

HI 991404 • HI 991405

pH/EC/TDS/Temperature Monitors

with Backlit Display

COMBO
GRÖCHEK®**Dual-level
Backlit LCD!****Continuous High
Accuracy Measurements**

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 meter. These indicators feature a large, dual-level, backlit 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. The HI 991404 and HI 991405's stability indicator and hold features let the user know when to take readings and freeze 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 the ideal choice for all continuous monitoring applications.

- **Waterproof**
- **Adjustable TDS ratio**
- **Adjustable β**
- **Stability indicator**
- **Extra-large display**
- **12 Vdc power supply**

SPECIFICATIONS

		HI 991404	HI 991405
Range	pH	0.0 to 14.0 pH	0.0 to 14.0 pH
	EC	0 to 3999 $\mu\text{S}/\text{cm}$	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 $\mu\text{S}/\text{cm}$	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	$\pm 2\%$ F.S.	
	temperature	$\pm 0.5^\circ\text{C}$ ($\pm 1^\circ\text{F}$)	
Temperature compensation		pH: automatic; EC/TDS: automatic with β adjustable from 0.0 to 2.4%/°C	
pH Calibration		pH: automatic, 1 or 2 points with 2 sets of memorized buffers	
EC/TDS Calibration		automatic, 1 point at 1413 $\mu\text{S}/\text{cm}$ or 1382 ppm	automatic, 1 point at 12.88 mS/cm or 6.44 ppt
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/Weight (meter only)		160 x 105 x 31 mm (6.3 x 4.1 x 1.2)/190 g (6.7 oz.)	

ORDERING INFORMATION

HI 991404-01 (115V) and **HI 991404-02** (230V) and **HI 991405-01** (115V) and **HI 991405-02** (230V) are supplied complete with HI 1293D pH electrode, fixed HI 7630 probe, pH and EC calibration solutions, 12 Vdc adapter and instructions.

ELECTRODES

HI 7630 Conductivity probe*
HI 1293D pH electrode with DIN connector and internal matching pin

SOLUTIONS

HI 7004M pH 4.01 calibration solution, 250 mL
HI 7007M pH 7.01 calibration solution, 250 mL
HI 7010M pH 10.01 calibration solution, 250 mL

HI 70030P 12.88 mS/cm calibration solution, 20 mL sachets (25)
HI 70031P 1413 $\mu\text{S}/\text{cm}$ calibration solution, 20 mL sachets (25)
HI 70032P 1382 ppm calibration solution, 20 mL sachets (25)
HI 70038P 6.44 ppt calibration solution, 20 mL sachets (25)
HI 70442P 1500 ppm calibration solution, 20 mL sachets (25)
HI 70300M Electrode storage solution, 250 mL
HI 7061M Probe cleaning solution, 250 mL

ACCESSORIES

HI 710005 115 Vac/12 Vdc pwr adapter (US)
HI 710006 230 Vac/12 Vdc pwr adapter (EURO)

*Replaceable by technical personnel only.



With Great Products, Come Great Results™