



Portable Ultrasonic Flaw Detector

Order Code: CME88D09

The CTS-1010 digital ultrasonic flaw detector is equipped with advanced square wave excitation technique and complied with EN 12668:2000. It is engineered for stable performance, lightweight and portable. It features a transfective TFT display with full WVGA (640x480) resolution providing superior visibility in low or bright lighting conditions.

Its long 7-hour battery life and 1.5kg lightweight that it can be easily carried and used in field of petrification, pressure vessel, electricity power and railway transportation.

Features

- Advanced circuit design with 640MHz sampling frequency to ensure quick and accurate display and analysis on defect signals even when the signals are weak
- High resolution in detection of thin workpieces and composite materials when using adjustable function with pulse width, drive voltage and damping resistance
- FIR** digital filtering technique for enhancement of signal-to-noise ratio
- The design comply with **EN 12668:2000**
- Auto-calibration function including fast calibrating material velocity, probe delay and probe angle
- Built-in **DAC** and **AVG** flaw sizing tools. The curves could be easily generated, modified, recorded and called



■ CTS-1010

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Specifications

Pulse Type	Negative square wave
Pulse Width	30 ~ 1000ns in 5ns steps
Pulse Voltage	25 ~ 250V in 25V steps
Pulse shift	-7.5 ~ 3000 μ s
Pulse Rise Time	<10ns (in 400 Ω /200V)
Test Mode	Pulse echo and dual transmission
Damping	400 Ω / 80 Ω
Bandwidth	Broadband: 0.5-15MHz Narrowband: 1.5-3MHz
Gain	0.0-110.0dB, Steps: 0.1\ 1.0\ 2.0\ 6.0dB
Material Velocity	1000-1500m/s continuously adjustable; Built-in 30 common material velocities selectable
Test Range	0.0 ~ 10000mm longitudinal wave at steel velocity; Range continuously variable with minimum 0.1mm increments
Rectification	Positive half-wave, negative half-wave, full wave, RF
Threshold and Alarm	Two thresholds/ gates with Real-time alarm signal by Audio or LED indicator; Optional: Positive/negative thresholds and DAC curve Measure mode: Peak/ Flank

Specifications Subject to Change Without Notice.

Display	5.7" (640x480) TFT colour LCD
Probe Zero	0-999.9 μ s
Pulse Repetitive Frequency (PRF)	25-800Hz, automatic adjustment
Vertical Linearity Error	\leq 3%
Horizontal Linearity Error	\leq 0.4%
Surplus Sensitivity	\geq 60dB (200 Φ 2 flat bottom hole)
Resolution	\geq 36dB (Probe : 5MHz 14mm Dia)
Dynamic Range	\geq 32dB
Reject	0 ~ 90%; No detriment to the linearity and gain
Noise level	<10% (steel longitudinal wave, 250mm)
Port	BNC (Q9) USB Host SD Card Port
Power Supply	Large-capacity lithium battery without memory effect; Internal/ External charging, AC Mains 220V; Battery Life: 6 - 8 hours
Standards	EN12668-1; JB/T 10061-1999
Weight	1.50 kg (with battery)
Dimensions	246mmx166mmx47mm
Warranty	2 Year



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