



# MX2-DL

## A/B SCAN THICKNESS GAUGE

### HIGHLIGHTS:

- ▶ Powered by a 100MHz DSP platform using FPGA technology.
- ▶ Screen Refresh rate of 25Hz.
- ▶ Manual or AGC gain, depending on measure mode selected (50dB gain range).
- ▶ Linear time dependent gain (TDG) built into each transducer type.
- ▶ Display views: 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: 4Gb internal.
- ▶ Windows® PC & OSX interface software.
- ▶ USB-C connectivity.

# DAKOTA MX2-DL THICKNESS GAUGE

The Dakota MX2-DL Corrosion Thickness Gauge has a large, easy to read display and provides users with A and B-Scan options for accurate interpretation of measurements.

## 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 invert).

### 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 100MHz 8 bit ultra low power digitizer.

**Pulse Repetition Frequency** - 250Hz.

### DISPLAY

**Display Views:**

**A-Scan:** Rectified +/- (flaw view) RF (full waveform view). Refresh rate at 25Hz.

**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 (17.78mm).

**Scan Bar:** Speed 10Hz. Viewable in B-Scan and Large Digit views.

**Bar Graph:** Indicates stability of measurement.

### POWER SOURCE

**Line power:** USB 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 to 100 ft. (0.63 to 30.48 M).

**Echo-Echo Mode (E-E)** - (Thru Paint & Coatings) measures from 0.100 to 6.0 in (2.54 to 152.4mm). Range will vary +/- depending on the coating.

**Resolution:** +/- .001 inches (0.01mm).

**Velocity Range:**

0.0122 to 0.7300 inches/ $\mu$ s

309.88 to 18542 meters/sec

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

**Units:** English & Metric

### TRANSDUCER

**Transducer Types:**

Dual Element (1 to 10MHz).

Locking quick disconnect LEMO "00" connectors.

Standard 4 foot cable.

Custom transducers and cable lengths available for special applications.

### MEMORY

**Data Structure:**

Grid (alpha numeric)

**Screen Capture:**

Bitmap graphic capture for quick documentation (.tif).

**OBSTRUCT** to indicate inaccessible locations.

**Capacity:**

4Gb internal memory.

**Data Output:**

USB-C 1.1 PC & OSX connectivity.

### FEATURES

**Setups:**

64 custom user-definable setups; Factory setups can also be edited by the user.

**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 removed.

### CERTIFICATION

Factory calibration traceable to NIST & MILSTD- 45662A.

### WARRANTY

2 year limited

### REPLACEMENT

MX2-DL replaces MVX & CG70ABDL



MADE IN THE USA

Dakota NDT  
an Elcometer company