



**UMX UNDERWATER ENCLOSURE &
MX-3 ULTRASONIC THICKNESS
GAUGE COMBINATION**

This combination of the UMX Underwater Enclosure and the MX-3 Digital Ultrasonic Thickness Tester provides a versatile system for performing underwater corrosion surveys. The MX-3 has a high-speed scan mode and is designed to measure the thickness of a variety of materials with a resolution of 0.01 mm. The UMX enclosure is constructed with clear plexiglas and stainless steel fittings and is rated for operation at a depth of 300 feet.

Physical

Weight:

MX-3: 10 ounces (with batteries)

UMX: 2.2lbs (1 kg)

Size:

MX-3: 2.5 W x 4.5 H x 1.24 D in
(63.5 W x 114.3 H x 31.5 D mm)

UMX: 3.5 W x 7.5 H x 2.75 D in
(63.5 W x 190.5 H x 69.85 D mm)

Operating Temperature:

-20 to 120 F (-30 to 50 C).

Case:

MX-3: Extruded aluminum body with nickel-plated aluminum end caps (gasket sealed).

UMX: Custom formed plexiglass with stainless steel shaft, connectors, and latches (gasket sealed).

Depth Rating: 300 ft. (91.44 M)

Keypad

MX-3: Sealed membrane that is resistant to both water and petroleum products. Six tactilefeedback keys.

UMX: Sliding stainless steel shaft.

Transducer

Dual-element (transmit and receive).
1 to 10 MHz frequency range.
Stainless steel connectors with 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 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.

Measuring

Range:

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

Switch to select English or Metric units.

Resolution:

0.001inch (0.01 millimeter)

Velocity Range:

0.0492 to .3937 in./ μ s.
(1250 to 10,000 meters/second)

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.

Warranty

MX-3: 5 year limited.

UMX: 1 year limited.

