

ULTRASONIC PHASED ARRAY DETECTORS

- Optimal for phased array inspections involving intricate structures or materials, including but not limited to PE pipe electrical conduits, composite materials, TKY butt welds, flanges, blades, etc.
- Integrating full focus function, conventional phased array function, bolt cylinder guided wave detection function, and TOFD function, it can be directly switched through device software, making it lighter and more powerful
- Supports 64-element real-time TFM full-focus scanning imaging capability
- The focus law offers versatility by supporting multiple PA scanning methods, enabling simultaneous scanning and imaging
- Incorporate a dual TOFD channel feature that facilitates integrated imaging through dual phased array TOFD
- Equipped 2×32 with dual linear array and double-sided array capabilities for effective austenitic stainless steel detection
- Equipped with advanced CAD import module, it can import equipment based on the size and contour of the workpiece to assist in identifying defects
- Facilitate the output of multi-channel video signals to distinct screen displays
- Support a dual-axis encoder interface for two-dimensional corrosion C scanning and wheel probe detection
- Enable high-speed network transmission, allowing for real-time data uploading and downloading
- Supports PCI/PWI and other imaging modes



phased array probe (optional)



phased array mini scanner (optional)



phased array handheld scanner (optional)

STANDARD DELIVERY

Main unit	1pc
Lithium battery	2pcs
Touch Pen	1pc
Screwdriver	2pcs
HDMI cable	1pc
Network cable	1pc
USB disk	1pc
Power adapter	1pc

OPTIONAL ACCESSORY

Phased array probe	refer to specification of transducers
Phased array mini scanner	UFD-K935-KD10
Phased array handheld scanner	UFD-K935-KD11

Note: Other probes and scanners can be customized according to customer requirements

SPECIFICATION OF PHASED ARRAY PROBE

Code	Frequency	E-Nos	Pitch (mm)	Elev (mm)	Ptd. angle	Ptd. material
UFD-K935-KD91 (optional)	2.5MHz	16	0.6	10	37°	plexiglass
UFD-K935-KD92 (optional)	5.0MHz	32	1.0	13	35°	plexiglass
UFD-K935-KD93 (optional)	7.5MHz	64	1.0	5	35°	plexiglass
UFD-K935-KD94 (optional)	2.5MHz	64	1.81×1.46	/	18.9°	plexiglass

SPECIFICATION

Code		UFD-K935		UFD-K936	
Channel category		phased array channel	conventional channel	phased array channel	conventional channel
PU/UT configuration	receive/transmit	32/64	4-channel TOFD (2 pairs, one transmit and one receive)	32/128	4-channel TOFD (2 pairs, one transmit and one receive)
	range	1000μs	10000μs	1000μs	10000μs
	material velocity	340~15240m/s			
Receiver	gain range	0~80dB	0~110dB	0~80dB	0~110dB
	system bandwidth	0.5~20MHz	0.5~15MHz	0.5~20MHz	0.5~15MHz
	receive delay	50μs/2.5ns	/	50μs/2.5ns	/
Pulser	pulse voltage	50V~100V continuously adjustable	100V~350V continuously adjustable	50V~100V continuously adjustable	100V~350V continuously adjustable
	pulse excitation method	negative square wave			
	pulse width	30~500ns/2.5ns			
	pulse rise time	<8ns	<15ns	<8ns	<15ns
	repetition frequency	200Hz~20kHz	100Hz~1kHz	200Hz~20kHz	100Hz~1kHz
	delay accuracy	0~20μs/2.5ns	0~655μs/10ns	0~20μs/2.5ns	0~655μs/10ns
Data acquisition	sampling rate	100MHz/10bits	200MHz/10bits	100MHz/10bits	200MHz/10bits
	maximum A-scan length	8192	2048	8192	2048
	focus mode	regular/dynamic/full range	/	regular/dynamic/full range	/
	focus type	depth, sound path, horizontal	/	depth, sound path horizontal	/
	detection method	positive-wave, negative-wave, RF-wave, full-wave			
Display and scan	display screen	10.1", resolution 1280×800			
	touch screen type	capacitive touch screen			
	scan type	fan scan/line scan/composite scan			
	display mode	A/B/C/L/S/3D	A/B/C	A/B/C/L/S/3D	A/B/C
Programmable TCG	number of points	32	/	32	/
	maximum gain	40dB, gain step is 0.1dB	/	40dB, gain step is 0.1dB	/
	maximum gain slope	40dB/μs	/	40dB/μs	/
I/O interface	USB	USB3.0/USB2.0			
	ethernet	1000Mb/s			
	video output mode	HDMI			
	encoder	dual encoder			
Data storage	SSD	256GB			
Power supply	DC supply voltage	24V/3.75A			
	lithium battery	rated voltage: 11.1V, rated capacity: 17Ah			
	working hour	lithium battery can work for ≥ 4 hours when fully charged			
Working temperature		-10°C~50°C			
Dimension (L×W×H)		340×230×100mm			
Net weight		5.2kg			