01kHz	±(1.0%+5d)
Resistance	600.0Ω	0.1Ω	±(1.0%+2d)
	6.000kΩ/60.00kΩ/600.0kΩ	0.001kΩ/0.01kΩ/0.1kΩ	±(0.8%+2d)
	6MΩ/60MΩ	0.001MΩ/0.01MΩ	±(2.0%+5d)
Capacitance	6.000nF/60.00nF/600.0nF	0.001nF/0.01nF/0.1nF	±(4.0%+10d)
	6.000μF/60.00μF/600.0μF	0.001μF/0.01μF/0.1μF	±(4.0%+5d)
	6.000mF/60.00mF	0.001mF/0.01mF	±10.0%
Frequency	10Hz~10MHz	0.01Hz~0.01MHz	±(0.1%+4d)
Duty cycle	0.1%~99.9%	0.1%	±(3.0%+5d)
Diode test	0V~ 6V		
Continuity check	<30Ω		
Power supply	2×1.5V AAA batteries		
Dimension (L×W×H)	215×63×36mm		
Net weight	245g		

*AC current frequency response: 50Hz~100Hz, AC voltage frequency response: 45Hz~400Hz, true RMS display

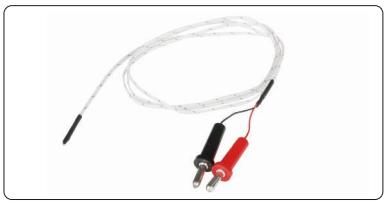
AC/DC DIGITAL CLAMP METER
CODE 9312-CB120

VIDEO

- 6000 counts display
- 28mm jaw opening
- NCV detection with light and sound alarm
- Live/neutral wire measurement function
- True RMS measurement
- Auto ranging
- REL (zero) function
- Data hold
- Polarity indication
- LCD screen with backlight
- Low battery indication
- Auto power off
- Safety rating: CAT III 300V/CAT II 600V



test leads (included)



K-type thermocouple (included)

STANDARD DELIVERY

Main unit	1 pc
Battery (AAA)	2 pcs
Test lead	2 pcs
K-type thermocouple	1 pc

SPECIFICATION

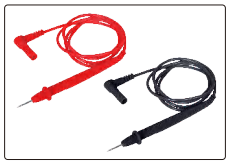
Function	Range		Resolution	Accuracy
DC current	60.00A/600.0A		0.01A/0.1A	±(2%+5d)
AC current*	60.00A/600.0A		0.01A/0.1A	±(2%+5d)
DC voltage	600.0mV		0.1mV	±(0.7%+3d)
	6.000V/60.00V/600.0V		0.001V/0.01V/0.1V	±(0.5%+2d)
AC voltage*	6.000V		0.001V	±(1%+5d)
	60.00V/600.0V		0.01V/0.1V	±(0.8%+5d)
AC voltage frequency	10Hz~60kHz		0.01Hz~0.01kHz	±(0.5%+2d)
Resistance	600.0Ω		0.1Ω	±(1%+2d)
	6.000kΩ/60.00kΩ/600.0kΩ		0.001kΩ/0.01kΩ/0.1kΩ	±(0.8%+2d)
	6MΩ/60MΩ		0.001MΩ/0.01MΩ	±(2.5%+5d)
Capacitance	60.00nF/600.0nF/6.000μF/ 60.00μF/600.0μF		0.01nF/0.1nF/0.001μF/ 0.01μF/0.1μF	±(4%+5d)
	6.000mF/60.00mF		0.001mF/0.01mF	±10%
Frequency	10Hz~10MHz		0.01Hz~0.01MHz	±(0.1%+4d)
Temperature	-40~1000°C	-40~40°C	1°C ±4°C	±4°C
		>40~500°C	1°C ±(1.5%+5d)	±(1.5%+5d)
		>500~1000°C	1°C ±(2%+5d)	±(2%+5d)
	-40~1832°F	-40~104°F	1°F ±6°F	±6°F
		>104~932°F	1°F ±(2%+6d)	±(2%+6d)
		>932~1832°F	1°F	±(2.5%+4d)
Duty cycle	0.1%~99.9%		0.1%	±(3.0%+5d)
Diode test	0V~ 6V			
Continuity check	<30Ω			
Power supply	2×1.5V AAA batteries			
Dimension (L×W×H)	215×63×36mm			
Net weight	230g			

