ULTRASONIC FLAW DETECTOR

PCE-FD 20



- **Operating frequency range: 1 ... 10 MHz**
- **Measured time interval range: 6 ... 1000 microseconds (µs)**
- **Sound velocity: 1000 ... 9999 m/s**
- **Implements shadow, echo and mirror-shadow testing methods**
- **Features a USB interface for downloading data to PC for detailed analysis**
- **Lightweight**
- **Battery or electric power**
- **1.5 m long probe cable**

The portable ultrasonic flaw detector with a large LCD screen that displays A-scan maps of ultrasonic signals as well as B-scan cross sections. Ideal for use in mechanical engineering, aerospace and metallurgical applications, this high-frequency ultrasonic flaw detector uses a contact transducer (two different probes included; 45° and 90°) to measure material thickness and identify flaws and defects such as discontinuity in welds.

The adjustable frequencies range from one to 10 megahertz. In addition, the ultrasonic flaw detector offers sound velocities between 1000 and 9999 meters per second.

Specification

General technical data	
Cable length	1,5 m
Frequency	1 ... 10 MHz
Display type	LCD
Display size	3,47 Inch
Interface	USB
Gain range	125 dB
Measuring geometry	45°, 90°
Adjustable sound velocity	1000 ... 9999 m/s
Measurement error	< ±0.025 µs
Scan duration	6 ... 1000 µS
Rectification	positive half-wave, Wireless mode
Additional description	Probe delay: 0 ... 15 µs Automatic defect warning: Double gate Defect warning measurement range: 0 ... 2000 µs Defect warning threshold adjustment range: 0 ... 100% Averaging: 1 ... 16 tests Number of control points (time-variable gain): 15 Time from excitation pulse to load: 0.0 ... 0.5 µs Amplitude of the excitation pulse at the 50-ohm resistor: 100, 200, 300
Scan range	1 ... 1000 µS
Scan delay	0 ... 2000 µS
Time measurement range	0 ... 1000 µS
Menu language	English, English (GB)
Protection class (device)	IP20
Power supply	5V DC, 3 A
Connector type	Device-europlug
(Rechargeable) battery	3 x 1,2 V AA - rechargeable battery , Nickel-metal hydride battery
Capacity	2700 mAh
Performance	3,24 Wh
Operating conditions	-15 ... 50 °C , 0 ... 95 % RH
Storage conditions	0 ... 50 °C , 0 ... 80 % RH
Dimensions (L x W x H)	38 x 82 x 162 mm
Weight	240 g