

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 | / |
| Pulsar | 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 | | | | |