*AC voltage/current frequency response: 45Hz~400Hz, true RMS display

AC/DC DIGITAL CLAMP METER
CODE 9315-CF210

VIDEO

- 4000 counts display
- 28mm jaw opening
- NCV detection with light and sound alarm
- True RMS measurement
- Auto ranging
- REL (zero) function
- Data hold
- Polarity indication
- LCD screen with backlight
- Low battery indication
- Auto power off
- Safety rating: CAT III 300V/CAT II 600V



test leads (included)

STANDARD DELIVERY

Main unit	1 pc
Battery (AAA)	2 pcs
Test lead	2 pcs

SPECIFICATION

Function	Range	Resolution	Accuracy
DC Current	40.00A/400.0A	0.01A/0.1A	±(2.0%+5d)
AC Current*	40.00A/400.0A	0.01A/0.1A	±(2.0%+5d)
DC Voltage	400.0mV	0.1mV	±(0.7%+3d)
	4.000V/40.00V/400.0V/600V	0.001V/0.01V/0.1V/1V	±(0.5%+2d)
AC Voltage*	4.000V	0.001V	±(1.0%+5d)
	40.00V/400.0V/600V	0.01V/0.1V/1V	±(0.8%+5d)
AC Voltage frequency	10Hz~60kHz	0.01Hz~0.01kHz	±(0.5%+2d)
Resistance	400.0Ω	0.1Ω	±(1.0%+2d)
	4.000kΩ/40.00kΩ/400.0kΩ	0.001kΩ/0.01kΩ/0.1kΩ	±(0.8%+2d)
	4MΩ/40MΩ	0.001MΩ/0.01MΩ	±(2.5%+5d)
Capacitance	40.00nF/400.0nF/4.000μF/ 40.00μF/400.0μF	0.01nF/0.1nF/0.001μF/ 0.01μF/0.1μF	±(4.0%+5d)
	4.000mF/40.00mF	0.001mF/0.01mF	±10.0%
Frequency	10Hz~10MHz	0.01Hz~0.01MHz	±(0.1%+4d)
Duty cycle	0.1%~99.0%	0.1%	±(3.0%+5d)
Diode test	open circuit voltage: 4V		
Continuity check	<30Ω		
Power supply	2×1.5V AAA batteries		
Dimension (L×W×H)	215×75×37mm		
Net weight	235g		

*AC voltage/current frequency response: 45Hz~400Hz, true RMS display

AC PHASE AND VOLTAGE DETECTOR
CODE 9723-400

VIDEO

- Non-contact detection of phase sequence, high and low voltage, wire distinction
- Low battery indication
- Auto power off
- Flashlight

SPECIFICATION

Phase sequence detection	screen shows clockwise or counterclockwise
High and low voltage detection	beep: slow~fast backlight: green~red analog bar: low~high
Wire distinction	green backlight indicates neutral wire red backlight indicates live wire
Power supply	2×1.5V AAA batteries
Dimension	157×27×23mm
Net weight	32g

DIGITAL VOLTAGE TESTER
CODE 9721-250

- Direct AC test (contact): 12-250V
  two way display: voltage displays on LCD screen and neon lamp lights up (when voltage>80V)
- Induction AC test (non-contact): 12-250V
  to detect power source or recognize the phase line, ground line and break point
- Direct DC test (contact): 6-36V
  instant sense and display
- Work without battery
- Tester tip: CRV material

SPECIFICATION

Range	AC: 12-250V; DC: 6-36V
Neon lamp life	30000 times
Dimension	133×21×19mm
Net weight	22g

VOLTAGE TESTER
CODE 9722-250

- Tester tip: CRV material

SPECIFICATION

Range	AC: 100-250V
Neon lamp life	30000 times
Dimension	145×Ø15mm
Net weight	21g

INTELLIGENT CORDLESS SOLDERING IRON
CODE 0710-SD420

VIDEO

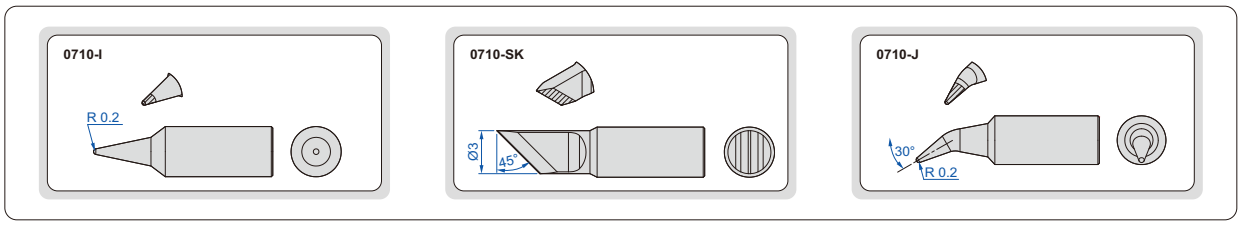
soldering tip **0710-SK** (included)

