

NauMetrics

Precision Measuring Instruments



Ultrasonic Thickness Gauges

NauMetrics PMI

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Inhoudsopgave:

Ultrasonic Wallthickness Gauges:

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Ultrasonic Wallthickness Gauge

KT100B
KT200B

Features:

- Pocket size,
- easy to operate Automatic Probe Zero Calibration Automatic Probe identification
- Suitable for various materials such as steel, stainless steel, aluminum, glass, polystyrene, polyethylene
- Average calculation of max 9 readings
- Limits setting Low-High
- Standard 5.0MHz transducer included, optional transducers 7.5MHz, 2.0MHz, 5.0MHz high temperature
- Sound velocity range 1000 up to 9999m/s
- Display resolution selectable at 0.1mm/0.01 inches and 0.01mm/0.001 inches
- Memory of readings with location number (KT-200B)

Technical Specifications:

	KT-100B	KT-200B
Display: 128×64 with backlight	✓	✓
Measuring range : 0.65-400mm (0.025-15.78inch) (range depends on probe-material combination)	✓	✓
Velocity rate : 1000-9999m/s (0.0393-0.3936inch/us)	✓	✓
Average mode: 2 to 9 times average measurement		✓
Limit setting: With Low-High indication and alarm		✓
Calibration : Auto	✓	✓
Display Resolution: 0.01mm(0.001inch) for thickness up to 99.99mm (3.936 inch) 0.1mm(0.01inch) for thickness above 99.99mm (3.93 inch)	✓	✓
Measuring units: mm/inch	✓	✓
Memory: Memory of max. 5000 readings with location number		✓
Data output: USB to PC		✓
Surface temperature: -15°C to +150°C (special probes available)	✓	✓
Battery indicator : Low battery voltage indicator	✓	✓
Power supply : AAA dry cell 1.5V (2 pcs)	✓	✓
Dimensions: 115 × 64 × 27mm	✓	✓
Weight: 220g including batteries	✓	✓

Transducers available:

Model	Frequency	Measuring range	Diameter	Temperature
D5008	5.0MHz	0.8-300mm	Ø8	<60°C
D5113	5.0MHz	3.0-200mm	Ø13	<350°C
D7006	7.5MHz	0.7-50mm	Ø6	<60°C
D7004	10.0MHz	0.65-20mm	Ø4	<60°C
D2012	2.0MHz	2.0-400.0	Ø12	<60°C

Standard Delivery

Main unit
Standard 5MHz transducer D5008
Operation manual
Two AAA batteries
Built-in calibration block 4mm
Carrying case
Couplant 40 Oz
Certificates
Software and cable (KT-200B)



Ultrasonic Through Coating

Wallthickness Gauge

KT100D
KT200D

Features:

- The Through-Coating thickness measurement (E-E)
- Pocket Size,
- easy to operate Automatic Probe Zero calibration
- Automatic probe identification
- Measuring Range: E-E: 4-25mm T-E: 0.65-400mm (Range depends on probe-material combination) Memory: 5000 readings with location number (KT-200D)
- Data output: USB to PC (KT-200D)
- Three measurement modes: T-E, E-E,
- Scan 9 material velocities are stored for selection,
- Or input the new velocity manual

Technical Specification

Specification			KT-100D	KT-200D
Measurement mode	Transmit-echo	-Standard measurement: For Normal	√	√
	Echo-Echo	The metal wall thickness is accurately	√	√
	Scan	Thickness value at 10 measurements per	√	√
Probe identify	Auto		√	√
Probe zero	Auto at power up and continuously during the measure-		√	√
Gain adjust	Auto gain adjustment		√	√
Memory	5000 groups		--	√
Output	USB to PC		--	√
Measuring	E-E: 4-25mm		√	√
Resolution	0.01mm (0.001 inch) for thickness up to 99.99mm		√	√

