High Precision Ultrasonic Thickness Gauge TG-3250

TG-3250 is a high precision digital ultrasonic thickness gauge. Based on the same operating principles as SONAR it is capable of measuring the thickness of various materials with accuracy as high as 0.001 millimeters, or 0.0001inches. It is adapted to measure the thickness of good conductor for ultrasonic, such as metal (steel, cast iron, aluminum, copper), plastic, ceramic, glass, glass fiber and so on

Features:

- High precision timing chip & V-Path model used for precision measurement

- Real-time Temperature Compensation Technic supporting One-time probe calibration for long term usage.

- Thru-paint measurement (Standard Version), simultaneously measure coatings and material thicknesses (Advanced Version)

- Bluetooth & Mini-USB interface for printing & communication, host software upgradable

Main Functions:

- Support Pulse-Echo, Echo-Echo, Interface-Echo measurement modes, gain adjustable

- Scan mode, min/max capture mode, differential mode & alarm mode support

- Sound velocity calibration by known thickness

- Storage capacity of 1000 measurements with thickness, velocity, time, etc.

- Communicate with PC or smart phones, support online measurement & command control (OC version)

Technical Parameters

Measure Range	0.75~400 mm　(Steel)	**Sound Velocity Range**	1 ~ 19999 m/s
Resolution	0.001mm / 0.0001inches	**Accuracy**	0.03mm or 0.3%*H
Measuring Period	4 times per second	**Probe Frequency**	2MHz，3MHz，5MHz，7.5MHz
Calibration Mode	Probe Calibration & Two Point Calibration	**Calibration block**	4.000mm　(Steel)
Measurement Mode	P-E, I-E, E-E, E-C, C-E	**Gain Adjustable**	16 Stages
Measuring Mode	Single point, scan, min/max capture, differential, alarm	**Data Storage**	1000 measurements, including thickness, sound velocity, time, etc.
Display	English / Chinese selectable, FSTN LCD Display with backlight	**Display Content**	Thickness, Sound velocity, Stability, Battery, Measuring Mode, etc.
Communication	Bluetooth & Mini-USB interface, virtual serial port protocol	**Print**	Optional portable Bluetooth thermal printers
Power Supply	3.7V Li-Ion chargeable battery	**Power off**	Timeout power off, low battery power off
Usage Temperature	-10 ~ 50 °C	**Storage Temperature**	-30 ~ 60 °C
Size	157mm*78mm*37mm	**Weight**	About 260g
Shell Material	ABS & PC alloy	**Box Material**	ABS (IK08 / IP67)

Probe Parameters

Label	5M Φ10	5M PT-08	2M ZT-12	7.5M PT-06	3M GT-12
Measure Range (Steel)	0.8~300 mm	0.8~300 mm	3.0~400 mm	0.75~50 mm	2.0~200 mm
Min. Measure Diameter	Ø25 x 3 mm	Ø20 x 1.2 mm	Ø30 x 4 mm	Ø15 x 1.2 mm	Ø25 x 3 mm
Probe Diameter	13mm	11mm	17mm	9mm	15mm
Effective area Diameter	10mm	8mm	12mm	6mm	12mm
Probe Frequency	5MHz	5MHz	2MHz	7.5MHz	3MHz
Contact Temperature	-10~60°C	-10~60°C	-10~60°C	-10~60°C	-10~310°C

Version Comparison

Version	Measurement Mode	Thru-paint measurement	Measure Coatings
Basic	P-E	x	x
Standard	P-E, I-E, E-E	√	x
Advanced	P-E, I-E, E-E, E-C, C-E	√	√