soldering tip **0710-J** (included)

- Built-in lithium battery, easy to carry
- Integral precision soldering tip, fast heating speed
- Automatic sleep function
- Temperature calibration function

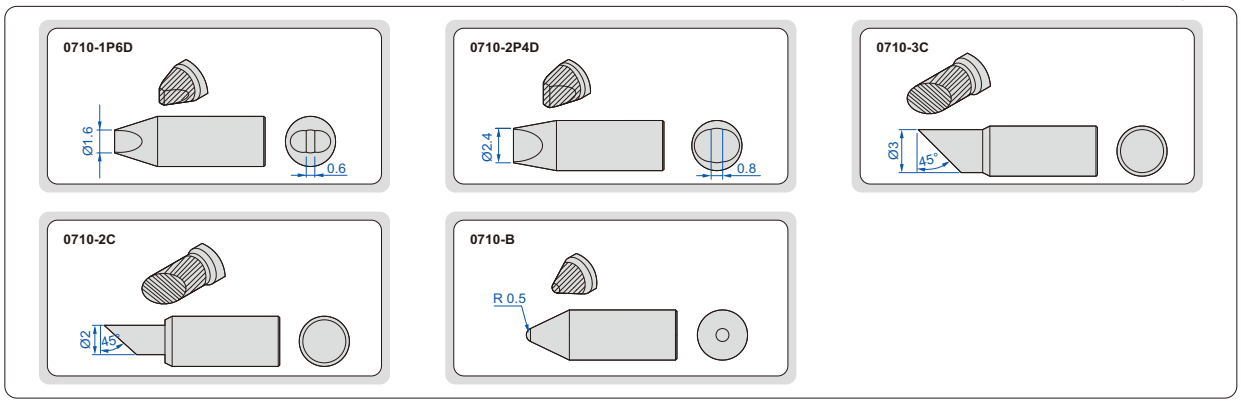
soldering tips (included)

Unit: mm



soldering tips (optional)

Unit: mm



SPECIFICATION

Display screen	OLED
Temperature range	100°C~420°C
Power	10W
Work hours	30 minutes (indicates V-P when the battery is low)
Power supply	rechargeable lithium battery: 3.7V, 2600mAh
Dimension	198×27×21mm
Net weight	85g

soldering iron stand (included)

STANDARD DELIVERY

Main unit	1 pc
Soldering tip (0710-I)	1 pc
Soldering tip (0710-J)	1 pc
Soldering tip (0710-SK)	1 pc
Soldering iron stand	1 pc

OPTIONAL ACCESSORY

Soldering tip	**0710-1P6D**
Soldering tip	**0710-2P4D**
Soldering tip	**0710-3C**
Soldering tip	**0710-2C**
Soldering tip	**0710-B**

LEAD FREE SOLDERING STATION
CODE 0711-SS480

VIDEO

- Fast heat-up and temperature return of the welding table
- Quickly switch between 3 different temperatures
- Temperature calibration function
- Compatible with general-purpose soldering nozzles, easy to use and economical

SPECIFICATION

Display screen	LCD
Temperature range	100°C~480°C
Temperature stability	±2°C (when the air is still and no load)
Power	70W (MAX)
Tip to ground potential	<2mV
Tip to ground resistance	<2Ω
Power supply	AC 220V, 50Hz
Dimension	87×140×119mm
Net weight	1.75kg

