Ultraschall-Fehler-Analysesystem

UFD-Pad

Hohe Performance

Das akkubetriebene Fehlersuchgerät UFD-Pad ist ein leichtes Staub, Wasser und Stoß geschütztes Profigerät zur Fehlersuche von z.B. Rissen oder Lunkern in Materialien. Typische Anwendungen finden sich in Druckgefäßen, Flugzeug- und Automobilbau, Schweißnahtuntersuchungen Bahnschienen usw.

Mit dem 10“ Bildschirm, der WIFI Verbindung oder der Speicherung der Messdaten auf einem eingesteckten USB Stick fällt das Handling im WIN 10 System um so leichter. Das Ultraschallgerät arbeitet mit Rechteckpulsen und bietet eine Selbstkalibrierung.

Technische Daten:

Messbereich	Auflösung	Schall-geschwindigkeit	Pulstyp	Frequenzbereich
0-1000 mm	0,01 mm (<100 mm) 1 mm (>100 mm)	0 – 20000 m/s	Rechteckpuls mit Pulsweite 25 ns – 15 µs	Max. 25 kHz

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Features:

- dust-proof,water-proof and shock-proof, industrial-grade three-proof,suitable for harsh site environment
- intelligent flat panel ultrasonic flaw detector ufd-pad
- square wave pulse excitation, optimized electro-acoustic matching is moresuitable for ultra-thick /ultra-thin workpiece detection
- ultra-thin intelligent tablet host wiht high sensitivity and touch high-definition screen
- wi-fi wireless Internet of things property, power cloud detection
- integrated XY position encoder, B/C scan detection system application(optional)
- a variety of scanners can be widely used in pipes, plates, welding seams, etc.(optional)
- Integrated, portable, suitable for steel structure field testing.
- Large screen display, intuitive and clear data.
- Suitable for connecting various scanning devices (it can test the inner wall of pipes, etc.)

Application field

- Pressure vessels, petrochemical, aerospace, welding, railways, steel mills, nuclear industry, aircraft manufacturers, automobile production

General descriptions

- Square Wave Excitation and Narrow Band Filtering
- B/C, 5 DAC curves, in accordance with JIS, APS standards
- Practical DGS

Parameter

Win10 system
Support WIFI
Support gravity sensing
The USB interface
The Mini HDMI
CPU using 1.92 GHz
12 nuclear Intel Cherry
Trail Z8350 processor

SPECIFICATIONS

Measuring Range 1.0~1000mm
Resolution
0.01mm(<100mm) 1mm(>100mm)
Velocity
500~20000m/s 20fixed velocities
Delay
-10~1000mus /resolution : 0.1us
Probe Delay
0~200us /resolution: 0.01us
Auto Calibration
Velocity Calibration &Probe Delay Calibration
Linear Error
Horizontal error≤0.1%
Vertical error≤3%
Dynamic Range ≥36dB
Sensitivity
≥64dB 200mmΦ2 flat-bottomed hole
Dimension (mm) 280×185×26.5
Weight
Kg (including battery pack)
Working Environment
Temperature: -10℃~50℃
Humidity: 5%~90%

Pulse

Dive Pulse
Square wave pulse 50-200v,
Pulse width 25ns-15us
Maximum 20KHz repetition frequency
The pulse transmission repetition frequency PRF is continuously adjustable

Receiver

To detect patterns
Pulse echo/transmit receive/transmit
Measurement peak/edge
Gain 0 ~80 db
Detection methods
Positive/negative half wave /RF/ full wave
The frequency bandwidth
0.1M-20M

Display

With 10 inches, IPS, 1920 x 1200 touch screen

Gate

Gate Two Separated Gate A/B
Measured value display
5 measured value display area,
SA/SB/DA/DB/PA/PB/A%A/A%B/dBtA/dBtB/dBrA/dBrB/SBA/DBA/PBA/LA/LB
Alarm
Independent logic gate alarm, alarm hreshold thickness measurement

Storage

Hard disk space: 60G
Channel Parameters 20
A Scan 2000
Thickness values 200,00 data
Wave video
Reference wave 4

Input / Output

Probe connector C5

Regional

Clock Real-time display date/time
Language English &Chinese
Unit mm/inch

Battery

The battery
Lithium battery adopts 3.7v12000mah
battery for continuous operationDo 8 hours
Enter 100 ~ 240 v / 50 ~60 hz
Output 5 VDC / 2 a

High ranking

U disk storage
Storage screen
shots/waveform/thickness three data report
Gate broadening
Gate area of concern for the details of observation and analysis
B-scan two-dimensional coding
Thickness / contour scanning; grayscale / color palette settings
Curve freeze YES
Characteristic indicator
Sound path measurement wave front and amplitude measurement position indicator
CSC Surface Correction
According probe angle, diameter of the work-piece thickness and curvature correction for the measured values
Lock
data set can be locked to avoid accidental deletion of data
Screen Saver Standby/Text/off

Equivalent curve

DAC curve
Can record 30 calibration points;
Automatic Gain; any order calibration;
calibration / edit two modified methods;
consider the material attenuation and surface compensation factor; five adjustable gain curve to assess compliance with JIS and API Standards
DGS curve
large flat-bottomed, flat-bottomed hole, through-hole

Standard

Main engine	1
Straight / angle probe	2
Probe line	2
Chargers	1
Battery	1
The instructions	1
The packing cases	1
The coupling agent	1

optional

160MHz sampling frequency

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