

ComboGRÖ'CHEK®

pH, EC/TDS and Temperature
Monitor with Large Backlit LCD

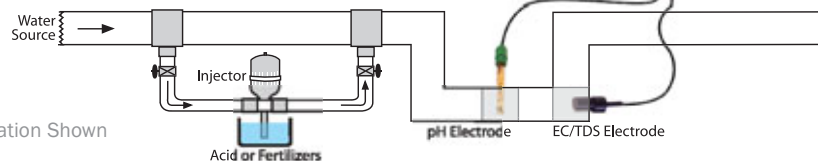
- **Waterproof**
- **Dual-level Backlit LCD**
- **Adjustable, TDS Ratio**
- **Adjustable β**
- **Stability Indicator**
- **Extra-Large Display**
- **12 VDC Power Supply**

**Dual-level
Backlit LCD**

The **Combo Gro'Chek®** from **HANNA** continuously monitors the three most important nutrient parameters in greenhouses, hydroponics and horticultural applications. The **HI 991404** and **HI 991405** are supplied with an advanced, non-clogging, double-junction pH electrode and a rugged, conductivity probe that will stand up to the most aggressive environments.

SPECIFICATIONS	HI 991404	HI 991405
Range	pH: 0.00 to 14.00; EC: 0 to 3999 μ S/cm; TDS: 0 to 2000 ppm; Temperature: 0.0 to 60.0°C or 32.0 to 140.0°F	pH: 0.00 to 14.00; EC: 0.00 to 20.00 mS/cm; TDS: 0.00 to 10.00 ppt; Temperature: 0.0 to 60.0°C or 32.0 to 140.0°F
Resolution	pH: 0.01; EC: 1 μ S/cm; TDS: 1 ppm; Temperature: 0.1°C or 0.1°F	pH: 0.01; EC: 0.01 mS/cm; TDS: 0.01 ppt; Temperature: 0.1°C or 0.1°F
Accuracy	pH: ± 0.05 ; EC/TDS: $\pm 2\%$ F.S.; Temperature: $\pm 0.5^\circ\text{C}$ or $\pm 1^\circ\text{F}$	pH: ± 0.05 ; EC/TDS: $\pm 2\%$ F.S.; Temperature: $\pm 0.5^\circ\text{C}$ or $\pm 1^\circ\text{F}$
pH Calibration	1 or 2 points with 2 sets of memorized buffers	1 or 2 points with 2 sets of memorized buffers
EC/TDS Calibration	automatic 1 point	automatic 1 point
EC/TDS Conv. Factor	adjustable from 0.45 to 1.00	adjustable from 0.45 to 1.00
Temp. Compensation	pH: automatic; EC/TDS: automatic, BETA (β) is adjustable from 0.0 to 2.4%/°C	pH: automatic; EC/TDS: automatic, BETA (β) is adjustable from 0.0 to 2.4%/°C
Battery Type	4 x 1.5V with BEPS (Battery Error Prevention System)	4 x 1.5V with BEPS (Battery Error Prevention System)
Battery Life	Approx. 100 hrs of continuous use; auto shut-off after 8 minutes of non-use	Approx. 100 hrs of continuous use; auto shut-off after 8 minutes of non-use
Environment	0 to 50°C (32 to 122°F); 100% RH	0 to 50°C (32 to 122°F); 100% RH
Dimensions/Weight	163 x 40 x 26 mm (6.4 x 1.6 x 1")/85 g (3.0 oz.)	163 x 40 x 26 mm (6.4 x 1.6 x 1")/85 g (3.0 oz.)

In-line Installation Shown



ORDERING INFORMATION

HI 991404 & 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.

GRÖ'CHEK® pH/EC and pH/TDS Monitors

Featuring pH and EC Simultaneous Display

These monitors are ideal for agricultural, horticultural and hydroponics applications where pH and EC levels need to be continuously monitored for optimal plant growth. These wall-mount monitors feature a large, easy-to-read LCD that displays pH and EC readings simultaneously.

SPECIFICATIONS	HI 981404N	HI 981405N
Range	pH: 0.0 to 14.0 TDS: 0 to 1990 ppm (mg/L)	pH: 0.0 to 14.0 pH EC: 0.00 to 9.99 mS/cm
Resolution	pH: 0.1; TDS: 10 ppm (mg/L)	pH: 0.1; EC: 0.01 mS/cm
Accuracy (@20°C/68°F)	± 0.2 pH; TDS: $\pm 2\%$ F.S.	± 0.2 pH; EC: $\pm 2\%$ F.S.
Calibration	manual, 1 or 2 points (pH); manual, 1 point (TDS)	manual, 1 or 2 points (pH); manual, 1 point (EC)
Temp. compensation	Automatic 5 to 50°C (TDS only)	Automatic 5 to 50°C (TDS only)
EC/TDS conv. factor	0.7 ppm = 1 μ S/cm	—
Power supply	12 Vdc adapter (included)	—
Environment	0 to 50°C (32 to 122°F); RH max 95%	0 to 50°C (32 to 122°F); RH max 95%
Dimensions/Weight	160 x 110 x 35 mm (6.3 x 4.3 x 1.4")/300 g (10.6 oz.)	160 x 110 x 35 mm (6.3 x 4.3 x 1.4")/300 g (10.6 oz.)

ORDERING INFORMATION

HI 981404N is supplied with HI 1286 pH electrode, HI 7634 TDS probe, HI 1283 grounding bar, cal. solutions, calibration screwdriver, 12 VDC adapter and instructions.

HI 981405N is supplied with HI 1286 pH electrode, HI 7632 EC probe, HI 1283 grounding bar, cal. solutions, calibration screwdriver, 12 VDC adapter and instructions.



- **Continuous Monitoring**
- **Displays Both pH and EC**
- **Adjustable Setpoints**