

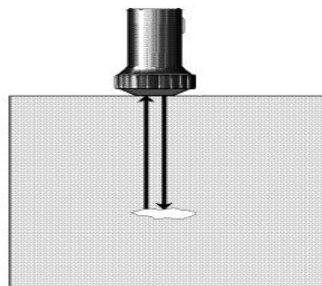
UTS-260 Digital Ultrasonic Flaw Detector



Overview

UTS-260 is a portable industrial non-destructive flaw detector, which can rapidly, easily and accurately inspect, locate, evaluate and diagnose various defects (crack, inclusion and pinhole, etc.) in a workpiece without destruction. It can be used both in a lab and field. The instrument can be widely used in any fields that need defect inspection and quality controlling e.g. manufacturing industry, iron & steel metallurgical industry, metalworking, chemical industry, etc., also be broadly used in the active safety inspection and service-life evaluation in such fields as aerospace, railway transportation and boiler pressure vessels, etc. It is an essential instrument for non-destructive inspection industry.

When the ultrasonic wave propagates in a job, one can detect the defect in it by the influence on the propagation of ultrasonic wave based on the acoustic characteristic demonstrated by the defect in the material. Based on this principle, by using ultrasonic wave one can measure such defects as crack, pinhole and inclusion in such media as metal, non metal and composite, etc.



Basic working principle for ultrasonic detection

Advantages:

- ★ Automated calibration (IIW), Automated gain
- ★ DAC, AVG, TCG, B scan, AWS, No Limited Video record,
- ★ High-speed capture and very low noise
- ★ high contrast viewing of the waveform from bright
- ★ Powerful pc software and reports can be export to excel

Performance Features

1. Automated calibration of transducer Zero Offset and/or Velocity
2. Automated gain, Peak Hold and Peak Memory
3. Automated display precise flaw location (Depth d, level p, distance s, amplitude, sz dB, ϕ)
4. Automated switch three staff gauge ((Depth d, level p, distance s)
5. **100 independence setup, any criterion can be input freely, we can work in the scene without test block**
6. Big memory of 500 A graph
7. Gate and DAC alarm, Acoustic-Optical alarm
8. USB port, communication with pc is easy
9. The embed software can be online updated
10. **Li battery, continue working time up to 10 hours**
11. Display freeze
12. Automated echo degree
13. Angles and K-value
14. Lock and unlock function of system parameters
15. **AWS D1.1**
16. Dormancy and screen savers
17. Electronic clock calendar
18. There are 14 standards of DAC in UTS-260.
19. Automated make video of test process and play Connect the USB Disk, ***the length of video is unlimited***
20. Two gates setting and alarm indication
21. High-speed capture and very low noise
22. **DAC, AVG, TCG, B Scan, Solid plastic housing (IP65)**
23. Automated calculate the size of the flaw with wide bottom type in AVG function
24. **6dB DAC functions**
25. Provides high contrast viewing of the waveform from bright, direct sunlight to complete darkness and easy to read from all angles
26. Powerful pc software and reports can be export to excel

2.6 Technical Parameters

Designation	Technical Data
Range of scanning (mm)	Range of scanning (mm): 0-6000 Steps: 2.5,5,10,20, 30,40,50,60,70,80,90, 100,150,200, 250, 300,350,400,450,500,600,700,800,900,1000,2000,3000,4000,5000,6000,7000,8000,9000,10000 Adjusting step: 0.1mm(2.5 mm-99.9mm), 1mm(100mm-10000mm)
D-delay (μ s)	D-delay (μ s): -20-+3400 Steps:-20,-10,0.0,10,20,50,100,150,200,250,300,350,400,450,500, 600,700,800,900,1000,1500,2000,2500,3000,3400. Adjusting steps: 0.1(-20 μ s-999.9 μ s), 1(1000 μ s-3400 μ s)
P-delay (μ s)	P-delay: 0.0-99.99 Adjusting steps: 0.01
MTLVEL(m/s)	MTLVEL:1000-15000 10 fixed levels: 2260,2730,3080,3230,4700,5920,6300,12000,13000,14000,15000 Adjusting steps: 1
Working mode	Single probe (receiving and sending), double probe (one for receiving and another for sending), transmission (transmission probe)
Frequency Range (MHz)	0.5-15
Gain adjustment (dB)	0-110 Adjusting step: 0.0, 0.1, 0.5, 1, 2, 6, 12
Reject	0%-80% of screen height, step: 1%
Vertical linear error	Vertical linear error is not more than 3%
Horizontal linear error	Not more than 0.2% in the scanning range
Sensitivity Leavings	\geq 62 dB
Dynamic range	\geq 34dB
Alarm	Three modes, i.e. forbidden wave, loss wave and auto
A-Scan display area	Full screen or local A-Scan display freezing and de-freezing A-Scan filling
Data save	500 A-Scan images (including setting of instrument)
Standard communication interface with PC	USB
Measuring unit	Mm / inch
Battery	Li battery 7.4V 4800mAh
Power adaptor	Input 100V-240V / 50Hz-60Hz Output 9VDC / 1.5A

Working temperature	-20°C-50°C
Working humidity	20%-90%
Port type	BNC / LEMO
Overall dimension (mm)	50x160x238
Weight (kg)	1.0



Standard Configuration

No.	Item	Quantity
1	Main Body	1
2	Straight Beam Probe 2.5MHz, 20mm	1
3	Angle Probe 4MHz, 8*9, 60 degree	1
4	Machine-probe Cable	2
5	Battery Module	1
6	1.5A/9V Power Adapter (Charger)	1
7	Instruction Manual in English	1
8	Instrument Carrying case	1
9	USB cable	1
10	Communication software for PC	1