Information Display	Measurement reading, Probe type, Velocity, Measurement mode, measurement symbol, Battery	√	√
Velocity range	9 material velocities are stored for selection, or entre the new velocity manually (1000 m/s-9999 m/s)	√	√
Vel. measurement	Simply calibrate when a material's velocity is unknown	√	√
Display	128 x 64 graphics LCD monochrome	√	√
Battery Type	2 AAA alkaline	√	√
Battery life	Up to 50 hours (without Backlight)	√	√
Shut off	Auto, 2 Min., 5 Min., or never shut off delectable	√	√
Work. Temperature	-20°C-50°C	√	√
Unit	Mm/inch	√	√
Dimensions	115mm x 64mm x 27mm	√	√
Weight	220g	√	√

Transducers available

Model	Frequency	Measuring range	Diameter	Temperature
D5301	5.0MHz	T-E 2-160mm E-E 4-25mm	Ø 10.8	<60°C
D5008	5.0MHz	0.8-300mm	Ø 10.8	<60°C
D5113	5.0MHz	3.0-200mm	Ø13	<350°C
D7006	7.5MHz	0.7-50mm	Ø8.5	<60°C
D7004	10.0MHz	0.65-20mm	Ø5	<60°C
D2012	2.0MHz	2.0-400.0	Ø16.3	<60°C

Standard Delivery

Main unit
 Standard 5MHz transducer D5301
 Operation manual Two AAA batteries
 Built-in calibration block 4mm
 Carrying case
 Couplant 40 Oz
 Certificates



Through Coating Ultrasonic Wallthickness Gauge

KT300

KT310

Features:

- Automatic self Calibration
- Couplant Indicator
- Automatic power off
- High-Low limit alarm
- LCD brightness adjust
- Through coating capability
- Low battery indicator

Technical Specifications:

		KT-300D	KT-310D
MEASURING RANGE (STEEL)	STANDARD	0.8mm ~250mm Depending of the probes	
	THROUGH COATING	3mm ~18mm Depending of the probes	
DISPLAY RESOLUTION		0.1mm or 0.01inch	0.1mm/0.01mm or 0.01inch/0.001inch
TOLERANCE		+/-0.1mm in steel	+/-0.025mm in steel
VELOCITY RANGE		1000-9999 m/s (0.0393-0.3936 inch/μs)	
DISPLAY TYPE		4 digital LCD with advanced backlight	
MEMORY		500 Test Values	
POWER		2 pcs. 1.5v AA Batteries	
OUTSIDE DIMENSION		149mm×73mm×32mm	
WEIGHT		160g	

Standard delivery:

Main unit with through coating mode
Standard Probe PT-08
Couplant bottle
Two AA 1.5V Batteries
Operation manual
Carrying case



Ultrasonic Wallthickness Gauge A- Scan snapshot

UM4
UM4-D
UM4-DL

Color A-Scan Snapshot UT Thickness Gauge

UM4 series

Color 320x240 Pixels Display

A-Scan Snapshot

Echo-Echo Mode(Thru Paint & Coatings)

Stores 100,000 Readings

Gain: Low, Medium or High for varying test conditions

Technical Specifications:

Feature	UM4	UM4-D	UM4-DL	Data Logger Option
Color Display	✓	✓	✓	
A-Scan Snapshot	✓	✓	✓	
Min/Max Capture	✓	✓	✓	
DIFF/RR%	✓	✓	✓	
Echo-Echo Mode (Thru Paint & Coating)	none	✓	✓	
Data Logger	Optional	none	✓	✓
Data view Software	Optional	none	✓	✓

Instrument Specifications

Display Type	2.4" color OLED, 320 X 240 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 condition
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 Range	500 to 9999m/s (0.0197 to 0.3937in/us)
Language	English
Alarm Settings	Minimum and Maximum alarms. Range of 0.25 mm to 508 mm (0.010" to 20.00"). Dynamic waveform color change on alarm
Power Requirements	2 AA size batteries
Operating Time	Approx. 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 +120°F)
Size	153mm X 76mm X 37mm(H X W X D)
Weight	280g including batteries

