

THOR A-Scan High Penetration Ultrasonic Thickness Gauge

The THOR is a little bit of everything. It is a fully equipped A-Scan high penetration Thickness gauge. THOR has the ability to use a variety of transducers - single, dual, and delay line styles. The THOR is an MX, PX, and an MMX gauge with the addition of an A-Scan Scope and a very strong pulsar for high penetration applications. It has an alpha numeric data logger that also stores waveforms, setup parameters, and user comments. THOR can be connected to a PC and interface with our DakView software program. The software and transfer cables are included in the THOR kit.



Thor is a full function A-Scan thickness gauge with a wide variety of modes and features for extra versatility.

The tone-burst style pulsar provides THOR with enough strength for the most difficult high penetration applications. The A-Scan display options and dual gates enable THOR to be optimized for multi-mode through paint requirements.

The full feature lockout disables the A-Scan features and allows THOR to be used as a simple digital thickness gauge.

THOR has 25 manufacturer-defined setups that can be edited by the user. This feature allows complete control to create custom setups for specific applications.

THOR is equipped with an alphanumeric data logger for reporting purposes. You can store 1000 pages of data each consisting of a main cell reading, 16 sub readings, a waveform display, and 2 lines of comments.

THOR also comes complete with our DakView2 Windows® PC software for transferring data to and from a PC.

THOR comes as a complete kit, ready to use, and is backed by a 2 year

Physical

Size:

Width (8.5in/216 mm)
Height (6.5in/165 mm)
Depth (2.0 in/51 mm)

Weight: 2 lbs. 10 ounces (1.2 Kg)
(with batteries).

Keyboard: Membrane switch pad with tactile keys.

Operating Temperature: -4° to 122°F (-20° to 50°C)

Case: Extruded aluminum body with nickel-plated aluminum end caps (gasket sealed).

Data Output: RS232 port out Windows® interface software.

Display: Backlit LCD—3.5"W x 2.0"H

Ultrasonic Specifications

Measurement Modes:

Pulse-Echo (flaws, pits)
Echo-Echo (thru paint,
precision delay line)

Pulsar:

Tone-burst (push-pull).
Selectable 1, 2, or 4 pulses.

Selectable frequencies (MHz):

0.5, 1, 2.25, 5, Hi Freq.

Receiver:

Low noise pre-amplifier.
Adjustable gain control.

Timing:

160 MHz 10-PPM TCXO
controlled digitizer.

Memory:

8-megabit non-volatile ram.

Power Source

Four 1.5V alkaline or
1.2V NiCad C cells
100—240 VAC input 12VDC
power supply.

Typically operates for 30 hours
on alkaline and 15 hours on
NiCad (charger not included.)
Battery icons indicate
remaining life.

Measuring

Range:

Measures from 0.010 to 480
inches (0.25mm to 12 Meters)
in steel. Switch to select
english or metric units.

Resolution:

Standard Mode—
.001 inches (0.01 millimeters)
High Resolution mode—
.0001 inches (0.001 mm)

Velocity Range:

.0500 to .3937 in/ms
1270 to 10,000 meters/sec
Selectable pulse repetition rate
allows for high speed scanning
or low power operation.
Single and Two point calibration
capability.

Display

Display Views:

Rectified (flaw view)
RF (full waveform view)
Digital thickness readout
Multi-function 6 digit graphic LCD, backlit for use in poor light conditions.

Measurements displayed in inches, inches/microsecond, or millimeters, meters/second. Bar graph indicates stability of reading.

Certification

Factory calibration traceable to national standards.

Data Logger (Internal)

1000 pages of memory (alpha numeric storage)—1 main cell reading, 1 waveform, 2 comment lines, and 16 sub readings per page.

OBSTRUCT for indicating inaccessible locations.

Transducer

Transducer Types:

Dual Element (1 to 10 MHz)
Single Element Contact (500 KHz to 10 MHz)
Single Element Delay Line (5 to 22 MHz)

Locking quick disconnect "00" LEMO connectors.

Standard 4 foot cable.

Custom transducers and lengths cables available for special applications.

Features:

Setups: 25 manufacturer presets that can be edited by the user.

Gates: 2 fully functional gates with adjustable thresholds. Windows®

PC interface

Software:

Bi-directional transfers of grid data, waveforms, and setups.

Full Feature Lockout:

Password locks or enables some of the advanced features. Locked: Use THOR as a digital thickness gauge. Unlocked: THOR is a fully functional A-Scan scope.

Warranty

2 year limited