

Ultrasonic thickness gauge A&B Scan for testing rubber thickness TM281 Series

Product Description

TM281 Series Color Screen with A/B-Scan Ultrasonic Thickness Gauge Professional in Solving Various Difficult Thickness Measurement



Features:

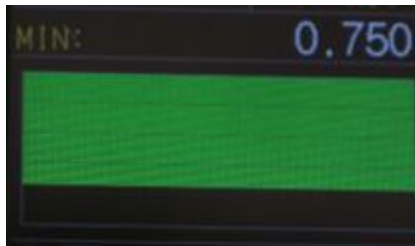
2.4" color OLED, 320 X 240 pixels, display contrast 10,000:1

Live Color A-Scan



Users could directly see the color waveform of the ultrasonic sound (or A-scan) on the screen, which is quite important for the occasions that we need to check the correctness of the testing results. Many cases will cause wrong testing results or even no readings. We could find the causes easily through the A-scan. Adjust the three parameters of GAIN, BLACKING, GATE, and then we will get the right readings.

Live Color B-Scan



TM281 series thickness gauge has time base B-scan function. Move the probe along the workpiece surface, then the cross-sectional profile of the workpiece display, use for observe the underside contour of the workpiece. It could be automatically capture a minimum value of the B-scan image, and indicate the position of the minimum by a red triangle. You can see any point thickness value of the B-scan image by moving the pointer.

Through Coating Function

No longer need to waste time to remove the coating

Now TM281D and TM281DL also have this widely acclaimed function. It's realized by measuring the two continuous bottom surface of the substrate. This mode also has more advantages:

1. Exempt Zero Calibration
2. High Stability, the measuring value is not influenced by the probe pressure, the coupling layer thickness and the surface dust of the workpiece.
3. Zero Drift



More Practical Function

Difference/Reduction Rate: Difference mode displays the difference between the actual value and the normal value. Reduction rate calculates and shows the percentage of the thickness reduction when the material becomes thin. Typical application is to measure the metal material which is due to bending and becomes thin.

Information displays: LOS, min, max, large reading while displaying min at the same time, velocity, zero, calibration, units, freeze, unfreeze, % battery life remaining, gain - low, std, high, echo to echo symbol

Max./Min. Capture: On this mode, the current thickness, minimum thickness and the maximum thickness will be shown on the screen at the same time.

Alarm Mode: Dynamic change the color of thickness readings when alarming.

Update Rate: Selectable 4Hz, 8hz and 16Hz. 4Hz for ordinary application, when you need a quick scan, such as high temperature measurement, you can choose higher update frequency.

Multi- Languages Available: Chinese, English, Spanish, German.

Echo to Echo: Measures the metal thickness only (ignore paint and coatings)

Data logger: 99999 thickness data logger with ID point in linear or grid files (400 files)

Output: USB 2.0 full speed connector. DataView report software

Size: 156mm) (L) 76mm) (W) x 1.25" (38 mm) (H)

Weight: 285 g

Temperature: Gage Operating: -10° C to 50° C

Standard TM510 Probe

The probe is the heart of the instrument, TMTeck has the world's leading probe production technology. TM510 probe uses the high performance piezoelectric ceramic chip, with integrated metal die-casting shell, practical design of probe and cable separated, regardless of costs to create high quality .

The Difference Between TM281 Series Ultrasonic Thickness Gauge

	TM281	TM281D
Color Display	√	√
Live A-Scan	√	√
Time-based B-Scan	√	√
Control of Gain and Gate	√	√
Blanking	√	√
Thru-paint&coatings	×	√
Data Logger	×	×
DataView Software	×	×





Specifications of TM281DL Ultrasonic Thickness Gauge

Display Type	2.4" color OLED, 320×240 pixels, display contrast 10,000:1
Operating Principle	Pulse echo with dual element transducers
Measuring Range	0.50mm to 508mm(0.02" to 20.00"), depending on material, probe and surface condition;E-E Mode:3-50mm under condition
Measuring Resolution	Selectable 0.01mm, 0.1mm(selectable 0.001", 0.01")
Units	Inch or Millimeter
Rectify Mode	RF+, RF-, HALF+, HALF-, FULL
Display Mode	Normal, Minimum/Maximum capture, DIFF/RR%, A-Scan, B-Scan
V-Path Correction	Automatic
Update Rate	Selectable 4Hz, 8Hz, 16Hz
Material Velocity Range	500 to 9999m/s(0.0197 to 0.3939 in/μs)
Languages	English, French, German,spanish,Chinese
Alarm Settings	Minimum and Maximum alarms. Range of 0.25mm to 508mm (0.010" to 20.00"). Dynamic waveform color change on alarm
Power Requirements	2 AA size batteries
Operating Time	Approximately 40 hours
Instrument Shut-off	Selectable ALWAYS ON or AUTO OFF after 5, 10, 20 minutes of inactivity
Operating Temperature	-10°C to +50°C(+10°F to +12°F)
Size	158mm × 76mm × 37mm (H × W × D)
Weight	285g including batteries

Standard Delivery TM281DL

Name	Quantity
Main body	1
Probe	1
Battery	1
Couplant	1
Carrying Case	1
Operating Manual	1
USB Cable	1
Software	1

TM281 Probe/Transducer Specifications						
PIC	Model	Type	Frequency	Contact Diameter	Measurement Range	Temperature Range
	PT-08	TM281 Standard	5MHz	11mm	0.8 to 100.0mm	-10 to 70°C
	TM510	TM281D/D L Standard	5MHz	13.5mm	1.2 to 200.0mm	-10 to 70°C
	TM550	Small tube	5MHz	5mm	0.8-60 mm	-10 to 70°C
	ZT-12-2	Cast iron	2MHz	17mm	4.0 to 508mm	-10 to 70°C
	PT-06	Small tube	7.5MHz	8mm	0.8 to 30mm	-10 to 70°C
	PT-04	Fingertip	10MHz	6mm	0.7 to 12mm	-10 to 70°C

	GT-12-2	High-Temperature	5MHz	15mm	4 to 80mm	-20 to 300°C
	GT-12-4	High-Temperature	5MHz	15mm	4 to 80mm	-20 to 550°C

