# **Ultrasonic Thickness Meter**



TM-8812 / TM-8812C (Functional Type)
Model: 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	





#### **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.

## Specifications

N	Model	TM-8812C	TM-8812	TM-8811	TM-8810			
D	risplay	LCD						
S	ensor	Ultrasonic Probe				Ultrasonic Probe		
Measu	ring Range	1.2~200 mm / 0.05~8 inch		1.5~200 mm / 0.06~8 inch				
Res	solution	0.01 mm 0.1 mm		0.1 mm	0.1 mm			
Ac	ccuracy	$\pm (0.5\%n + 0.1)$		$\pm (0.5\%n + 0.2)$				
Sound	d Velocity	500~9,990 m/s		1000~9,000 m/s	<del></del>			
Lower L	imit of Pipes	Φ15 x 2.0 mm Φ20 x 3.0 mm Determined By Tra			r			
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			x32mm			
Weight		164g (Not Inclu	164g (Not Including Batteries) 208g (Not Including Batteries)					

Standard	Main Unit	√
Accessories	Probe	5MΦ8 Standard Probe
	Coupling Agent	$\checkmark$
	Carrying Case	B04
	Operation Manual	$\checkmark$

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	Y	1.5 ~ 200 mm ( Steel )	Ф8 mm	5M Hz	0 ~ 50 °C
5MHz Φ8 ( UTG-TP ) Curved Surface Probe	V	1.5 ~ 200 mm ( Steel )	Ф8 mm	5M Hz	0 ~ 50 °C
2MHz Φ 10 Plastics Measurement Probe		1.0 ~ 50 mm ( Plastics )	Ф 10 mm	2M Hz	0 ~ 50 °C
2MHz Φ10 Cast Iron Measurement Probe		3.0 ~ 40 mm ( Cast Iron )	Ф 10 mm	2M Hz	0 ~ 50 °C
5MHz Φ6 Thin Material Probe		1.0 ~ 50 mm ( Steel )	Ф 6 mm	5M Hz	0 ~ 50 °C
5MHz Φ12 (UTG-HT) High Temperature Probe		3.0 ~ 200 mm ( Steel )	Ф 12 mm	5M Hz	60 ~ 300 °C