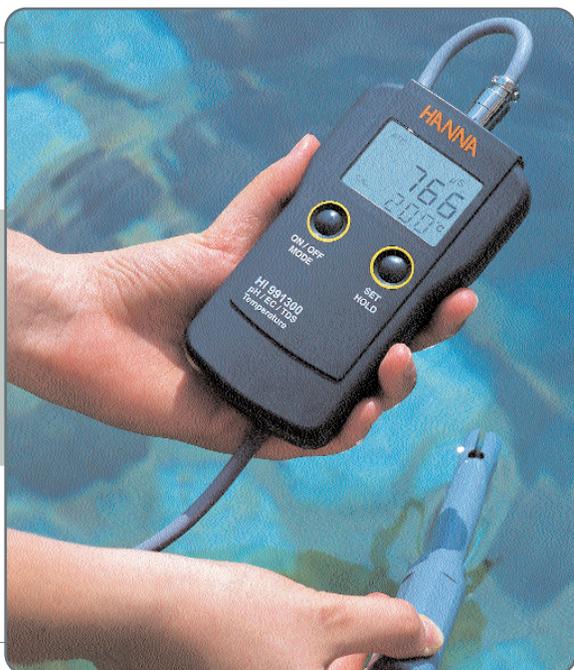


HI 991300 and HI 991301

4-in-1: pH/EC/TDS/Temperature in a Waterproof Casing



Features ...

Welcome the new generation of unparalleled versatility and simplicity in pH, EC, and TDS measurements. Hanna offers you a choice of 2 meters to meet your exacting requirements. The **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-functional probe 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.

... and Benefits

Specifications	HI 991300	HI 991301
Range	pH 0.00 to 14.00 EC 0 to 3999 $\mu\text{S}/\text{cm}$ TDS 0 to 2000 ppm Temperature 0.0 to 60.0 $^{\circ}\text{C}$ or 32.0 to 140.0 $^{\circ}\text{F}$	0.00 to 14.00 0.00 to 20.00 mS/cm 0.00 to 10.00 ppt 0.0 to 60.0 $^{\circ}\text{C}$ or 32.0 to 140.0 $^{\circ}\text{F}$
Resolution	pH 0.01 EC 1 $\mu\text{S}/\text{cm}$ TDS 1 ppm Temperature 0.1 $^{\circ}\text{C}$ or 0.1 $^{\circ}\text{F}$	0.01 0.01 mS/cm 0.01 ppt 0.1 $^{\circ}\text{C}$ or 0.1 $^{\circ}\text{F}$
Accuracy (@20$^{\circ}\text{C}/68^{\circ}\text{F}$)	pH ± 0.01 EC $\pm 2\%$ F.S. TDS $\pm 2\%$ F.S. Temperature $\pm 0.5^{\circ}\text{C}$ or $\pm 1.0^{\circ}\text{F}$	± 0.01 $\pm 2\%$ F.S. $\pm 2\%$ F.S. $\pm 0.5^{\circ}\text{C}$ or $\pm 1.0^{\circ}\text{F}$
Typical EMC Deviation	pH ± 0.03 EC $\pm 2\%$ F.S. TDS $\pm 2\%$ F.S. Temperature $\pm 0.5^{\circ}\text{C}$ or $\pm 1.0^{\circ}\text{F}$	± 0.03 $\pm 2\%$ F.S. $\pm 2\%$ F.S. $\pm 0.5^{\circ}\text{C}$ or $\pm 1.0^{\circ}\text{F}$
EC/TDS Ratios	Selectable from 0.45 to 1.00 (0.50 default); step is of 0.01 unit	
pH Calibration	Automatic 1 or 2 points with 2 sets of memorized standard buffers (pH 4.01, 7.01, 10.01 or 4.01, 6.86, 9.18)	
EC/TDS Calibration	Automatic 1 point at 1382 ppm (conv.=0.5); 1500 ppm (conv.=0.7); 1413 $\mu\text{S}/\text{cm}$ (others)	Automatic 1 point at 6.44 ppt (conv.=0.5); 9.02 ppt (conv.=0.7) 12880 $\mu\text{S}/\text{cm}$ (others)
Temperature Compensation	pH Automatic from 0 to 60 $^{\circ}\text{C}$ EC/TDS Automatic from 0 to 60 $^{\circ}\text{C}$ with a selectable β from 0.0 to 2.4% per $^{\circ}\text{C}$ (1.9 default); step is 0.1 unit	
Probe	HI 1288 pH/EC/TDS probe with built-in temperature sensor, DIN connector and 1 m (3.3') cable (included)	
Battery Type / Life	4 x 1.5V AAA / approximately 500 hours of continuous use	
Environment	0 to 50 $^{\circ}\text{C}$ (32 to 122 $^{\circ}\text{F}$); RH 100%	
Dimensions	143 x 80 x 38 mm (5.6 x 3.1 x 1.5")	
Weight	320g (11.3 oz.)	

Ordering Information

HI 991300 is supplied complete with **HI 1288** pH/EC/TDS/ $^{\circ}\text{C}$ probe, batteries, instruction manual in hard carrying case.

HI 991301 is supplied complete with **HI 1288** pH/EC/TDS/ $^{\circ}\text{C}$ probe, batteries, instruction manual in hard carrying case.

For a complete range of calibration and maintenance solutions see pages G17-G18 and section F.
For a comprehensive list of accessories see section U.

Accessories

HI 1288	pH/EC/TDS/ $^{\circ}\text{C}$ probe
HI 710004	Soft carrying case
HI 710007	Blue shockproof rubber boot
HI 710008	Orange shockproof rubber boot
HI 70030P	12880 μS cal. sol. (25 x 20 mL)

HI 70038P	6.44 ppt cal. sol. (25 x 20 mL)
HI 77100P	1413 μS & pH 7 sol., 20 mL, 10 pcs each
HI 77200P	1500 ppm & pH 7 sol., 20 mL, 10 pcs each
HI 77300P	1382 ppm & pH 7 sol., 20 mL, 10 pcs each
HI 77400P	pH 4 & 7 sol., 20 mL, 5 pcs each