

## Ultrasonic Flaw Detector UFD-Z6



**Measuring range :** 1mm-15000mm

**Precision value for :** 0.01mm

**Storage and interface :** USB Connection

**Continuous working time :** 20 hours working time

**Instrument turning :** 1.9 KG

**The product gross weight :** 5KG

**Product can be colors :** Black

**Appearance size :** 240\*180\*50mm

### **Specification:**

Measuring range	1.0~15000mm
Resolution	0.01mm(<100mm) 1mm(>100mm)
Velocity	500~2000m/s 20 fixed sound velocity
Display delay	-20~3400us resolution: 0.1us
Probe delay	0~99us resolution: 0.01us
Auto calibration	Measurement and setting of sound velocity and probe delay using two known calibration echoes (2-point calibration )
Linear error	Horizontal linearity error $\leq$ 0.1% Vertical linearity error $\leq$ 3%
Dynamic range	$\geq$ 36dB
Sensitivity leavings	$\geq$ 64dB 200mm $\Phi$ 2 flat-bottomed hole
Dimension (mm)	240 $\times$ 180 $\times$ 50
Weight	1.9Kg(including battery pack)
Working environment	Temperature: 0 $^{\circ}$ C~60 $^{\circ}$ C Humidity: 20% ~90%
Transmission Pulse	
Drive Pulse	Negative pulse/Square Wave
Pulse Width	50~2000ns
Pulse Amplitude	50-500v

Pulse repetition frequency	Pulse repetition frequency PRF could be adjusted
Damping	50/150/250/400Ω
Receiving System	
Testing mode	Pulse echo/ transmitting and receiving /transmission
Measuring mode	Peak /Verge
Gain	0 to 110dB Customers define steps 0/0.2/0.5/1/2/6/12
Detector Pattern	RF/full-wave/positive /negative half- wave
Frequency bandwidth	0.3~1 / 0.5~4 /2~15MHz broad band filter 1/2.5/5/10/15 MHz narrow band filter
Display	
LCD	Wide temperature high-light TET color LCD 5.7" industrial class
Backlight	5 grades could be chosen
Display refresh frequency	Not less than 60Hz
GUI theme	5 GUI color themes: simple/classical/gray/bright light/ dark light Customers could choose theme by setting color of characters A wave scan coordinate color background
Gate /Measuring /Alarm	
Gate	Two separated gates A/B
Measuring Value	5 value display areas one of them is mainly area. Chosen measuring content SA/SB/DA/DB/PA/PB/A%A/A%B/dBtA/dBtB/dBrA/dBrB/SBA/DBA/PBA/LA/LB
Alarm	All gates could alarm logically and independently
Memory	
Channel parameters	20 groups
A-scan wave	3200 group
Thickness value	320000linear
Wave Video	10 min

Reference wave	4
Input/Output	
Probe cable	LEMO/BNC
Communication	RS232/USB
Region	
Time	Real time date and time
Language	Chinese English
Unit	mm/inch
Power	
Battery	High power lithium battery capable of preventing over-charge and over-discharge
Power Indicator	Monitor power based on coulombmeter showing remaining capacity of battery via percentage and battery life
Working time	Continuous working over 20 hours
Power adapter	Input 100~240V/50~60Hz output 9VDC/4A
High Grade	
Dynamic Echo	Digital Nature Simulation Performance
Memory key Store	3 kinds of data report screenshot wave thickness value
Grate	Analysis the details of the wide gate area
two-dimensional coding B scanning	Thickness/ Shape scanning Gray/Color board Design
Echo Coding	Two chosen coding matter: coordinate/waveform it is convenient to calculate span
Freezing Curve	All/peak value/contract/envelope/delay envelope
Feature Indicator	Measuring of the sound distance wave front & amplitude
CSC Curve Calibration	Value correction according to probe angle thickness of pieces and curvature diameter
Lock	Single menu independently lock to avoid system adjust related data; Data group could lock to avoid wrong delete

Screen saver	Standby/Character/Power Off
Equivalent curve	
DAC curve	Recording 30 calibration points; auto gain; any order calibration; two correction matter calibration/edit ; considering of material attenuation and surface saving factor; 5 estimate curves of adjusted gain comply to JIS&API standard
DGS Curve	DGS Curve fits to three references includes flat bottomed flat-bottomed hole through holes; considering of material attenuation and surface saving factor estimating flaw matter; equivalent size/equivalent gain/percentage;
Standard Package	
Main Body	1
Straight /Angle probe	2
Probe Cable	1
Power adaptor	1
Battery	1 group
Operating manual	1
Carrying case	1
Coupling Paste	1 bottle
Optional accessory	
Interface Gate	Applied when flaw detector in a environment which has medium e.g water
Printer	TP serial printer 3 data report: screen shot wave thickness value
Communication	USB