

## CONDUCTIVITY METER

The *sensIon*<sup>TM</sup>5 Conductivity Meter is a custom digital LCD display that simultaneously displays temperature and measurement results. This meter meets IP67 waterproof specifications, and features an electrode holder, ergonomic design, datalogging, and RS232 communication for printing result to a computer or printer.

The instrument is designed for field or laboratory use for a wide variety of applications. Water quality, salinity, acids, bases, and other aqueous samples can be easily analyzed for conductivity with the available conductivity probes.

The meter operates on four alkaline batteries or 115/230 Vac power. A docking Station supplies line voltage to the meter in the laboratory. The meter measures from 0  $\mu$ S to 199.9 mS/cm, 0 to 50.0 g/L TDS, 0 to 42 g/L salinity, and the sample temperature.

The instrument setup menu allows the analyst to choose options for display lock, temperature units, time, date, temperature correction factor, TDS calculation factor, and reference temperature.

The meter is designed to be maintenance-free.



### Specifications

#### Measurement Range

**Conductivity Range :** 0-19.99  $\mu$ S; 20-199.9  $\mu$ S/cm

200-1999  $\mu$ S/cm;  
2-19.19 mS/cm; 20-199.9  
mS/cm

**TDS :** 0-50,000 mg/L as NaCl

**Salinity :** 0-42 ppt (%)

**Temperature :** - 10 to 105  $^{\circ}$ C

#### Resolution

**Conductivity:**

0.00-19.99  $\mu$ S/cm      0.01  $\mu$ S/cm  
20.0-199.9  $\mu$ S/cm      0.1  $\mu$ S/cm  
200-1999  $\mu$ S/cm      1  $\mu$ S/cm  
2.00-19.99 mS/cm      0.01 mS/cm  
20.0-199.9 mS/cm      0.1 mS/cm

#### Resolution

**TDS:**

0.00-199.9 mg/L      0.1mg/L  
200-1999 mg/L      1 mg/L  
2.00- 19.99 g/L      0.01g/L

**Salinity:** 0.1 ppt

**Temperature:**  $\pm$  0.1  $^{\circ}$ C

#### Accuracy

**Conductivity:**  $\pm$  0.5% of range

**TDS:**  $\pm$  0.5% of full scale

**Salinity:**  $\pm$  0.1 ppt (-2 to 35 $^{\circ}$ C)

**Temperature:**  $\pm$  0.3 $^{\circ}$ C from 0 – 70 $^{\circ}$ C

$\pm$  1.0  $^{\circ}$ C >70-110 $^{\circ}$ C

**Conversion Factor for TDS:** automatic or user adjustable

## Specifications

#### Temperature Compensation

**Manual:** (user selected coefficient, % per  $^{\circ}$ C) or

**Automatic:** (non-linear based on NaCl solutions)

**Display:** Custom LCD

**Inputs:** 5 pin DIN (with temperature); line power

**Outputs:** One-way RS232

#### Power Requirements

**Meter-**4 AA alkaline batteries or via Docking station

**Docking Station-** 6-12 Vdc; use either Hach-supplied 115 or 230V, 50/60 Hz external power supply or a customer-provided supply with 50 mA output, 5.5-mm power plug with a 2.5 mm center post opening.

**Environmental Requirements:** 5 to 45 $^{\circ}$ C and 5 to 85% relative humidity, non-condensing.

**Meter Dimensions:** 21.2 x 8.7 x 4.2 cm (8.35 x 3.43 x 1.65 inches)

**Enclosure:** Waterproof (meets IP67), chemical resistant, dust proof, meter will float. Docking station is water resistant to IP40.