DAKOTA ULTRASONICS



SPECIFICATIONS

Physical

Size:

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

Weight:

2lbs. 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)

Pulser:

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.

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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 (0.63 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.

Millimeters and 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 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