

MX-3, 5 & 5DL Ultrasonic Thickness Gauge

The **MX-3** is the first model in the MX line with the ability to field calibrate on the fly. This model offers extreme flexibility and accuracy to calibrate to a variety of materials instantly. Simply tell the **MX-3** one known thickness point located on the test material, and the MX-3 will calculate the material type for you. The **MX-3** is also equipped with a two-point calibration option, providing the user with extreme accuracy. Another special feature of the **MX-3** is the high-speed scan mode. In this mode, the MX-3 takes 16 readings per second rather than 4 readings per second in standard measurement mode. The readings are viewable while scanning. Simply remove the transducer from the area being tested and the MX-3 will display the minimum thickness in the area scanned.

With the hand held **MX-3** Ultrasonic Micrometer, you can make reliable measurements or scan a length of material for the thinnest point.

The tool's backlit display is easy to read, even in dim light, and the unit operates for up to 200 hours on a single set of batteries.

The **MX-3** comes complete, ready to use and is protected by Dakota Ultrasonics 5 year limited warranty.



Description: MX-3 Ultrasonic Thickness Gauge

Model Part # [119-Z-112-0001](#)

Kit Includes: Gauge, transducer, couplant, manual, and carrying case

Applications:

Corrosion & Pitting Tube & Pipe Tanks, Boilers, Glass and a Variety of Applications

Physical

Physical Weight: 10 ounces

Size: 2.5 W x 4.75 H x 1.25-D inches
63.5 W x 120.7 H x 31.8-D mm

Operating Temperature: -20 to 120F
(-20 to 50C)

Case: Extruded aluminum body / nickel-plated aluminum end caps.
Resistant to impact and environmentally sealed.

Keypad

Sealed membrane that is resistant to both water and petroleum products.
5 tactile-feedback keys.

Transducer

Dual element (transmit and receive).
1 to 10 MHz frequency range.
Locking quick disconnect Lemo connectors.
4 foot cable.

Custom transducers available for special applications.

Power Source

Two 1.5V alkaline or 1.2V NiCad AA cells.

Typically operates for 200 hours on alkaline and 130 hours on NiCad.

Display

Multi-function 4.5 digit liquid crystal display with 0.500-inch numerals, backlit for use in poor light conditions. Measurements displayed in inches, inches/microsecond, millimeters, and meters/second.

Bar graph indicates stability or reading.

Certification

Factory calibration traceable to national standards.

Warranty

5 year limited.

Measuring

Range:

Measures from 0.025 to 19.999 inches (0.63 to 199.99 millimeters) switch to select English or metric units.

Resolution:

0.001 inch (0.01 millimeter)

Velocity Range:

.0492 to .3937 in/m s
1250 to 10,000 meters/sec

Built-in:

Stainless steel reference disk for probe zeroing.

Four readings per second for single point measurements or 16 per second in SCAN mode.

Single and Two-point calibration option included.

The **MX-5** has all the features of the **MX-3** plus: An audible and visual alarm mode. In alarm mode, the user can set a nominal thickness value. When measurements fall above or below the set nominal value, a red light and audible beeper is displayed and sounded. The **MX-5** also features a differential mode. In differential mode, the user sets a target thickness value and the **MX-5** will display the difference (+/-) from the target value. The **MX-5** is also equipped with an RS232 port out. This enables the user the ability to send measurements to an external data collection device or directly to a PC.

The **MX-5** is a simple to use hand-held Ultrasonic Thickness Gauge. It offers features that make your job easier. An Alarm mode, Differential mode, high speed scanning, and data send are the main features of the **MX-5**. The **MX-5** comes as a complete kit, ready to use, and is backed by Dakota Ultrasonics 5 year limited warranty.



Description: MX-5 Ultrasonic Thickness Gauge

Model Part # [119-Z-114-0001](#)

Kit Includes: Gauge, transducer, couplant, manual, and carrying case

Applications:

Corrosion & Pitting Tube & Pipe Tanks, Boilers, Glass and a Variety of Applications

Physical

Weight: 10 ounces
Size: 2.5 W x 4.75 H x 1.25 D inches (63.5 W 120.7 H x 31.8 D mm)
Operating Temperature:
 -20° to 120° F (-30° to 50° C)
Case:
 Extruded aluminum body / nickel plated aluminum end caps.
 Resistant to impact and environmentally sealed.

Keypad

Sealed membrane that is resistant to both water and petroleum products. Nine tactile-feedback keys.

Transducer

Dual element (transmit and receive). 1 to 10 MHz frequency ranges
 Locking quick disconnect LEMO connectors.
 4 foot cable.
 Optional cable lengths up to 100 feet.
 Custom transducers available for special applications.

