

HST960 Intelligent Digital Ultrasonic Testing System



Product Overview

The ultrasonic flaw detector is a portable industrial non-destructive testing instrument that enables rapid, convenient, and non-destructive detection, localization, evaluation, and diagnosis of various internal defects (cracks, porosity, voids, inclusions, etc.) in workpieces. It is suitable for both laboratory testing and on-site engineering inspections. Widely used in industries such as boilers, pressure vessels, aviation, aerospace, power generation, petroleum, chemical processing, pipeline systems, military equipment, shipbuilding, automotive manufacturing, mechanical processing, mold production, metallurgy, metalworking, steel structures, railway transportation, nuclear power, special inspection systems, and higher education institutions. Key features include high sensitivity, strong penetration capability, fast detection speed, low cost, simple and lightweight design, and human safety.

Technical parameter

- Measurement range: (0~12000) mm
- Operating frequency: (0.2~20) MHz
- Sound speed range: (100~20000) m/s
- Repetition frequency: (20~2000) Hz
- Dynamic range: ≥36dB
- Vertical linear error: ≤1.5%
- Horizontal linearity: ≤0.1%

- Resolution:>42dB (5P14)
- Sensitivity margin:>65dB (deep 200mmΦ2 flat-bottom hole)
- Digital suppression: (0~80)%, does not affect linearity and gain
- Electrical noise level: ≤10%
- Sensor types: straight probe, angled probe, dual-crystal probe, through-type probe
- Gates: Inflow gate, outflow gate; single gate reading, dual gate reading; peak trigger, edge trigger
- Alarm: Buzzer and LED light alarm
- Power supply: DC 9V, lithium battery for continuous operation for over 12 hours
- Dimensions: 260×170×55 (mm)
- Main weight: 1.1kg
- Working temperature: (-30℃~+55) °C
- Relative humidity: (20~95)%RH

Note: The above measurements were obtained at a probe frequency of 2.5MHz with full-wave detection.