

0.01mm Resolution Ultrasonic Thickness Tester with Statistics Software



The innovative A scanning snapshot function marks the economic thickness gauge into digital age.

UM-4 first provides A scanning waveform display function in the similar products of other manufacturer. Ultrasonic is no longer an abstract conception, users could see the ultrasonic signal directly, to verify if the thickness reading is correct, analyze the cause of the problem and help users to find the solution of the problem.

The only real 0.01mm resolution of ultrasonic thickness tester in the similar products.

The display resolution of ultrasonic thickness is usually 0.01mm, but it's hard for the real resolution up to 0.01mm. Ordinary timing counter within the thickness gauge is generally below 30 MHz. With the break through full digital technology and special algorithm, the true resolution of UM-4 can reach 0.01mm. Lots of experiments prove that it's easy for UM-4 to distinguish that thickness is only 0.01mm difference of two blocks.

Kindly Reminder: The instrument does not contain rubber sheath.

Larger and More convenient storage capacity

Store 100,000 thickness values, 20 - 200 times of similar products.

We are the first adopt grid format storing files, one screen can display 15 thickness values, and according its position in grid, which is more convenient for the users to browse the thickness data.

USB 2.0 full speed connector.

Zero Cross Measurement Technology
www.iqualitrol.com, sales@iqualitrol.com

Based on full digital technology, with zero cross measurement technology, the measured value will not be affected by echo intensity, material attenuation coefficient, gain and the height of gate, keep high measurement stability and reliability.

Update rate: Selectable 4Hz, 8Hz, 16Hz; 4Hz for ordinary application, 8Hz and 16Hz for more quick scan.

Easy Operation: UM-4 Series is a very simple operation instrument, users dont need any training to use.

More Practical Functions:

1, Gain: Adjustable High, Medium or Low

2, Alarm Mode: Dynamic change the color of thickness readings for alarming

3, 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 become thin. Typical application is to measure the metal material which is due to bending and becomes thin.

4, 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.

5, Multi-Language Available: Chinese, English, Japanese, French, German, etc.

The Difference Between UM-4 Series Technical Specifications:

Feature	UM-4	UM-4D	UM-4DL
OLED Color Screen	√	√	√
A-Scan Snapshot	√	√	√
3 Gears Adjustable Gain	√	√	√
DIFF/Capture/Alarm	√	√	√
Thru-paint&coatings	×	√	√
Data Logger	×	×	√
DataView Software	×	×	√

Packing List:

Main Unit	1	Battery	2
Probe	1	Carrying Case	1
Couplant	1	Operating Manual	1
USB Cable	1(Only UM-4DL)	Software	1(Only UM-4DL)

Note: Without Battery and Couplant if By Air Transportation.

Technical Specifications:

Display Type	2.4" color OLED, 320x240 pixels, contrast 10,000:1
Operating Principle	Pulse echo with dual element transducers
Measuring Range	0.60mm to 508mm(0.025" to 20.00"), depending on material, probe and surface
Measuring Resolution	Selectable 0.01mm, 0.1mm(selectable 0.001", 0.01")
Units	Inch or Millimeter
Gain	Low, Medium or High for varying test conditions
Display Mode	Normal, Minimum/Maximum capture, DIFF/RR%
V-Path Correction	Automatic
Update Rate	Selectable 4Hz, 8Hz, 16Hz
Material Velocity	500 to 9999m/s(0.0197 to 0.3939 in/microsecond)
Languages	English, French, German, etc.
Alarm Settings	Minimum and Maximum alarms. Range of 0.25mm to 508 mm(0.010" to 20.00").
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	-10°C to +50°C (+10°F to +12°F)
Size	153mm × 76mm × 37mm (H × W × D)
Weight	280g including batteries