Power Source

Two 1.5V alkaline or 1.2V NiCad AA cells
 Typically operates for 200 hours on alkaline and 130 hours on NiCad.
 Display flashes when battery is low. Unit turns off automatically when battery is too low to operate reliably.

Display

Multi-function 4.5 digit liquid crystal display with 0.500 inch numerals, backlit for use in poor light conditions. Backlight is selectable: on / off / auto (illuminates only when taking a measurement).
 Measurements displayed in inches, inches/microsecond, millimeters, and meters/second.
 Bar graph indicates stability of reading.

Certification

Factory calibration traceable to national standards.

Warranty

5 year limited

Measuring

Range:
 Measures from 0.025 to 19.999 inches (0.63 to 500 millimeters).
 Switch to select English or metric units.
Resolution: 0.001 inches (0.01 millimeters)
Velocity Range: 0.492 to .3937 in/m s
 1250 to 10,000 meters/sec
Built in:
 Stainless steel reference disk for probe zeroing.
 Four readings per second for single point measurements or 16 per second in scan mode – captures the minimum thickness.
 Single and Two-point calibration option included.
Features:
 Differential Mode: Enter acceptable thickness value, unit will display +/- the difference from the value entered.
Alarm Mode: Enter a minimum acceptable thickness value. If measurement falls below minimum, red led will illuminate and sound beeper. If measurement is above minimum value, green led will illuminate.
Data Output:
 RS232 output sends thickness readings to a computer or other external storage device.

The **MX-5DL** has all the features of the **MX-5** plus: An Internal data logger that stores a total of 1000 readings in 10 files of 100 readings each file. This gives the user the ability to store, and download the stored measurements directly to a PC using our DakView software program. The software and transfer cable is included in the **MX-5DL** kit.

The **MX-5 DL** is a simple to operate Ultrasonic Thickness Gauge with an internal data logger. It offers features that make your job easier. An Alarm mode, Differential mode, high speed scanning, and data send are the main features of the **MX-5 DL**.

The **MX-5 DL** will automatically log your readings in numeric order (1 to 1000 readings). The gauge comes as a complete kit, ready to use, and is backed by Dakota Ultrasonics 5 year limited warranty.



Description: MX-5DL Ultrasonic Thickness Gauge

Model Part # [119-Z-115-0001](#)

Kit Includes: Kit Includes: Gauge, transducer, transfer software, RS232 cable, couplant, manual, and carrying case

Applications:

Corrosion & Pitting Tube & Pipe Tanks, Boilers, Glass and a Variety of Applications

Physical

Weight: 10 ounces

Size: 2.5 W x 4.75 H x 1.25 D inches (63.5 W 120.7 H x 31.8 D mm)

Operating Temperature:

-20° to 120° F (-30° to 50° C)

Case:

Extruded aluminum body / nickel-plated aluminum end caps.

Resistant to impact and environmentally sealed.

Keypad

Sealed membrane that is resistant to both water and petroleum products.

Nine tactile-feedback keys.

Transducer

Dual element (transmit and receive).

1 to 10 MHz frequency ranges

Locking quick disconnect LEMO connectors.

4 foot cable.

Optional cable lengths up to 100 feet.

Custom transducers available for special applications.

Data Logger

Automatic numeric Data Logging system 1 to 1000 readings.

Power Source

Two 1.5V alkaline or 1.2V NiCad AA cells

Typically operates for 200 hours on alkaline and 130 hours on NiCad.

Display flashes when battery is low.

Unit turns off automatically when battery is too low to operate reliably.

Display

Multi-function 4.5 digit liquid crystal display with 0.500-inch numerals, backlit for use in poor light conditions.

Backlight is selectable:

on / off / auto (illuminates only when taking a measurement).

Measurements displayed in inches, inches/microsecond. Millimeters, and meters/second.

Bar graph indicates stability of reading.

Certification

Factory calibration traceable to national standards.

Warranty

5 year limited

Measuring

Range: Measures from 0.025 to 19.999 inches (0.63 to 500 millimeters).

Switch to select English or metric units.

Resolution: 0.001 inches (0.01 millimeters)

Velocity Range: .0492 to .3937 in/ μ s
1250 to 10,000 meters/sec

Built in: Stainless steel reference disk for probe zeroing.

Four readings per second for single point measurements or 16 per second in scan mode – captures the minimum thickness.

Single and Two-point calibration option included.

Features:

Differential Mode:

Enter acceptable thickness value, unit will display +/- the difference from the value entered.

Alarm Mode:

Enter a minimum acceptable thickness value. If measurement falls below minimum, red led will illuminate and sound beeper. If measurement is above minimum value, green led will illuminate.

Data Output:

RS232 output sends thickness readings to a printer, computer or other external storage device.