

UFM-7 | Ultrasonic Thickness Gauge | Data Sheet

UFM-7 ultrasonic thickness gauge made by our factory is a simple-to-use, highly accurate, hand-held ultrasonic thickness gauge with the operating principle of ultrasonic wave measuring. It can measure quickly, nondestructively and precisely with a resolution of 0.001in/0.01in or 0.01mm/0.1mm. This instrument can be widely used in the fields such as manufacturing, metal processing, chemistry, oil and gas and business inspecting for measuring the thickness of all sorts of materials where ultrasonic wave can spread through with a constant speed and get the reflection from the back side. Apart from making accurate measure on various kinds of plates and processing components, it can also make detection on various kinds of pipes and pressure containers of the manufacturing facilities about their thickness loss after corrosion. UFM-7 is an incensory specialized instrument for material protection.



Features

- **Minimum pipe diameter** : 15 mm
- **Measuring error** : ± 0.002 in or $\pm 0,05$ mm
- **Repeatability** : ± 0.001 in or $\pm 0,025$ mm
- **Operating temperature** : -20°C ~ +300 °C (See also 'Sensors')
- **Power** : 1.5 V AA batteries, warning with low voltage

Sensors

We supply ultrasonic wall thickness gauges for high and low temperatures. You have the choice of 2 types of probes / sensors, depending on the application :

NT : for temperatures from -10°C to +50°C
HT : for temperatures from -20°C to +300°C

The UFM-7 Wall Thickness Gauge includes :

- Normal temperature probe (NT)
- Carrying case
- Two 1.5V AA alkaline batteries
- Couplant
- Operating manual
- Certification of quality

Technical specifications

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 :

0,8 mm to 300 mm ; 0.031 in to 11.81 in

Depending on probe, material and surface condition

Digital resolution :

$H < 4$ in : 0.001 in / 0.01 in or 0,01mm / 0,1mm

$H \geq 4$ in : 0.01 in or 0,1 mm

Units : Selectable: inch or mm

Display :

128×64 dot-matrix LCD screen (1.65 in × 2.24 in ; 42 mm × 57 mm)

EL backlight and switchable contrast ratio

Digit height: 0.54 in 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 : -20°C to + 300°C (See also 'Sensors')

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

Weight : 200 g ; 7 oz (including batteries)

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

Operating language : English

Measuring error :

Up to 1 in : * } 0.002 in or * } 0,05 mm

Above 1 in : * } 0.5 % H

H is the height of the testing object

Repeatability : * } 0.001in or * } 0,025mm