

# UltrasonicSonic Thickness Gauge TM281 DL

## **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, 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 noreadings. 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

We are the first one to develop ultrasonic thickness gauge TM230D with through coating technology in China. 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.

**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, Japanese, French, German.



#### **Standard TC510 Probe**

The probe is the heart of the instrument,TMTeck has the world's leading probe production

technology. TC510 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.

	TM281	TM281D	TM281DL
Color Display	$\checkmark$	$\checkmark$	$\checkmark$
Live A-Scan	$\checkmark$	$\checkmark$	$\checkmark$
Time-based B-Scan	$\checkmark$	$\checkmark$	$\checkmark$
Control of Gain and Gate	$\checkmark$	$\checkmark$	$\checkmark$
Blanking	$\checkmark$	$\checkmark$	$\checkmark$
Thru-paint&coatings	×	$\checkmark$	$\checkmark$
Data Logger	×	×	$\checkmark$
DataView Software	×	×	$\checkmark$

## The Difference Between UM-5 Series Ultrasonic Thickness Gauge

## Specifications of TM281DL Ultrasonic Thickness Gauge

Display Type	2.4" color OLED, 320×240 pixels, contrast 10,000:1	
Operating Principle	Pulse echo with dual elemet transducers	
Measuring Range	0.50mm to 508mm(0.02" to 20.00"), depending on material, probe	
	and surface 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, etc.	
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	$-10^{\circ}$ C to $+50^{\circ}$ C ( $+10^{\circ}$ F to $+12^{\circ}$ F)	
Size	$156mm \times 75mm \times 38mm (H \times W \times D)$	
Weight	270g including batteries	

## **Standard Delivery**

Name	Quantity
TM281 Main body	1
Probe	1
Battery	1
Couplant	1
Carrying Case	1
Operating Manual	1
USB Cable	1
Software	1

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