

Ultrasonic Thickness Meter



TM-8812/TM-8812C

Model: TM-8812 / TM-8812C (Functional Type)
TM-8811 (Basic Type)
TM-8810 (Affordable Type)

Applications

Used for measuring thickness and corrosion of pressure vessels, chemical equipment, boilers, oil storage tanks, etc. in industries of petroleum, shipbuilding, power station, and machine manufacturing. Applicable to measure the thickness of many materials, e.g. Steel, Cast iron, Aluminum, Red copper, Brass, Zinc, Quartz glass, Polyethylene, PVC, Gray cast iron, Nodular cast iron.

Material Selection

| Code | Material | Code | Material |
|------|------------|------|-------------------|
| cd01 | Steel | cd07 | Quartz Glass |
| cd02 | Cast Iron | cd08 | Polyethylene |
| cd03 | Aluminum | cd09 | PVC |
| cd04 | Red Copper | cd10 | Gray Cast Iron |
| cd05 | Brass | cd11 | Nodular Cast Iron |
| cd06 | Zinc | xxxx | Sound Velocity |



Ultrasonic Probe



TM-8811

TM-8810

Features

- * With high power of emission and broad band of receiving sensitivity, the gauge can match probes of different frequencies. That makes it easy to measure the rough surface, even cast iron. It is widely used in almost all kinds of industries.
- * Automatic memory material code and sound velocity value, convenient to use.
- * Coupling symbol indication when measuring.
- * Manual or automatic power off.
- * Applies USB, RS-232, Bluetooth data output.

DIGITAL INSTRUMENT

Specifications

| Model | TM-8812C | TM-8812 | TM-8811 | TM-8810 |
|-----------------------|--|---------|--------------------------------|---------|
| Display | LCD | | | |
| Sensor | Ultrasonic Probe | | | |
| Measuring Range | 1.2~200 mm / 0.05~8 inch | | 1.5~200 mm / 0.06~8 inch | |
| Resolution | 0.01 mm | 0.1 mm | 0.1 mm | 0.1 mm |
| Accuracy | $\pm (0.5\%n + 0.1)$ | | $\pm (0.5\%n + 0.2)$ | |
| Sound Velocity | 500~9,990 m/s | | 1000~9,000 m/s | — |
| Lower Limit of Pipes | $\Phi 15 \times 2.0 \text{ mm}$ $\Phi 20 \times 3.0 \text{ mm}$ Determined By Transducer | | | |
| Operating Temperature | 0~40°C | | | |
| Conditions Humidity | < 85%RH | | | |
| Power Supply | 4x1.5V AAA (UM-4) Battery | | 4x1.5V AA (UM-3) Battery | |
| Dimensions | 120x62x30mm | | 160x68x32mm | |
| Weight | 164g (Not Including Batteries) | | 208g (Not Including Batteries) | |

| | | |
|-------------|------------------|---------------------|
| Standard | Main Unit | ✓ |
| Accessories | Probe | 5MΦ8 Standard Probe |
| | Coupling Agent | ✓ |
| | Carrying Case | B04 |
| | Operation Manual | ✓ |

| Optional Accessories | Other Special-purpose Probes | |
|----------------------|--------------------------------------|---|
| | RS-232C Data Cable with Software | — |
| | Bluetooth Data Adapter with Software | — |

Probe Technical Parameters

| Probe Model | Diagram | Measuring Range | Diameter | Frequency | Operating Temp. |
|--|---|------------------------------|----------|-----------|-----------------|
| 5MHz Φ8 (UTG-ST) Standard Configure Probe |  | 1.5 ~ 200 mm (Steel) | Φ 8 mm | 5M Hz | 0 ~ 50 °C |
| 5MHz Φ8 (UTG-TP) Curved Surface Probe |  | 1.5 ~ 200 mm (Steel) | Φ 8 mm | 5M Hz | 0 ~ 50 °C |
| 2MHz Φ10 Plastics Measurement Probe |  | 1.0 ~ 50 mm (Plastics) | Φ 10 mm | 2M Hz | 0 ~ 50 °C |
| 2MHz Φ10 Cast Iron Measurement Probe |  | 3.0 ~ 40 mm (Cast Iron) | Φ 10 mm | 2M Hz | 0 ~ 50 °C |
| 5MHz Φ6 Thin Material Probe |  | 1.0 ~ 50 mm (Steel) | Φ 6 mm | 5M Hz | 0 ~ 50 °C |
| 5MHz Φ12 (UTG-HT) High Temperature Probe |  | 4.0 ~ 100 mm (Steel) | Φ 12 mm | 5M Hz | 60 ~ 300 °C |