

*Thickness gauge with  
coating penetration function*



## UM-2 Series Technical Parameters

### Product Features

UM-2 series is an excellent performance ultrasonic thickness gauge with high stability and accuracy of measurement.

Our company is the first to develop thru-coating technology in China in 2006. Our UM-2D offers this function. It can directly measure the substrate thickness without removing the coating on the surface of the test object.

The applicable coatings for this function are: paint layer, plastic coating, etc.

This function is achieved by measuring two consecutive bottom echoes of the substrate. It also has more advantages: no need zero-point calibration, high stability of the measurement and don't drift.

Technical parameter	
Display	128×64 dot-matrix LCD screen with EL backlight
Operating Principle	P-E (pulse-echo) , E-E (echo-echo) with dual-crystal probes (Only UM-2D)
Measuring Range	Std. mode: 0.8mm to 300mm, depending on material and probe
	Thru-coating: 3mm-20mm with PT-08 probe(Only UM-2D)
Measuring Limits of Tube (Steel):	Φ20mm×3.0mm(PT-08 probe) Φ15mm×2.0mm(PT-06 probe) The measuring error is up to ±0.1mm
Measuring Error	Low limit to 10mm: ±0.05mm 10mm to high limit: ± (0.5%H+0.01) mm Note: H is the actual thickness of the testing object
Repeatability:	0.05mm
Resolution	0.01mm / 0.001in
Units	Inch / Millimeter
Calibration	Zero calibration, One-point calibration, Two-point calibration
V-Path Correction	Automatic, Compensate the nonlinearity of dual element probe
Update Rate	4Hz
Material Velocity Range	1000 ~ 9999 m/s (0.0394 to 0.3937 in/us)
Data Storage	5 groups are divided to store 500 thickness values
Minimum Value Checking	Move the probe along the surface of the measured object, the gauge can find the thinnest point automatically.
Warning Function	There will be an alarm sound if the measured value exceeds the pre-set thickness limit.
Velocity Storage	Velocity of 5 different materials can be stored
Language	Selectable English and Chinese
Communication Port	USB port or Serial RS 232C port (Optional)
Software	UmView software is used for measurement data transmission, storage, analysis and documents editing (Optional)
Power	2pcs 1.5V AA alkaline batteries (Warning with low battery voltage)
Working Time	Up to 200 hours (no backlight)
Auto Power-off	AUTO OFF after 5 minutes of inactivity
Operating Temperature	-10° C to +50° C , -20° C in special requirements
Size	149mm X 73mm X 32mm(H X W X D)
Weight	210g including batteries

### Optional Accessories

High-temp Probe	Cast iron Probe	Small Tube Probe	Fingertip Probe	Probe Cable
Step Calibration Block	Software	Data Transmission Cable	Rubber Sheath	Couplant/High-temp Couplant