SISCO

Ultrasonic Flaw Detector with Touch Screen





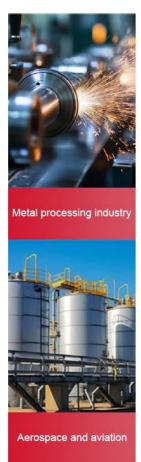
Overview of the product

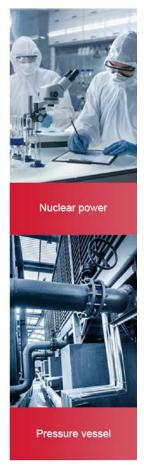
The ultrasonic flaw detector is a portable industrial non-destructive testing instrument that enables rapid, convenient, and non-invasive detection, localization, evaluation, and diagnosis of various internal defects (such as cracks, porosity, gas holes, and inclusions) in workpieces. It can be used both in laboratories and on-site engineering inspection sites. Widely applied across industries including boilers, pressure vessels, aerospace, power generation, petroleum, chemical processing, pipelines, military equipment, shipbuilding, automotive manufacturing, mechanical processing, mold manufacturing, metallurgy, metalworking, steel structures, railway transportation, nuclear energy, special inspection systems, and higher education institutions. Key features include high sensitivity, strong penetration capability, fast detection speed, cost-effectiveness, lightweight design, and safety without posing risks to human health.

Application Area











Features

- The body is light and suitable for one-handed operation
- ➤ PD65W fast charge, 12 hours of long battery life
- ➤ The 5.0-inch IPS HD display screen is combined with a new UI interface for a fresh experience
- Supports full screen touch, quick gesture operation, virtual keyboard, easy to use
- It has professional functions such as DAC, AVG, automatic gain and wave memory
- It contains many practical functions such as switching between Chinese and English, data export to SD card, online upgrade, screenshot and so on

Technical Parameter

- ➤ Bandwidth: 0.1MHz~20MHz
- Fig. Gain: 120dB, step 0.1dB, 0.6dB, 1dB, 2dB, 6dB
- Filter: broadband, 1M,1.25M,2.5M,5M,10M,15M,1M-5M
- Sampling rate: hardware sampling rate 100MSPS, equivalent sampling rate 400MSPS
- > Detection mode: full wave, positive half wave, negative half wave, radio frequency, envelope
- Detection range: 20 meters (carbon steel for longitudinal wave), step 100mm, 10mm, 0.1mm
- Sound velocity range: 250~16000 m/s
- ➤ Launch damping: adjustable
- > Pulse mode: sharp pulse, single square wave, double square wave
- ➤ Pulse voltage: 25V~300V,25V step
- ➤ Pulse width: 0ns~500ns continuously adjustable, 5ns step
- Pulse frequency: automatic or manual, 0-1250Hz
- ➤ Probe channel: 200 groups, support new, preview, delete, rename, overwrite, restore and other operations
- ➤ Gate alarm: Gate A and B report wave loss/injection
- > Gate mode: independent gate A, gate B
- Measurement mode: peak, front edge, J front edge
- ➤ Quantitative mode: DAC curve, AVG (DGS) curve
- ➤ Scoring standards: AWS D1.1/D1.5, NB/T 47013, GB/T 29712, GB/T 11345
- ➤ Save content: single frame, multi-frame recording (<500 frames), screen capture
- Auxiliary functions: automatic gain, wave memory, waveform freeze, channel management, gate alarm, gate expansion, automatic gate, full screen touch, virtual keyboard, quick screenshot, channel import/export
- ➤ Display: HD 5.0 inch 800×480 LCD, IPS LCD
- Probe interface: dual LEMO-00 C5
 Output interface: Type-C1, MINI USB
- ► Input interface: Type-C2



> Data storage: 8GB SD card

➤ Charger: 30W PD fast charge, standard Type-C interface (100~240V,50~60Hz)

> Size: 183 mm × 113 mm × 45 mm

Weight: 700g, contains battery and does not contain rubber sleeve

Language: Simplified Chinese, English

Units; metric, imperial

➤ Battery: 7.4V 8000mAh lithium battery, 12 hours of endurance

➤ Working temperature: -10°C~55°C

➤ Resolution: 30dB (metering performance requirement: ≥26dB)

➤ Dynamic range 35dB (metering performance requirement: ≥26dB)

➤ Sensitivity margin: 50dB (metering performance requirement: ≥42dB)

➤ Vertical linearity: 1.20% (metering performance requirement: ≤6%)

► Horizontal linearity: 0.15% (measuring performance requirement: ≤2%)

Standard Layout

order number	name	quantity	remarks
1	main engine	1	
2	High precision direct probe	1	2.5MHz Φ20
3	High precision inclined	1	2.5MHz 10x10 K2
	probe		
4	Probe lines	1	
5	PD65W fast charging	1	
6	power line	1	
7	instructions	1	
8	certificate	1	
9	warranty card	1	
10	SD card (8G)	1	
11	Conversion plug (C to	1	You can connect to the
	USB)		computer to export data

Apolegamy

order number	name	quantity	remarks
1	power bank	1	Battery capacity: 20000mAh/7.4V; 74Wh
2	SD card (16G,32G,64G)	1	

3



Maintenance

- 1. When operating the key, do not use too much force, and do not use hands with too much oil and mud to operate the instrument keyboard, so as not to affect the service life of the keyboard;
- 2. After the use of the flaw detector, the surface of the instrument should be cleaned;
- 3. The instrument should be stored in a dry and clean place;
- 4. The instrument should avoid oil or water and other liquids entering the interior of the instrument. Clean the surface of the instrument frequently. Do not twist or press the probe cable and communication cable. When unplugging the cable, hold the root of the plug instead of holding the cable to pull, plug or drag.