

pH/EC/TDS/Temperature Monitors with Back-lit Display

The Combo HI 991404 and HI 991405 series meters from Hanna are designed for continuous, high accuracy pH, EC/TDS and temperature measurements. These microprocessor indicators continuously monitor the three most important nutrient parameters in hydroponics, greenhouses and horticultural applications with a single instrument. These indicators feature a large, dual-level, back-lit LCD to give you instantaneous readings of pH, EC or TDS and temperature, even from a distance.

At startup, these indicators perform a self-check to assure proper working condition. HI 991404 and HI 991405 also have a stability indicator and hold feature to prompt the user when to take the reading and freezes the display for easy and accurate recording.

Calibration and temperature compensation is automatic, while the EC/TDS conversion factor and temperature coefficient (β) are user adjustable for application-specific measurements. These instruments are supplied with an advanced, non-clogging double junction pH electrode and a rugged conductivity probe that will withstand even the most aggressive environments. The instruments are powered by a 12 Vdc transformer and are easy to install and use, making them ideal for all continuous monitoring applications.

GRÖC'HEK® Combo



Specifications

		HI 991404	HI 991405
Range	pH	0.0 to 14.0 pH	0.0 to 14.0 pH
	EC	0 to 3999 μ S/cm	0.00 to 20.00 mS/cm
	TDS	0 to 2000 ppm (mg/L)	0.00 to 10.00 ppt (g/L)
	temperature	0.0 to 60.0°C / 32.0 to 140.0°F	0.0 to 60.0°C / 32.0 to 140.0°F
Resolution	pH	0.1 pH	0.1 pH
	EC	1 μ S/cm	0.01 mS/cm
	TDS	1 ppm	0.01 ppt
	temperature	0.1°C (o 0.1°F)	0.1°C (0.1°F)
Accuracy (@20°C/68°F)	pH	±0.1 pH	
	EC/TDS	±2% F.S.	
	temperature	±0.5°C (±1°F)	
Temperature compensation	pH: automatic; EC/TDS: automatic with β adjustable from 0.0 to 2.4%/°C		
Calibration	pH: automatic, 1 or 2 points with 2 sets of memorized buffers; EC/TDS: automatic, 1 point		
pH electrode	HI 1293D (included)		
EC/TDS probe	HI 7630 (fixed)		
EC/TDS conversion factor	adjustable from 0.45 to 1.00		
Environment	0 to 50°C (32 to 122°F); RH max 95%		
Input impedance	10 ¹² Ohm		
Power supply	12 Vdc adapter (included)		
Dimensions	160 x 105 x 31 mm (6.3 x 4.1 x 1.2)		
Weight	190 g (6.7 oz.) - meter only		

Ordering Information

HI 991404 is supplied complete with HI 1293D pH electrode, fixed HI 7630 probe, pH and EC calibration solutions, 12 Vdc power adapter and instructions.

HI 991405 is supplied complete with HI 1293D pH electrode, fixed HI 7630 probe, pH and EC calibration solutions, 12 Vdc power adapter and instructions.

Accessories

HI 1293D	pH electrode with DIN connector and internal matching pin Conductivity probe*	HI 70032P	1382 ppm calibration solution, 20 mL sachet, 25 pcs
HI 7630	pH 4.01 calibration solution, 230 mL bottle	HI 70038P	6.44 ppt calibration solution, 20 mL sachet, 25 pcs
HI 7004M	pH 7.01 calibration solution, 230 mL bottle	HI 70442P	1500 ppm calibration solution, 20 mL sachet, 25 pcs
HI 7007M	pH 10.01 calibration solution, 230 mL bottle	HI 70300M	Electrode storage solution, 230 mL bottle
HI 7010M	12.88 mS/cm calibration solution, 20 mL sachet, 25 pcs	HI 7061M	Probe cleaning solution, 230 mL bottle
HI 70030P	1413 μ S/cm calibration solution, 20 mL sachet, 25 pcs	HI 710005	115 Vac/12 Vdc adapter
HI 70031P		HI 710006	230 Vac/12 Vdc adapter

*Replaceable by technical personnel only.

For a complete range of calibration, cleaning and maintenance solutions, see section F. For EC/TDS probes, see section U.