

DIGITAL ULTRASONIC FLAW DETECTOR (STANDARD TYPE) CODE UFD-F720

- 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





straight-beam probe (included)



angle-beam probe (included)

## **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				

## **SPECIFICATION**

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 640x480					
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					
Size (LxWxH)	228×140×42mm					
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	13x13mm	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	9x9mm	Single-element angle probe	45°
UFD-F75 (optional)	2.5MHz	9x9mm	Single-element angle probe	71.6°

Note: Other probes can be customized according to customer requirements