

# Conductivity Meters

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CONDUCTIVITY



- Four measurement ranges
- Manual calibration
- Automatic Temperature Compensation
- Analog output (EC 215R)

These instruments utilize a four ring potentiometric probe with platinum sensor that offers greater versatility over typical amperometric designs. A potentiometric probe works on the principal of induction which eliminates the effects of polarization (a common problem of amperometric systems). Two outer rings apply an alternating voltage and induce a current loop in the solution while two inner rings measure the voltage drop induced by the current loop (which is dependent on the conductivity of the solution). By utilizing the 4-ring method, it is possible to measure very low or high conductivity levels (up to 200 mS/cm) without changing probes.

The temperature coefficient correction is settable between 0 and 2.5%/°C for EC 215.

In addition, the EC 215R model offers analog output of 0 to 5V that represents the full conductivity scale across all four ranges.

## ORDERING INFORMATION

EC 214-01 (115V) and EC 214-02 (230V) are supplied with HI 76300 conductivity probe, 12 VDC adapter and instruction manual.

EC 215-01 (115V), EC 215-02 (230V), EC 215-03 (AUS plug), EC 215R-01 (115V) and EC 215R-02 (230V) are supplied with HI 76303 conductivity probe, 12 VDC adapter and instruction manual.

## ELECTRODES

**HI 76300** Platinum four ring conductivity probe with DIN connector and 1 m (3.3') cable for EC 214

**HI 76303** Platinum four ring conductivity probe with internal temperature sensor, DIN connector and 1 m (3.3') cable for EC 215 and EC 215R

## SOLUTIONS

**HI 7030L** 12880 µS/cm calibration solution, 500 mL

**HI 7031L** 1413 µS/cm calibration solution, 500 mL

**HI 7033L** 84 µS/cm calibration solution, 500 mL

**HI 7034L** 80000 µS/cm calibration solution, 500 mL

**HI 7035L** 111800 µS/cm calibration solution, 500 mL

**HI 70300L** Electrode storage solution, 500 mL

**HI 7061L** Electrode cleaning solution, 500 mL

## ACCESSORIES

**HI 76404** Probe holder

SPECIFICATIONS	EC 214	EC 215	EC 215R
Range		0.0 to 199.9 µS/cm; 0 to 1999 µS/cm; 0.00 to 19.99 mS/cm; 0.0 to 199.9 mS/cm	
Resolution		0.1 µS/cm; 1 µS/cm; 0.01 mS/cm; 0.1 mS/cm	
Accuracy (@20°C/68°F)		±1% F.S. (excluding probe error)	
Calibration		manual, one point	
Temperature Compensation	manual, 0 to 50°C (32 to 122°F) with $\beta = 2\%/^{\circ}\text{C}$	automatic, 0 to 50°C (32 to 122°F) with $\beta$ adjustable from 0 to 2.5%/°C	
Probe	HI 76300, platinum four ring conductivity probe with DIN connector and 1 m (3.3') cable (included)	HI 76303, platinum four ring conductivity probe with internal temperature sensor, DIN connector and 1 m (3.3') cable (included)	
Analog Output	–	–	0 to 5 Vcc non isolated output; accuracy $\pm 0.1\%$ of reading; resolution $\pm 2.5$ mV
Power Supply		12 VDC adapter (included)	
Environment		0 to 50°C (32 to 122°F); RH max 95% non-condensing	
Dimensions		240 x 182 x 74 mm (9.4 x 7.2 x 2.9")	
Weight		1.0 kg (2.2 lbs.)	

For a complete list of Solutions, see the end of this section.