

# THE UMX / MX-3 UNDERWATER KIT

Take your MX-3 underwater with the UMX underwater enclosure. This custom designed housing provides a convenient method for off-shore inspections. The UMX / MX-3 combination is designed to inspect for corrosion in a variety of off-shore applications: Ships, pipes, storage vessels, docks, pilings, and piers. The MX-3 is a pulse-echo thickness gauge using a dual element transducer to inspect for pitting prior to actual material deterioration - unlike single element gauges using echo-echo technology.

## S P E C I F I C A T I O N S

### 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 tactile-feedback 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:**

0.001 inch (0.01 millimeter)

**Velocity Range:**

0.0492 to .3937 in./ $\mu$ 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.