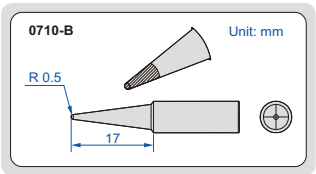
OPTIONAL ACCESSORY

Soldering tip	0711-0P8D
Soldering tip	0711-1P2D
Soldering tip	0711-2P4D
Soldering tip	0711-3P2D
Soldering tip	0711-LB
Soldering tip	0711-I
Soldering tip	0711-1C
Soldering tip	0711-2C
Soldering tip	0711-3C
Soldering tip	0711-4C
Soldering tip	0711-0P8C
Soldering tip	0711-K
Soldering tip	0711-LI
Soldering tip	0711-SK

STANDARD DELIVERY

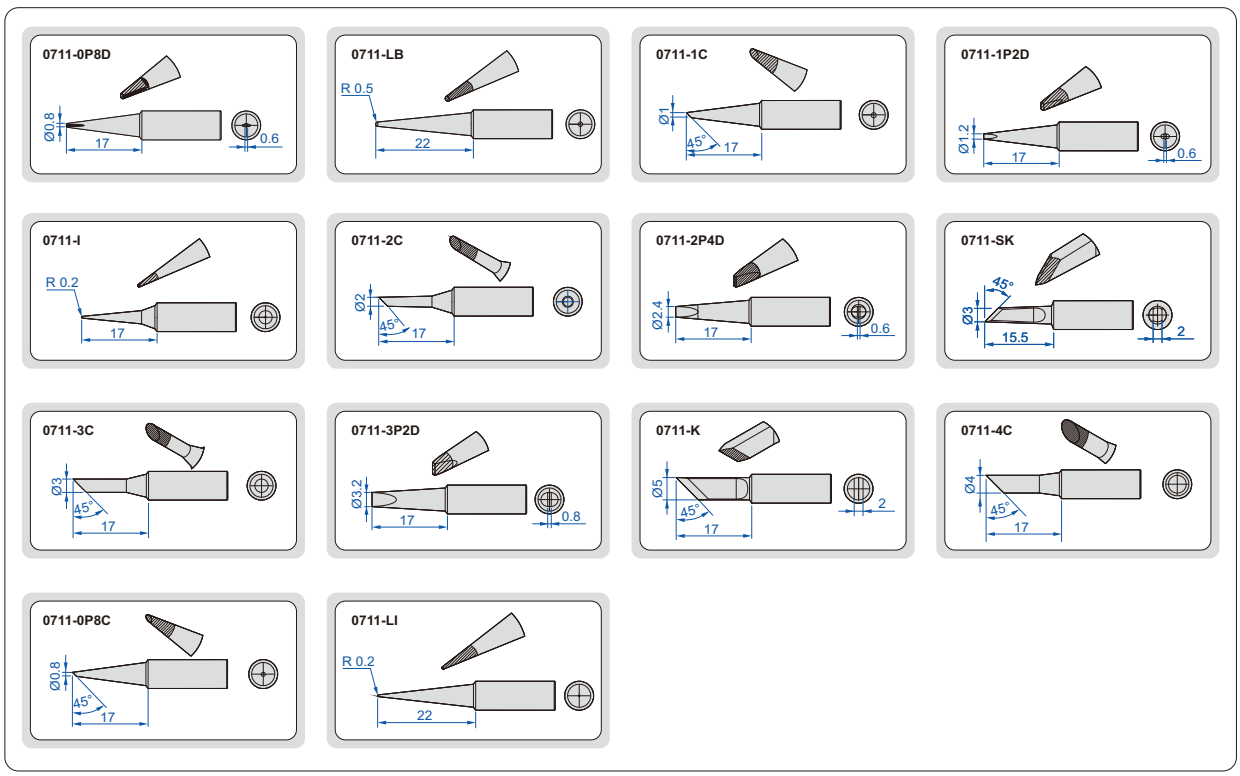
Main unit	1 pc
Soldering tip (0711-B)	1 pc
Soldering iron stand	1 pc

soldering tips (included)



soldering tips (optional)

Unit: mm



INTELLIGENT LEAD FREE SOLDERING STATION
CODE 0712-SS450

VIDEO

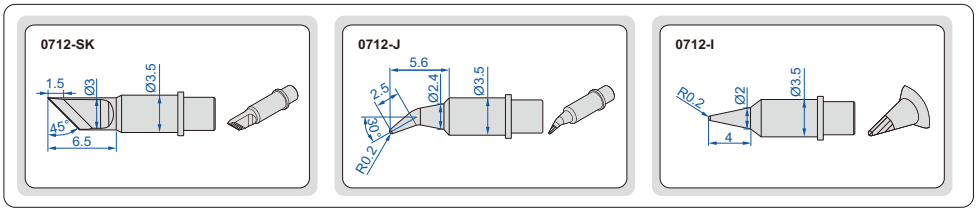
- Fast heat-up and temperature return of the welding table
- Quickly switch between 3 different temperatures
- Temperature calibration function
- Automatic sleep function
- Unit: °C/°F

soldering tip **0712-SK** (included)

soldering tip **0712-J** (included)

