

## Ultrasonic Thickness Meter



**Model:** TM-8818 (Enhanced Type, Wide Range)  
TM-8816 (Functional 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.
- \* The model TM-8818 has bidirectional measurements, materials thickness is measurable with know velocity, Conversely velocity is measurable with know thickness.
- \* 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.




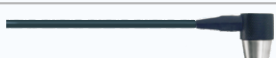
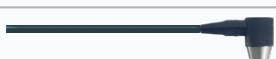

## Specifications

Model	TM-8818	TM-8816	TM-8816C
Housing Material	Aluminum Alloy	Strong, Light Weight ABS-Plastic	
Display	Large Screen LCD	4 Digit, 10 mm LCD	
Measuring Range	0.75~400 mm ( 45 # steel, Depend on Probe )	1.0~200 mm / 0.04~8 inch	
Resolution	0.01 mm / 0.1 mm / 0.001 inch	0.1 mm	0.01 mm
Accuracy	$\pm (0.5\%n + 0.05)$		
Sound Velocity	500~9,990 m/s		
Lower Limit of Pipes	$\Phi 15 \times 2.0$ mm $\Phi 20 \times 3.0$ mm Determined By Transducer		
Operating Conditions	Temperature	0~40°C	
	Humidity	< 85%RH	
Power Supply	2x1.5V AA (UM-3) Battery	4x1.5V AAA (UM-4) Battery	
Dimensions	130x76x32mm	135x65x27mm	
Weight	340g (Not Including Batteries)	120g (Not Including Batteries)	

Standard	Main Unit	✓	✓
Accessories	Probe	5M $\Phi$ 8 Standard Probe	Built-in Probe
	Coupling Agent	✓	✓
	Carrying Case	B04	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 $\Phi 8$ ( UTG-ST ) Standard Configure Probe		1.5 ~ 200 mm ( Steel )	$\Phi 8$ mm	5M Hz	0 ~ 50 °C
5MHz $\Phi 8$ ( UTG-TP ) Curved Surface Probe		1.5 ~ 200 mm ( Steel )	$\Phi 8$ mm	5M Hz	0 ~ 50 °C
2MHz $\Phi 10$ Plastics Measurement Probe		1.0 ~ 50 mm ( Plastics )	$\Phi 10$ mm	2M Hz	0 ~ 50 °C
2MHz $\Phi 10$ Cast Iron Measurement Probe		3.0 ~ 40 mm ( Cast Iron )	$\Phi 10$ mm	2M Hz	0 ~ 50 °C
5MHz $\Phi 6$ Thin Material Probe		1.0 ~ 50 mm ( Steel )	$\Phi 6$ mm	5M Hz	0 ~ 50 °C
5MHz $\Phi 12$ ( UTG-HT ) High Temperature Probe		4.0 ~ 100 mm ( Steel )	$\Phi 12$ mm	5M Hz	60 ~ 300 °C