

MX2-DL

A/B Scan Ultrasonic Thickness Gauge



Highlights:

- Powered by a 100MHz DSP platform using FPGA technology 1/8" VGA grayscale display (240 x 160 pixels).
- Screen Refresh rate of 25 Hz
- Manual or AGC gain, depending on measure mode selected (50 dB gain range)
- Linear time dependent gain (TDG). built into each transducer type
- Display veivs: RF, +/- Rectified, B-Scan (cross section), or Large Digits
- Two independent gates
- Measure modes: (P-E) pulse-echo (flaws & pits) and (E-E) echo-echo (thru-paint)
- Dual element style transducers
- Memory: 4 gigabyte internal SD card
- Windows® PC & OSX interface software
- USB-C connectivity

MX2-DL A/B Scan Ultrasonic Thickness Gauge



MX2-DL is high performance thickness gauge which provides both pulse echo & measure thickness through paint capability & is an A/B scan scope with full RF Waveform viewing.

SPECIFICATIONS

Physical

Weight:
13.5 ounces (with batteries).

Size:
2.5 W x 6.5 H x 1.24 D inches
(63.5 W x 165 H x 31.5 D mm).

Operating Temperature:
-14° to 140°F (-10° to 60°C).

Keyboard:
Membrane switch with twelve tactile keys.

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

Display:
1/8in VGA grayscale display (240 x 160 pixels); viewable area 2.4 x 1.8in (62 x 5.7mm); EL backlit (on/off/auto inver

Ultrasonic Specifications

Measurement Modes:
Pulse-Echo (flaws, pits).
Echo-Echo (thru-paint).

Pulser:
Square wave pulser with adjustable pulse width (spike, thin, wide).

Receiver:
Manual or AGC gain control with 50dB range, depending on mode selected.

Timing:
Precision TCXO timing with single shot 100 MHz 8 bit ultra low power digitizer.
Pulse Repetition Frequency - 250 Hz.

Power Source

Line Power: USB-C to PC or power outlet.

Batteries:
Three AA cells. Alkaline - 35 hrs, Nicad - 10 hrs and NI-MH - 35hrs.
Auto power off if idle 5 minutes.

Battery status icon.

Measuring:

Range:
Pulse-Echo Mode (P-E) - (Pit & Flaw Detection) measures from 0.025 in. to 100 ft. (0.63 mm to 30.48 M).
Echo-Echo Mode (E-E) - (Thru Paint & Coatings) measures from 0.100 to 6.0 in (2.54 to 152.4 mm). Range will vary +/- depending on the coating.
Resolution: +/- .001 inches (0.01 mm).

Velocity Range:
0.0122 to 0.7300 inches/ μ s
309.88 to 18542 meters/sec

Single and Two point calibration option, or selection of basic material types.

Units: English & Metri

Transducer

Transducer Types:
Dual Element (1 to 10 MHz).
Locking quick disconnect LEMO "00" connectors.
Standard 4 foot cable.
Custom transducers and cable lengths available for special applications.

Display

Display Views:
A-Scan: Rectified +/- (flaw view) RF (full waveform view). Refresh rate at 25 Hz.
B-Scan: Time based cross section view.
Display speed variable (10 to 200 readings per second).
Large Digits: Standard thickness view;
Digit Height: 0.700 in (17.78 mm).
Scan Bar: Speed 10 Hz. Viewable in B-Scan and Large Digit views.
Bar Graph: Indicates stability of measurement.

Memory:

Data Structure:
Grid (alpha numeric)
Screen Capture:
Bitmap graphic capture for quick documentation (.tif).
OBSTRUCT to indicate inaccessible locations.
Capacity:
4 Gb internal SD card.
Data Output:
USB-C 1.1 to PC & OSX connectivity

Features:

Setups:
64 custom user-definable setups; Factory setups can be edited.

Selectable Transducers:
Selectable transducer types with built-in dual path error correction for improved linearity.

Alarm Mode:
Set Hi and Lo tolerances with audible beeper and visual LEDs.

Scan Mode:
Takes 250 readings per second and displays the minimum reading found when the transducer is remove

Certification

Factory calibration traceable to NIST & MIL-STD-45662A

Warranty

2 year limited

Replacement:

MX2-DL replaces MVX & CG70ABDL



Dakota NDT
an Elcometer company

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