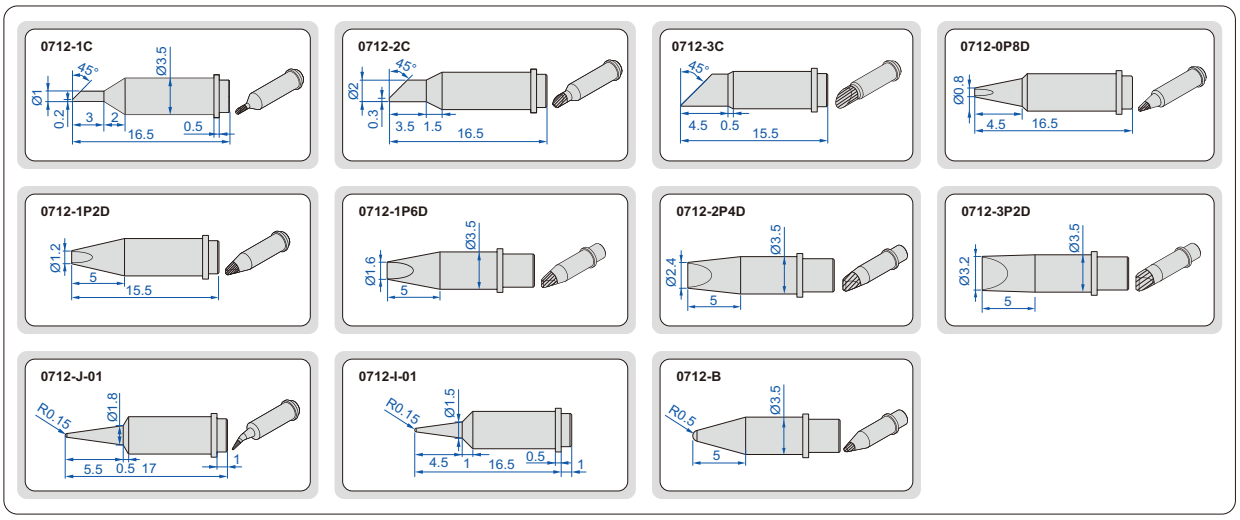
soldering tips (included)

Unit: mm



soldering tips (optional)

Unit: mm



SPECIFICATION

Display screen	IPS
Temperature range	100°C~450°C/212°F~842°F
Temperature stability	±2°C (when the air is still and no load)
Power	90W (MAX)
Tip to groundl potential	<2mV
Tip to ground resistance	<2Ω
Power supply	AC 220V, 50Hz
Dimension	116×149×93mm
Net weight	1.8kg

STANDARD DELIVERY

Main unit	1 pc
Soldering tip (0712-SK)	1 pc
Soldering tip (0712-J)	1 pc
Soldering tip (0712-I)	1 pc
Soldering iron stand	1 pc

OPTIONAL ACCESSORY

Soldering tip	0712-1C
Soldering tip	0712-2C
Soldering tip	0712-3C
Soldering tip	0712-0P8D
Soldering tip	0712-1P2D
Soldering tip	0712-1P6D
Soldering tip	0712-2P4D
Soldering tip	0712-3P2D
Soldering tip	0712-J-01
Soldering tip	0712-I-01
Soldering tip	0712-B

INCH PRODUCTS

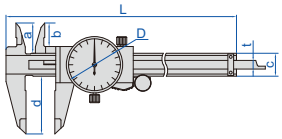
DIAL CALIPERS

SHOCK PROOF

INSPECTION CERTIFICATE

- Dial indicator graduation 0.001"
- Shockproof dial indicator
- Made of stainless steel

