

COORDINATE MEASURING MACHINES (LARGE RANGE)



FEATURES

- Classic bridge structure, integrated workbench
- High precision air bearing
- Special non-linear spring system to minimize guide way 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



CMM-PM10128A

Visuall 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 transfer with mainstream CAD systems, complete graphical display
- Optional specialized modules, such as gear module, worm module, pipeline module, blade module, SPC data analysis module, etc.

STANDARD ACCURACY (PM SERIES)

Code	Range (X×Y×Z)	Probe system		Accuracy		Max. load	Overall dimension (mm)	Weight (kg)
		Head	Body	MPEE (μm)	MPEP			
CMM-PM686A	600×800×600mm	PH10T	TP20	±(2.1+L/300)	2.4μm	800kg	1485×1800×2730	1650
CMM-PM686B		PH10M	SP25M	±(1.5+L/300)	1.5μm			
CMM-PM8127A	800×1200×700mm	PH10T	TP20	±(2.3+L/300)	2.6μm	1000kg	1685×2200×2900	2600
CMM-PM8127B		PH10M	SP25M	±(1.7+L/300)	1.7μm			
CMM-PM8157A	800×1500×700mm	PH10T	TP20	±(2.3+L/300)	2.6μm	1000kg	1685×2500×2930	3000
CMM-PM8157B		PH10M	SP25M	±(1.7+L/300)	1.7μm			
CMM-PM10128A	1000×1200×800mm	PH10T	TP20	±(2.7+L/300)	3.0μm	1500kg	1885×2200×3130	2900
CMM-PM10128B		PH10M	SP25M	±(2.1+L/300)	2.1μm			
CMM-PM10158A	1000×1500×800mm	PH10T	TP20	±(2.7+L/300)	3.0μm	1500kg	1885×2500×3130	3300
CMM-PM10158B		PH10M	SP25M	±(2.1+L/300)	2.1μm			
CMM-PM10228A	1000×2200×800mm	PH10T	TP20	±(2.7+L/300)	3.0μm	1800kg	1885×3580×3130	4200
CMM-PM10228B		PH10M	SP25M	±(2.1+L/300)	2.1μm			
CMM-PM10258A	1000×2500×800mm	PH10T	TP20	±(2.7+L/300)	3.0μm	1800kg	1885×3880×3070	5200
CMM-PM10258B		PH10M	SP25M	±(2.1+L/300)	2.1μm			
CMM-PM10308A	1000×3000×800mm	PH10T	TP20	±(2.7+L/300)	3.0μm	1800kg	1885×4380×3070	5900
CMM-PM10308B		PH10M	SP25M	±(2.1+L/300)	2.1μm			
CMM-PM121510A	1200×1500×1000mm	PH10T	TP20	±(3.1+L/300)	3.4μm	2000kg	2085×2500×3530	3600
CMM-PM121510B		PH10M	SP25M	±(2.5+L/300)	2.5μm			

STANDARD ACCURACY (PM SERIES)

Code	Range (X×Y×Z)	Probe system		Accuracy		Max. load	Overall dimension (mm)	Weight (kg)
		Head	Body	MPEE (μm)	MPEP			
CMM-PM122210A	1200×2200×1000mm	PH10T	TP20	±(3.1+L/300)	3.4μm	2000kg	2085×3580×3530	4600
CMM-PM122210B		PH10M	SP25M	±(2.5+L/300)	2.5μm			
CMM-PM122510A	1200×2500×1000mm	PH10T	TP20	±(3.1+L/300)	3.4μm	2000kg	2085×3880×3470	5500
CMM-PM122510B		PH10M	SP25M	±(2.5+L/300)	2.5μm			
CMM-PM123010A	1200×3000×1000mm	PH10T	TP20	±(3.1+L/300)	3.4μm	2000kg	2085×4380×3470	6500
CMM-PM123010B		PH10M	SP25M	±(2.5+L/300)	2.5μm			
CMM-PM152210A	1500×2200×1000mm	PH10T	TP20	±(3.5+L/300)	3.8μm	2200kg	2385×3580×3470	5900
CMM-PM152210B		PH10M	SP25M	±(2.9+L/300)	2.9μm			
CMM-PM152510A	1500×2500×1000mm	PH10T	TP20	±(3.5+L/300)	3.8μm	2200kg	2385×3880×3470	6500
CMM-PM152510B		PH10M	SP25M	±(2.9+L/300)	2.9μm			
CMM-PM153010A	1500×3000×1000mm	PH10T	TP20	±(3.5+L/300)	3.8μm	2200kg	2385×4380×3470	7500
CMM-PM153010B		PH10M	SP25M	±(2.9+L/300)	2.9μm			
CMM-PM182510A	1800×2500×1000mm	PH10T	TP20	±(3.9+L/300)	4.2μm	2500kg	2685×3880×3470	7300
CMM-PM182510B		PH10M	SP25M	±(3.3+L/300)	3.3μm			
CMM-PM183010A	1800×3000×1000mm	PH10T	TP20	±(3.9+L/300)	4.2μm	2500kg	2685×4380×3470	8500
CMM-PM183010B		PH10M	SP25M	±(3.3+L/300)	3.3μm			
CMM-PM183510A	1800×3500×1000mm	PH10T	TP20	±(3.9+L/300)	4.2μm	2500kg	2685×4880×3470	9700
CMM-PM183510B		PH10M	SP25M	±(3.3+L/300)	3.3μm			
CMM-PM184010A	1800×4000×1000mm	PH10T	TP20	±(3.9+L/300)	4.2μm	2500kg	2685×5380×3470	10800
CMM-PM184010B		PH10M	SP25M	±(3.3+L/300)	3.3μm			

