

# Specifications of UM-1 Ultrasonic Thickness Gauge

## **Standard Package:**

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

## **Operating Principle:**

Ultrasonic pulse/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

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/ $\mu$ 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: ±0.002in or ±0.1mm

Above 1in: ± 1%H

H is the height of the testing object

## **Repeatability:**

±0.001in or ±0.1mm

## **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.