Data Logger Option Features

Capacity	100,000 readings, 400 files (UM4-DL)
File Structure	Grid file
Rows X Columns	21 X 12
Communication Port	USB 2.0 (Full Speed) port
Software	Data view PC Software

UM4 Series Optional Transducers Specifications

Model	PT-08	TC510 (Thru-Paint)	PT12	ZT12	PT06	PT04	GT12
Type	UM4 Standard	UM4D/DL Standard	Standard Optional	Cast Iron	Small Tube	Fingertip	High-Temp
Frequency	5MHz	5MHz	5MHz	2MHz	7.5MHz	10MHz	5MHz
Contact Diameter	11mm	13.5mm	13.5mm	17mm	8mm	6mm	15mm
Measuring Range	0.8 to 100.0mm	1.2 to 200.0mm	1.0 to 200.0mm	4.0 to 508.0mm	0.8 to 30.0mm	0.7 to 12.0mm	4.0 to 80.0mm
Temp. Range	-10 to 70°C	-10 to 70°C	-10 to 70°C	-10 to 70°C	-10 to 70°C	-10 to 70°C	-20 to 300°C

Standard Delivery

Main Unit UM4	1
Transducer/Probe	1
Coupling Bottle	1
Operation Manual	1
Certificate of Conformity	1
Carrying Case	1
Software & Cable (UM4-DL)	1



Ultrasonic Wallthickness Gauge A/B Scan

UM-5;
UM-5D;
UM-5DL

Product name : **Ultrasonic Thickness Gauge**

Item : **UM5; UM5D; UM5DL**

Details :

Color OLED 320x240 Pixels Display

Live Simultaneous Color A-Scan and Thickness Display

Control of Gain, Blanking, Gate, Range, Delay, RF and Rectify Modes

Time-based B-Scan Display

Echo-Echo Mode(Thru Paint & Coatings)

Stores 100,000 Readings and 1000 waveform

UM5 Series Technical Specifications

Feature	UM-5	UM-5D	UM-5DL	Data Logger Option
Color Display	✓	✓	✓	
Live A-Scan	✓	✓	✓	
Time-based B-Scan	✓	✓	✓	
Control of Gain, Blanking, Gate, Range, Delay, RF and Rectify Modes	✓	✓	✓	
Echo-Echo Mode (Thru Paint & Coatings)		✓	✓	
Data Logger			✓	✓
DataView Software			✓	✓

Instrument Specifications

Display Type	2.4" color OLED, 320 X 240 pixels, 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
Measuring Resolution	Selectable 0.01mm, 0.1mm(selectable 0.001", 0.01")
Units	Inch or Millimeter
Rectify Modes	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 0.3937in/us)
Languages	English
Alarm Settings	Minimum and Maximum alarms. Range of 0.25 mm to 508 mm (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 +120°F)
Size	153mm X 76mm X 37mm(H X W X D)
Weight	280g including batteries

Data Logger Option Features	
Capacity	100,000 readings, 1000 waveforms, 400 files
File Structure	Grid file
Rows X Columns	21 X 12
Communication Port	USB 2.0 (Full Speed) port
Software	DataView PC software

UTG-500 Probe/Transducer Specifications							
Model	PT08	TC510	PT12	ZT12	PT06	PT04	GT12
Type	UM-5 Standard	UM-5D/DL Standard	Standard	Cast iron	Small tube	Fingertip	High-Temperature
Frequency	5MHz	5MHz	5MHz	2MHz	7.5MHz	10MHz	5MHz
Contact Diameter	11mm	13.5mm	13.5mm	17mm	8mm	6mm	15mm
Measurement Range	0.8 to 100.0mm	1.2 to 200.0mm	1.0 to 200.0mm	4.0 to 508.0mm	0.8 to 30.0mm	0.7 to 12.0mm	4.0 to 80.0mm
Temperature Range	-10 to 70°C	-10 to 70°C	-10 to 70°C	-10 to 70°C	-10 to 70°C	-10 to 70°C	-20 to 300°C