1311-6



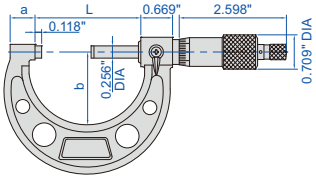
Code	Range	Accuracy	L	a	b	c	d	D	t
1311-6*	0-6"	±0.0015"	9.252"	0.827"	0.650"	0.630"	1.575"	1.535" DIA	0.256"
1311-8*	0-8"	±0.0020"	11.339"	0.945"	0.748"	0.630"	1.890"	1.535" DIA	0.256"
1311-12*	0-12"	±0.0020"	16.142"	1.102"	0.866"	0.787"	2.441"	1.752" DIA	0.295"

*Supplied with manufacturer inspection certificate

OUTSIDE MICROMETERS

INSPECTION CERTIFICATE

3203-2A



3203-44A

- Graduation 0.0001"
- Carbide measuring faces
- Ratchet stop type
- Supplied with setting standards (except 0-1")

Individual

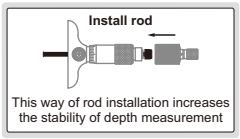
Code	Range	Accuracy	L	a	b
3203-1A*	0-1"	0.00015"	1.260"	0.354"	1.102"
3203-2A*	1-2"	0.00015"	2.244"	0.551"	1.496"
3203-3A*	2-3"	0.00020"	3.228"	0.591"	1.929"
3203-4A*	3-4"	0.00020"	4.213"	0.591"	2.362"
3203-5A*	4-5"	0.00025"	5.236"	0.650"	2.874"
3203-6A*	5-6"	0.00025"	6.220"	0.650"	3.346"

Set

Code	Range	Micrometers included	Packaging
3203-33A*	0-3"	3203-1A, 3203-2A, 3203-3A	blow mould case
3203-44A*	0-4"	3203-1A, 3203-2A, 3203-3A, 3203-4A	blow mould case
3203-66A*	0-6"	3203-1A, 3203-2A, 3203-3A, 3203-4A, 3203-5A, 3203-6A	blow mould case

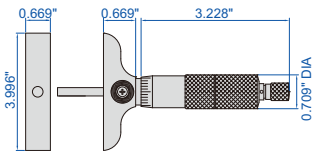
*Supplied with manufacturer inspection certificate

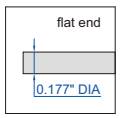
DEPTH MICROMETER



3241-6

- Graduation 0.001"
- Micrometer head accuracy: ±0.00012"
- Rod accuracy: ±[0.001+0.0005(L/3)]", L is the measuring range in inch
- Rods with flat end
- Ratchet stop





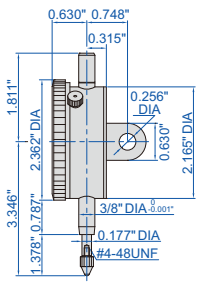
Code	Range	Rods
3241-6	0-6"	6 pcs

DIAL INDICATOR

INSPECTION CERTIFICATE

2307-1

- Meet ASME B89.1.10M-2001
- Graduation: 0.001"
- Maximum measuring force: 0.405lbf
- Cap: can lift
- With lug back
- Supplied with limit pointers and bezel clamp
- Optional accessory: backs, contact points



Code	Range	Accuracy		Range/rev	Dial reading
		First 2.5 rev	Overall		
2307-1*	1"	±0.001"	±0.002"	0.1"	0-100

*Supplied with manufacturer inspection certificate

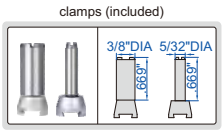
DIAL TEST INDICATOR

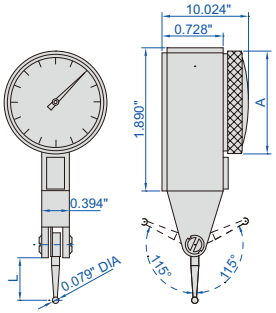
INSPECTION CERTIFICATE

JEWELED BEARING

- Jeweled bearing
- Carbide contact point
- Two measuring directions
- Anti magnetic body
- Supplied with two clamps: 5/32" DIA and 3/8" DIA
- Optional accessory: styli

2380-31





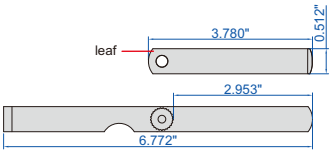
Code	Range	Graduation	Accuracy	Dial reading	A (DIA)	L
2380-31*	0.03"	0.001"	±0.001"	0-15-0	1.181"	0.50"

