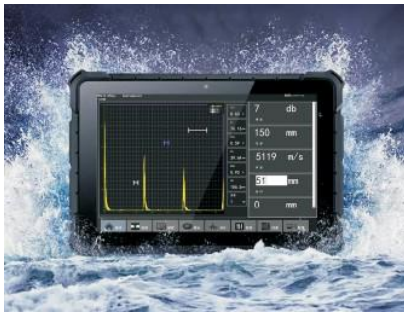# Intelligent Panel Ultrasonic Flaw Detector
UFD-PAD

UFD-PAD: More convenient!

We pursue the portability of industrial flaw detection and simplify the complexity. The team has worked hard day and night to develop new flat-panel flaw detectors to make flaw detection simpler and more convenient, and meet the increasingly updated modern flaw detection needs.

Function

- Dustproof, Waterproof and shockproof Industrial grade protection
- Suitable for harsh testing environment
- intelligent flat panel ultrasonic flaw detector UFD-PAD
- Square wave pulse excitation, optimized electro-acoustic matching is more suitable for ultra-thick/ultra-thin workpiece detection, ultra-thin smart panel host, high-sensitivity touch high-definition screen
- WI-FI wireless Internet of Things attributes to help cloud detection
- Integrated XY position encoder, can realize the application of B/C scanning detection system (optional)
- Integrated, portable, suitable for on-site inspection of steel structures. Large-screen display, the data is intuitive and clear.
- Suitable for connecting a variety of scanning devices (can be used for pipe inner wall inspection, etc.)

Performance

- Production industry: casting, forging, metallurgy, target material and other production enterprises' products. (Plates, bars, tubes, targets, etc.). In-service inspection: In-service workpiece inspection in steel structure, transportation, electric power, petroleum, petrochemical, new energy and other industries. (Welds, shafts, pipes, etc.)
- Manufacturing industry: aviation, aerospace, shipbuilding, machining and other industries, inspection of special material workpieces. (Composite materials, non-ferrous metal materials, etc.) Comply with JIS and API standards. Built-in ultrasonic non-destructive testing standards.
- WI-FI wireless Internet of Things attributes, help cloud detection, cloud storage, cloud update
- The integrated XY position encoder can realize the application of B/C scanning detection system (optional).
  variety of scanners can be widely used in pipelines, plates, welds, etc. (optional). Suitable for connecting multiple scanning devices (optional) Pipeline inner wall inspection, etc.
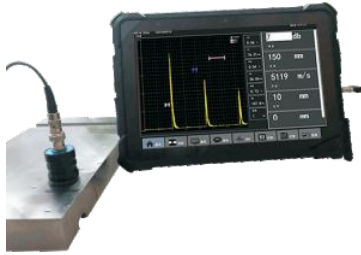
- Visualized operation, easy to learn;
- The textual menu structure makes the settings you need clear at a glance
- Support a variety of standard probes;
- Products are widely used in pressure vessels, petrochemicals, aerospace, welding, railways, metallurgy, steel structures, electric power, boilers, nuclear industry, shipbuilding, aircraft manufacturing and automobile production.

System
Win7
Support WIFI
Support gravity sensor
USB interface
HDMI interface
SIM interface
CPU 1.83 quad-core (N2930)
RAM 8G
Hard disk 30G

Display
With 10-inch, IPS, 1920×1200 touch screen

Power supply

Battery
Lithium battery adopts 3.7V12000mAH battery for continuous
Work 8 hours
Input 100~240V/50~60Hz
Output 19VDC/3.42A

Feature

working principle
Ultrasonic (pulse-echo/echo-echo)

Detection range
10mm - 2000mm

Velocity
100-9999m/s , Preset 26 common material sound velocities

Probe delay
0-200us

Display delay
-199-200mm

Dynamic range
>36dB

Sensitivity
>64dB 200mm , 2mmflat bottomed hole

Dimension(mm)
280×185×26.5mm

Weight
1.2Kg

Working Environment
Temperature -10-60℃
Humidity 5%-90%

Drive system

Square wave pulse
50-230V

Pulse width
50 - 1500ns

Repeat frequency
100-5000Hz Continuous adjustable

Pulse
1-10

Matched damp
50 Ω

Receive system

Gain
0-110dB dynamic range

Gain interval
0.1/0.2/0.5/1/2/6/12

Sampling frequency
80-160M

Testing method
Peak/edge

Testing method
Full wave/positive wave/negative wave/RF

Bandwidth frequency
1.25/2.5/5/10/20/0.5-2.5/2-5/4-15/all

Mean Value
1-10000

Storage
A scan raw data
B scan imaging
C scan imaging
Defect list
Export report

USB
Save data via USB to USB flash drive

Input-Output

Probe connection
C5

I/O
Encoder interface

Regional

Language
Chinese/English

Unit
mm/inch

Clock
Real time display date/time

Gate

Quantity
4 independent gates (1 interface gate)

Follow the gate
Support gate 1 frame selection of boundary waves, gates 2, 3, and 4 are always in the same position after the boundary waves as follow-ups

Measured value display
The maximum peak amplitude, position (SA), depth (DA), horizontal distance (PA, RA (remove the leading edge of the probe)) and the number of round trips in each gate.

Alarm
Alarm logic is set in each gate (positive (waveform is higher than the gate)/negative (waveform is lower than the gate)/close)

Quick operation
Full screen/lock screen/auto gain/freeze/envelope/device reconnection

Equivalent curve

DAC/TCG
5 curves

Standard
GB 11345、NB 47013

Standardize
10 non-sequential calibration points

DGS
Suitable for three reference types of large flat bottom/flat bottom hole/through hole, considering the reference attenuation, material attenuation and surface compensation factors, defect evaluation method: equivalent size/equivalent gain/percentage

Cloud

Remote Assistance
Wechat/whatsapp

Date
Upload/download/analyze data

Update

Cloud upgrade/authorization			
标配			
Host	1	Manual	1
Straight/oblique	2	Tool box	1
Probe wire	2	Coupling	1
charger	1	Power	1