

Specifications of UM-1D Ultrasonic Thickness Gauge

Standard Package:

UM-1D thickness gauge
Standard probe (PT-08)
Carrying case
Two 1.5V AA alkaline batteries
Couplant
Operating manual
Certification of quality
Packaging list

Operating Principle:

Standard mode: P-E (pulse-echo) method with dual-element probes
Coating mode: E-E (echo-echo) method with dual-element probes

Probe Zero Adjustment:

Selectable: 1-point calibration: normal measurement
2-point calibration: curve surface measurement or other special application with a high precision

V-Path Correction:

Automatic

Measuring Range:

0.8mm to 300mm; 0.031in to 11.81in in standard mode
3.0mm to 18.0mm; 0.118in to 0.709in in through coating mode
Depending on probe, material and surface condition

Digital Resolution:

0.001in or 0.1mm

Units:

Selectable: inch or mm

Display:

128 × 64 dot-matrix LCD screen (1.65in × 2.24in; 42mm × 57mm)
EL backlight and switchable contract ratio
Digit height: 0.54in or 13.75mm

Measurement Update Rate:

4 Hz in standard measurement mode
25 Hz in MIN capture mode

Material Velocity Range:

1000 to 9999 m/s; 0.039 to 0.394 inch/ μ s

Power:

Two 1.5V AA alkaline batteries
Warning with low battery voltage



Operating Time:

Up to 200 hours (without backlight) with alkaline batteries, depending on operating mode

Auto Shut-Off:

After 5 minutes of non-use

Operating Temperature:

-10°C to +50°C; +14°F to +122°F

Specification to -20°C/-4°F on request

Size:

5.86in × 2.87in × 1.25in; 149mm × 73mm × 32mm (H × W × D)

Weight:

200g; 7oz (including batteries)

Data Logger Capacity:

Up to 500 readings can be divided into a maximum of 5 files (user-selectable)

Optional Accessories:

Attachable rubber case

Numerous special probes on request

Couplants and high-temperature couplant

4-step/6-step block for calibration

Data transmission cable

Application software

Operating Language:

English and Chinese

Measuring Error:

Up to 1in: ± 0.002 in or ± 0.1 mm

Above 1in: $\pm 1\%$ H

H is the height of the testing object

Repeatability:

± 0.001 in or ± 0.1 mm

Application Software:

UMVIEW

Interfaces:

Serial RS 232C port in combination with a communicative cable;

Data transfer parameters: 8 bits, 1 stop bit, 9600 baud, no parity.