

Drone Ultrasonic Thickness Gauge

Multigaugage 6000 Drone

The Multigaugage 6000 Drone gauge has been designed specifically to mount onto a drone. Multiple Echo technology is used to ignore coatings up to 6 mm thick, just the metal substrate is measured. The measurements are transmitted wirelessly in real time to a PC or laptop up to 500 metres away. The lightweight gauge is supplied with a plastic probe to further reduce weight. 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) ensures only true measurements are displayed, even on the most heavily corroded metals. The gauge can store measurements in either a grid or string format which can then later be used in other proprietary programs.

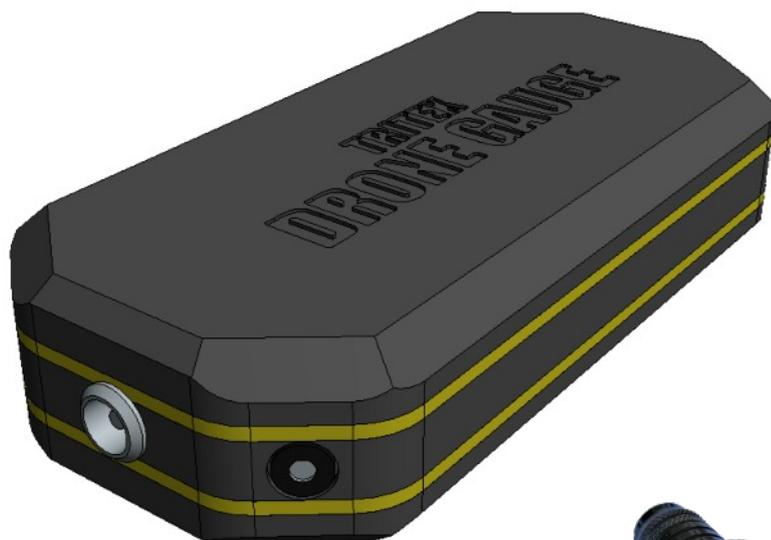
Typical Applications

- Shipping
- Bridges
- Storage Tanks
- Phone Masts
- Silos
- Lighting Columns
- Offshore Platforms
- Wind Turbines

Features

- Ignores coatings up to **6 mm thick** using **Multiple Echo**. Coating Plus+ ignores coatings up to 20 mm.
- Automatic Measurement Verification System (AMVS).
- Wirelessly transmits measurements up to 500 m.
- **No couplant required. Dry membrane.**
- Lightweight.
- No zeroing required.
- 10 Vdc - 32 Vdc input supply.
- Single crystal soft faced probe .
- Easy calibration.
- Intelligent Probe Recognition (IPR).
- 3 year warranty.
- Free calibration for the life of the gauge.

Wireless
Transmission
up to 500m



Lightweight
Plastic
Probe



simple . accurate . robust

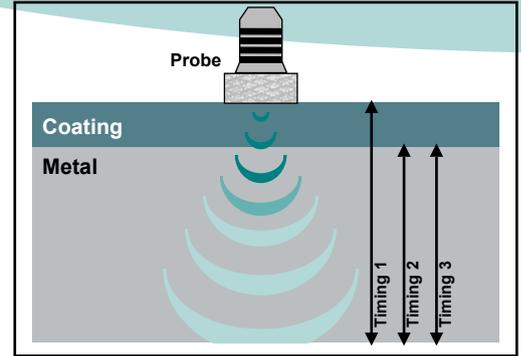


About Multiple Echo

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. The returned echoes need not be consecutive as the gauge will interpret them automatically and calculate the thickness. A minimum of three echoes are checked each time. This is referred to as the **Automatic Measurement Verification System (AMVS)**.



Communicator Software

The Multigauge 6000 OEM Drone gauge uses wireless technology to transmit the readings to the PC or laptop where dedicated Communicator software displays the measurements in real time. Each measurement can also be stored in a .txt file format which can be opened in proprietary programs to produce reports.



Specification

The Tritex Multigauge 6000 has been manufactured to comply with British Standard BS EN 15317:2013, which covers the characterisation and verification of ultrasonic thickness measuring equipment.

Sound Velocity Range	From 1000 m/s to 8000 m/s (0.0394 in/μs to 0.3150 in/μs)		
Single Crystal Soft Faced Probe Options	2.25 MHz	3.5 MHz	5 MHz
Probe Measurement Range	3 - 250 mm (0.120" to 10")	2 - 150 mm (0.080" to 6")	1 - 50 mm (0.040" to 2")
Probe Sizes	13 mm (0.5")	13 mm (0.5")	13 mm (0.5")
Resolution	0.1 mm (0.005") or 0.05 mm (0.002")		
Accuracy	± 0.1 mm (0.005") or ± 0.05 mm (0.002")		
Display	Communicator software on PC or laptop		
Data Transmission	Wireless RF, 2.4 GHz. Internationally Acceptable.		
Coatings Range	Up to 6mm (Standard Mode)*; up to 20mm (Coating Plus+)*		
Power Supply	10Vdc - 32Vdc. Polarity Protection		
Wireless Transmission Range	Up to 500 Metres		
Dimensions (Including switches and connectors)	137 mm x 62 mm x 33 mm (5.39" X 2.44" X 1.30")		
Gauge Weight	130 g (4.59 ounces)		
Probe Weight (Plastic Housing)	20 g (0.71 ounces) (excluding probe cable)		
Environmental	IP65. RoHS and WEEE compliant		
Operating Temperature	-10°C to +50°C (14°F to 122°F)		
Storage Temperature	-10°C to +60°C (14°F to 140°F)		



Kit Contents:

Multigauge 6000 Drone gauge, probe, probe lead, spare membranes, membrane oil, ultrasonic gel, 15mm test block, membrane key, power supply, power - XT30 connector lead, manual, calibration certificate, carry case.

Optional: Flexible probe holder, Dry couplant membrane.

Contact

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* Figures relate to most coating types



3 YEAR WARRANTY



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