



Waterproof pH/EC/TDS/Temperature Meter with Advanced Features



HANNA instruments offers you a choice of 2 meters to meet your exacting requirements. HI 991300 and HI 991301 offer you the combination of pH, electro-conductivity, total dissolved solids and temperature measurements. To increase precision, you can select the meter which will work best with your range of conductivity, from purified to brackish waters.

There are only 2 buttons, yet you can select from a range of calibration buffers and even the temperature scale ($^{\circ}\text{C}$ or $^{\circ}\text{F}$) most familiar to you. The housing is waterproof and rated for IP 67 conditions.

The multi-parameter probe, HI 1288, includes pH, EC/TDS and temperature in one convenient, rugged handle.

Other user selectable features include different TDS factors from 0.45 to 1.00, and a range of temperature coefficients (β) from 0.0 to 2.4% for greater consistency and reproducibility. Also selectable are standardized buffer recognition values.

To ensure against interference from transient electrical noise, a solid-state amplifier is integrated into the probe.

Specifications

	HI 991300	HI 991301
Range	pH	0.00 to 14.00 pH
	EC	0 to 3999 $\mu\text{S}/\text{cm}$
	TDS	0 to 2000 ppm (mg/L)
	Temperature	0.0 to 60.0 $^{\circ}\text{C}$ (32.0 to 140.0 $^{\circ}\text{F}$)
Resolution	pH	0.01 pH
	EC	1 $\mu\text{S}/\text{cm}$
	TDS	1 ppm
	Temperature	0.1 $^{\circ}\text{C}$ (0.1 $^{\circ}\text{F}$)
Accuracy (@20 $^{\circ}\text{C}/68^{\circ}\text{F}$)	pH	± 0.01 pH
	EC	$\pm 2\%$ F.S.
	TDS	$\pm 2\%$ F.S.
	Temperature	$\pm 0.5^{\circ}\text{C}$ ($\pm 1.0^{\circ}\text{F}$)
TDS Conversion Factor	selectable 0.45 to 1.00 with 0.01 increments (default 0.50)	
pH Calibration	automatic at 1 or 2 points with 2 sets of memorized standard buffers (pH 4.01/7.01/10.01 or pH 4.01/6.86/9.18)	
EC/TDS Calibration	automatic, 1 point at 1382 ppm (CONV 0.5) or at 1500 ppm (CONV 0.7) or at 1413 $\mu\text{S}/\text{cm}$ (others)	automatic, 1 point at 6.44 ppt (CONV 0.5) or at 9.02 ppt (CONV 0.7) or at 12880 $\mu\text{S}/\text{cm}$ (others)
Temperature Compensation	pH	automatic
Probe	EC/TDS	automatic with selectable β from 0.0 to 2.4%/ $^{\circ}\text{C}$ with 0.1 increments
Battery Type / Life	HI 1288, pH/EC/TDS/T, DIN connector, 1 m (3.3') cable (included)	
Environment	4 x 1.5V AAA / approximately 500 hours of continuous use	
Dimensions / Weight	0 to 50 $^{\circ}\text{C}$ (32 to 122 $^{\circ}\text{F}$); RH max 100%	
	150 x 80 x 36 mm (5.9 x 3.1 x 1.4") / 210g (7.4 oz.)	

Accessories

HI 1288	pH/EC/TDS/T probe	HI 77100P	1413 $\mu\text{S}/\text{pH}$ 7 calibration solution (10 x 20 mL each)
HI 710007	Shockproof rubber boot, blue	HI 77200P	1500 ppm/pH 7 calibration solution (10 x 20 mL each)
HI 710008	Shockproof rubber boot, orange	HI 77300P	1382 ppm/pH 7 calibration solution (10 x 20 mL each)
HI 70030P	12880 μS calibration solution (25 x 20 ml)	HI 77400P	pH 4; pH 7 calibration solution (5 x 20 mL each)
HI 70038P	6.44 ppt calibration solution (25 x 20 ml)		

Ordering Information

HI 991300 is supplied complete with pH/EC/TDS/T HI 1288 probe, with 1 m (3.3') cable, batteries, rugged carrying case and instructions.

HI 991301 is supplied complete with pH/EC/TDS/T HI 1288 probe, with 1 m (3.3') cable, batteries, rugged carrying case and instructions.

For a complete range of calibration, cleaning and maintenance solutions, see section F. For probes, see section E. For other accessories, see section U.