*Supplied with manufacturer inspection certificate

FEELER GAUGE

- 0.010" is made of brass, others are made of hardened alloy steel
- Each blade is marked with inch/metric size

4608-31



Code	Range	Quantity of Leaves
4608-31	0.0015"~0.035"	32

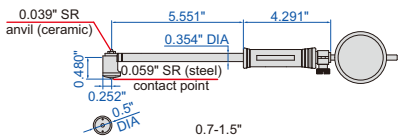
Thickness of leaves included	Accuracy
0.010" (brass)	±0.00039"
0.0015", 0.002"	±0.0002"
0.0025", 0.003", 0.004", 0.005", 0.006", 0.007"	±0.00028"
0.008", 0.009"	±0.00035"
0.010", 0.011"	±0.00039"
0.012", 0.013"	±0.00047"
0.014", 0.015"	±0.00051"
0.016", 0.017"	±0.00055"
0.018", 0.019"	±0.00059"
0.020", 0.021"	±0.00067"
0.022", 0.023"	±0.00071"
0.024", 0.025", 0.026"	±0.00075"
0.028"	±0.00091"
0.030"	±0.00094"
0.032", 0.035"	±0.00102"

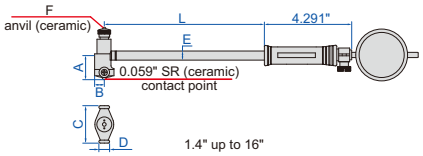
BORE GAUGES (WITH DIAL INDICATOR)

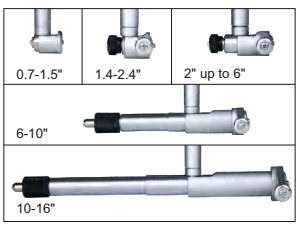
ATTENTION: NOT SUITABLE FOR 0.00005" OR 0.0001" DIAL INDICATORS

- Optional accessory:
  setting ring (code **6313**),
  long handle (code **7351**)
  bore gauge setter (code **2395-400**)

2323-6







Code	Range	Indicator	Accuracy	Repeatability
2323-15	0.7-1.5"	dial indicator, range 0.25", graduation 0.0005"	±0.00075"	0.00015"
2323-24	1.4-2.4"		±0.0009"	0.00015"
2323-6	2-6"		±0.0009"	0.00015"
2323-10	6-10"		±0.0009"	0.00015"
2323-16	10-16"		±0.0009"	0.00015"

Range	A	B	C	D	E	F	L
1.4-2.4"	0.866"	0.354"	10.063"	0.512" DIA	0.504" DIA	0.079" R	5.551"
2-6"	10.024"	0.354"	1.378"	0.512" DIA	0.504" DIA	0.079" R	5.551"
6-10"	2.224"	0.512"	2.933"	0.591" DIA	0.504" DIA	0.079" R	9.488"
10-16"	3.406"	0.591"	3.996"	0.591" DIA	0.571" DIA	0.098" R	9.488"

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France
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Add: Europarc du chêne, 11 rue Pascal,
69500 Bron
Email: France@insize.com
Website: www.insize.fr

Italy
INSIZE ITALIA SRL
Add: Via Palmiro Togliati 9, 20041,
BUSSERO (MILANO), ITALIA.
Tel: +39-392-449-1207
Email: italia@insize.com
Website: www.insize.it

United Kingdom
INSIZE UK Limited
Add: 83 Castle Road, St Albans,
Hertfordshire, AL1 5DQ
Tel: 07919 344003
Email: SalesUK@insize.com
Website: www.insize.uk

Poland
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Add: Al. Jerozolimskie 439, 05-800, Pruszków
Tel: +48 571 394 994
Email: poland@insize.com
Website: www.insize.pl

Czech
INSIZE Czech s.r.o.
Add: Krumlovská 1454/26,
Ivančice 664 91, Czech republic
Tel: +420-544 500 151
GSM: +420-703 148 182
Email: obchod@insize.cz
Website: www.insize.cz

Slovenia
INSIZE SLOVENIA
Add: Koroska cesta 45 2370
Dravograd Slovenia
Tel: +386 70 858 665
Email: matic.poberznik@insize.com

Romania
INSIZE ROMANIA
Tel: +40-744-448120
Email: cristian.bostan@insize.com

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