

AUDIT 7000 Series

Ultrasonic Precision Thickness Gauge

FEATURES

- Simultaneous live colour A-Scan & thickness measurement display.
- 3.5" sunlight readable colour display.
- Field upgradeable software options including live waveform, datalogger or both.
- Fast/Min and Fast/Max displays minimum, maximum or both simultaneously with actual thickness at 25 Hz.
- Compatible with a wide variety of standard single element transducers.
- Multiple languages
- Datalogger interfaces with Microsoft Excel.
- Designed for IP67.



The **AUDIT 7000** represents our most advanced thickness gauge ever, offering a 3.5", high resolution, sunlight readable colour display with live A-Scan; use of a wide variety of contact, delay line and immersion probes from 1-20 Mhz as default, plus custom created and stored applications setups.

B-Scan and Datalogger functions are also available, with up to 32GB of SD card memory and interface to Microsoft Excel. The vibrate on alarm feature is a market first and is ideal for working in noisy environments.

The AUDIT 7000 is available in 3 further models to suit every budget and application:

AUDIT 7000 W: includes all the features of the AUDIT 7000 plus a live colour A-Scan, with adjustable range, gain, blanks and rectification.

AUDIT 7000 DL: includes all the features of the AUDIT 7000 plus B-Scan and an "unlimited" readings Datalogger, with export to excel options using the Data XL interface program or working remotely with on- board SD cards.

AUDIT 7000 DLW: combines live colour waveform function (A-Scan) and the Datalogger functions.

Applications:

Coil Steel	Aluminium	Glass	Fibreglass	Rubber
Plastic Parts including:				
Bottles	Toys	Pipes	Tanks	Trays

AUDIT 7000 Specification

Size	Length 184mm x Width 101.6mm x Height 50.8mm (7.25" x 4.00" x 2.00")
Weight	0.52kg (1.15 lbs) with internal Li-Ion battery, 0.45kg (1.0 lb) with optional Alkaline tray- 3 AA batteries
Display	3.5" high resolution colour display, 320 x 240 pixels (1/4 VGA), sunlight readable, including multiple colour choices
Backlight	Light Emitting Diode (LED) backlight. Includes variable light intensity, indoor and outdoor modes.
Operating Temperature	-20°C to 50°C (-4°F to 122°F)
Package	Designed for IP67 rating, custom, splash-proof, high impact plastic. Illuminating rubber keypad for go/no-go testing
Transducer Connector Type	Lemo 00 (x2)
Bandwidth	0.5-30 MHz (-3dB)
Measurement Rate	4 Hz or 25 Hz
Pulser	150V, Square Wave
Range	Thickness range depends on gauge type, probe selection and material conditions. Typical range in corrosion mode, 0.508- 0.584mm (0.004"-23").
Calibration	Cal zero, Cal velocity, Two-point calibration or Auto Calibration delivers two-point calibration using a 5-step test block
Material Velocity Range	0.508-18.699 mm/ uS (0.0200 in/usec- 0.7362 in/uS)
Batteries	Standard 3.7 V Li Ion internally rechargeable battery (11-27 hours - standard mode of 4Hz. and 74% brightness: 27 hour continuous operation, Fast mode at 25Hz., continuous measurements in echo to echo mode: 11 Hours or optional alkaline tray for 3 AA batteries
Data XL	Interface program to send and receive stored readings, latest firmware and application set up files as two way communication from ECHO to computer (excel)
USB	USB 2.0
Stored Set-ups	Storage and recall of calibration and set up files (up to 5,000)
Memory	Internal memory standard on all models. For Datalogger models 2GB micro SD card standard, expandable to 32GB
Gain	Initial gain, final gain and slope. 20-90 db in .1 db increments
Zoom	Automatically centres echos in the centre of the display independent of material thickness
Units	English, Metric, Microseconds
Temperature Correction	Software to correct for varying sound speed as a function of entered temperature
Languages	English, French, German, Spanish, Italian, Russian, Czech, Finnish, Chinese, Japanese, Hungarian
Fats Min./max.	Displays min, max or both simultaneously with actual thickness at 25 Hz.
Alarms	Gauge vibrates and beeps. Display changes colour based on alarm condition
Transducers	Single, delay lines, contact, immersion
Measurement Types	3 Classes: Class 1: Main bang to first backwall echo, Class 2: Interface echo to first backwall echo Class 3: echo to echo after interface echo. Velocity mode (Velocimeter: displays acoustic sound speed based on entered thickness)
Freeze Mode	Direct access to freeze display (ideal for high temperature applications)
Hold Mode	Holds display to retain last thickness reading.
Warranty	Limited 2 year warranty under normal use on parts and labour for gauge.
Shut Off	Selectable auto shut off 1-31 minutes or never shut off.
Differential Mode	Displays difference from actual thickness measurement in absolute or percentage of a user entered value.
Resolution	0.001mm or 0.01mm (0.0001" or 0.001") .
Units	Inches, Millimetres and Microseconds
Transport Case	Hard Plastic with high density moulded foam cut out for gauge and most accessories.
Certifications	CE certified, RHOS compliant, designed for IP67
Accessory Mount	AUDIT 7000 includes a 1/4x20 standard connection point on the back of the unit to allow for a multitude of accessories including a magnetic pipe attachment and a Gorilla Pod.
Standard Inclusions	AUDIT 7000 series ultrasonic thickness gauge, DKS-537, transducer up to 10 Mhz., LM-06Å cable, 2oz bottle of couplant, operation manual, Data XL interface program, USB cable, Charger Adapter, Transport Case *A transducer is included with each model.
Software Options	Datalogger with B-scan, Live Waveform, Precision Mode, Oxide scale.
Hardware Options	Bluetooth, alkaline battery tray, rubber boot, magnetic pipe stand, footswitch.

Distributed by:



Tel: +44 (0)1432 267671
sales@bw-nde.com
bw-nde.com



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