CONDUCTIVITY METER

The *sension™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 µS 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 µS; 20-199.9 µS/cm
200-1999 µS/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 t0 105 ^{0}C

Resolution

Conductivity:

0.00-19.99 µS/cm	0.01 µS/cm
20.0-199.9 µS/cm	0.1 µS/cm
200-1999 µS/cm	1 µS/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: ± 0.1 ^{0}C

Accuracy

Conductivity:	± 0.5% of range
TDS:	± 0.5% of full scale
Salinity:	± 0.1 ppt (-2 to 35^{0}C)
Temperature:	± 0.3^{O}C from 0 – 70°C
	± 1.0 ^{O}C >70-110°C
Conversion Factor for TDS:	automatic or user adjustable

Specifications

Temperature Compensation

Manual: (user selected coefficient, % per ^{O}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°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.