

# Ultrasonic Thickness Gauge

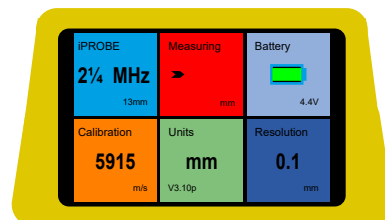
## Multigaugage 5650 / 5750 Surveyor Gauge

The Multigaugage 5650 Surveyor / 5750 Surveyor Datalogger are simple, robust ultrasonic thickness gauges designed specifically for ship and small craft surveyors. The user has a choice of Multiple Echo, Echo to Echo or Single Echo to cover all requirements. The gauges can be used for metal, GRP or plastic measurement and they automatically switch modes and settings depending on the type of probe fitted. The easy to use keypad allows operator interface whilst the bright LCD display can be used in all light conditions. All probes have Intelligent Probe Recognition (IPR), which automatically adjusts settings in the gauge at the same time as transmitting recognition data - the result is a perfectly matched probe and gauge for enhanced performance. Additionally, the Automatic Measurement Verification System (AMVS) used with multiple echo ensures only true measurements are displayed, even on the most heavily corroded metals.



### Features

- Ignores coatings up to **6 mm thick** using **Multiple Echo**. Coating Plus+ ignores coatings up to 20 mm.
- Single crystal soft faced probes protected by a membrane and single crystal hard faced probes for linear accuracy.
- Automatic Measurement Verification System (AMVS) in multiple echo mode.
- Echo - Echo mode for enhanced performance.
- Inspect GRP for osmosis.
- Large colour LCD display giving user information.
- No zeroing required.
- Easy calibration with menu driven buttons.
- Intelligent Probe Recognition (IPR).
- Echo strength indicator.



Easy Menu System

simple . accurate . robust

FREE  
ANNUAL  
CALIBRATION

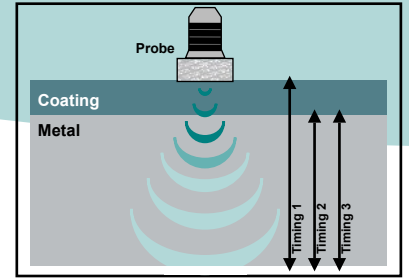
FREE  
3 YEAR  
WARRANTY

# About Multiple Echo

All Ultrasonic Thickness Gauges should be calibrated to the velocity of sound of the material being measured. Coatings have a different velocity of sound than metal and it is important they are not included in the measurement. Multiple Echo ensures all coatings, up to 6mm thick, are completely eliminated from the measurement.

## How it works:

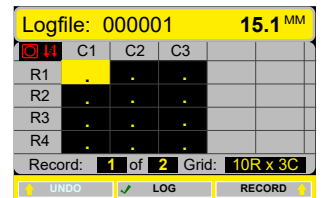
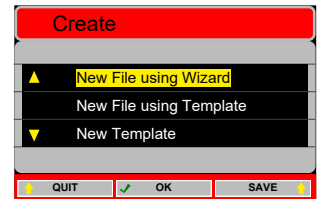
A transmitted ultrasound pulse travels through both the coating and the metal and reflects from the back wall. The returned echo then reverberates within the metal, with only a small portion of the echo travelling back through the coating each time. The timing between the small echoes gives us the timing of the echoes within the metal, which relate to the metal thickness. A minimum of three echoes are checked each time. This is referred to as the **Automatic Measurement Verification System (AMVS)**.



# Datalogging (Multigauge 5750)

Measurements can be logged using a grid or string format. The gauge will store up to 895 files, each containing 100 records. Each record can store either a string of 250 or grid of 16 x 16 measurements. The simple, easy to use menu guides the user through intuitive setup procedures.

The gauge uses wireless technology to transmit the measurements to the PC where dedicated Communicator software allows the analysis of the results or easy production of templates using wizards. Measurements are stored in a .txt format so that they can be opened in other applications. Measurements can also be displayed remotely on a PC up to 1000 metres away.



# Specification

*The Tritex Multigauge range has been manufactured to comply with British Standard BS EN 15317:2013, which covers the characterisation and verification of ultrasonic thickness measuring equipment.*

<b>Sound Velocity Range</b>	From 1000 m/s to 8000 m/s (0.0394 in/μs to 0.3150 in/μs)			
<b>Single Crystal Probe Options</b>	1 MHz	2.25 MHz	3.5 MHz	5 MHz
<b>Probe Type</b>	Hard Faced	Soft Faced	Soft Faced	Soft Faced
<b>Probe Measurement Range</b>	2 - 300 mm (0.080" to 11")	3 - 250 mm (0.120" to 9")	2 - 150 mm (0.080" to 6")	1 - 50 mm (0.040" to 2")
<b>Probe Sizes</b>	19 mm (0.75")	13 mm (0.5") 19 mm (0.75")	13 mm (0.5")	6 mm (0.25") 13 mm (0.5")
<b>Resolution</b>	0.1 mm (0.005") or 0.05 mm (0.002")			
<b>Accuracy</b>	± 0.1 mm (0.005") or ± 0.05 mm (0.002")			
<b>Display</b>	Multi character Colour LCD			
<b>Batteries</b>	3 x disposable AA alkaline batteries or rechargeable NiMH / NiCD			
<b>Battery Life</b>	Up to 50 Hours continuous use using alkaline batteries			
<b>Gauge Dimensions</b>	147 mm x 90 mm x 28 mm (5.75" X 3.5" X 1")			
<b>Gauge Weight</b>	325 g (11.5 ounces) including batteries			
<b>Environmental</b>	Case rated to IP65. RoHS and WEEE compliant			
<b>Operating Temperature</b>	-10°C to +50°C (14°F to 122°F)			
<b>Storage Temperature</b>	-10°C to +60°C (14°F to 140°F)			
<b>Multigauge 5750 Datalogger Only</b>				
<b>Storage capacity</b>	32 Mb			
<b>Data Transmission</b>	Wireless RF			

\* Figures relate to most coating types



## Kit Contents:

Multigauge 5650 or Multigauge 5750 datalogger gauge, soft faced probe, hard faced probe, probe lead, spare membranes, membrane oil, ultrasonic gel, 15mm test block, membrane key, batteries, manual, calibration certificate, carry case.

Optional leather case.

**Multigauge 5750 Datalogger Only**  
Transceiver, Communicator software

# Contact

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**3 YEAR WARRANTY**

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