HIGH ACCURACY (PE SERIES)

Code	Range (X×Y×Z)	Probe system		Accuracy		Max. load	Overall dimension (mm)	Weight (kg)
		Head	Body	MPEE (μm)	MPEP			
CMM-PE686A	600×800×600mm	PH10T	TP20	±(1.8+L/350)	2.0μm	800kg	1485×1800×2730	1650
CMM-PE686B		PH10M	SP25M	±(1.2+L/350)	1.2μm			
CMM-PE8127A	800×1200×700mm	PH10T	TP20	±(2.0+L/350)	2.2μm	1000kg	1685×2200×2900	2600
CMM-PE8127B		PH10M	SP25M	±(1.4+L/350)	1.4μm			
CMM-PE8157A	800×1500×700mm	PH10T	TP20	±(2.0+L/350)	2.2μm	1000kg	1685×2500×2930	3000
CMM-PE8157B		PH10M	SP25M	±(1.4+L/350)	1.4μm			
CMM-PE10128A	1000×1200×800mm	PH10T	TP20	±(2.3+L/350)	2.5μm	1500kg	1885×2200×3130	2900
CMM-PE10128B		PH10M	SP25M	±(1.7+L/350)	1.7μm			
CMM-PE10158A	1000×1500×800mm	PH10T	TP20	±(2.3+L/350)	2.5μm	1500kg	1885×2500×3130	3300
CMM-PE10158B		PH10M	SP25M	±(1.7+L/350)	1.7μm			
CMM-PE10228A	1000×2200×800mm	PH10T	TP20	±(2.3+L/350)	2.5μm	1800kg	1885×3580×3130	4200
CMM-PE10228B		PH10M	SP25M	±(1.7+L/350)	1.7μm			
CMM-PE10258A	1000×2500×800mm	PH10T	TP20	±(2.3+L/350)	2.5μm	1800kg	1885×3880×3070	5200
CMM-PE10258B		PH10M	SP25M	±(1.7+L/350)	1.7μm			
CMM-PE10308A	1000×3000×800mm	PH10T	TP20	±(2.3+L/350)	2.5μm	1800kg	1885×4380×3070	5900
CMM-PE10308B		PH10M	SP25M	±(1.7+L/350)	1.7μm			
CMM-PE121510A	1200×1500×1000mm	PH10T	TP20	±(2.7+L/350)	2.9μm	2000kg	2085×2500×3530	3600
CMM-PE121510B		PH10M	SP25M	±(2.1+L/350)	2.1μm			

HIGH ACCURACY (PE SERIES)

Code	Range (X×Y×Z)	Probe system		Accuracy		Max. load	Overall dimension (mm)	Weight (kg)
		Head	Body	MPEE (μm)	MPEP			
CMM-PE122210A	1200×2200×1000mm	PH10T	TP20	±(2.7+L/350)	2.9μm	2000kg	2085×3580×3530	4600
CMM-PE122210B		PH10M	SP25M	±(2.1+L/350)	2.1μm			
CMM-PE122510A	1200×2500×1000mm	PH10T	TP20	±(2.7+L/350)	2.9μm	2000kg	2085×3880×3470	5500
CMM-PE122510B		PH10M	SP25M	±(2.1+L/350)	2.1μm			
CMM-PE123010A	1200×3000×1000mm	PH10T	TP20	±(2.7+L/350)	2.9μm	2000kg	2085×4380×3470	6500
CMM-PE123010B		PH10M	SP25M	±(2.1+L/350)	2.1μm			
CMM-PE152210A	1500×2200×1000mm	PH10T	TP20	±(3.1+L/350)	3.3μm	2200kg	2385×3580×3470	5900
CMM-PE152210B		PH10M	SP25M	±(2.5+L/350)	2.5μm			
CMM-PE152510A	1500×2500×1000mm	PH10T	TP20	±(3.1+L/350)	3.3μm	2200kg	2385×3880×3470	6500
CMM-PE152510B		PH10M	SP25M	±(2.5+L/350)	2.5μm			
CMM-PE153010A	1500×3000×1000mm	PH10T	TP20	±(3.1+L/350)	3.3μm	2200kg	2385×4380×3470	7500
CMM-PE153010B		PH10M	SP25M	±(2.5+L/350)	2.5μm			
CMM-PE182510A	1800×2500×1000mm	PH10T	TP20	±(3.5+L/350)	3.7μm	2500kg	2685×3880×3470	7300
CMM-PE182510B		PH10M	SP25M	±(2.9+L/350)	2.9μm			
CMM-PE183010A	1800×3000×1000mm	PH10T	TP20	±(3.5+L/350)	3.7μm	2500kg	2685×4380×3470	8500
CMM-PE183010B		PH10M	SP25M	±(2.9+L/350)	2.9μm			
CMM-PE183510A	1800×3500×1000mm	PH10T	TP20	±(3.5+L/350)	3.7μm	2500kg	2685×4880×3470	9700
CMM-PE183510B		PH10M	SP25M	±(2.9+L/350)	2.9μm			
CMM-PE184010A	1800×4000×1000mm	PH10T	TP20	±(3.5+L/350)	3.7μm	2500kg	2685×5380×3470	10800
CMM-PE184010B		PH10M	SP25M	±(2.9+L/350)	2.9μm			

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±2°C; <0.5°C/h, <1°C/24h
Humidity	30%~70%
Max. power	1000W
Power supply	220V±5%, 50Hz

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
Weight	649g

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

Type	Material	Diameter	Length	Quantity
Center base	stainless steel	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

Type	Material	Diameter	Length	Quantity
Center base	stainless steel	10mm	13mm	1 pc