

# GroLine

HI9814

## pH / EC / TDS / Temperature Meter

with Multiparameter Probe

- Simultaneous, pH, EC/TDS and temperature measurements on a large three-line LCD display;
- User-friendly Design
  - With only two buttons, meter operation could not be simpler. Two buttons allow you to quickly adjust settings, select the measurement range, and choose calibration buffer sets.



- Watertight Connection
  - A Quick Connect DIN connector makes attaching and removing the probe simple and easy. The rubber coating protects the cable and creates a sealed connection for added reliability.
- Probe Condition
  - An on-screen indicator provides visual confirmation that your probe is working at its best.
- Large LCD
  - A multilevel display provides at-a-glance readings of your most important numbers from any angle.
- Durable IP67 waterproof Casing
  - Designed to withstand the knocks, drops, and spills of real life, the new IP67 body ensures top performance in any environment. These meters are totally protected against dust and water intrusion from any direction.
- On-screen calibration tags
- mV of pH measurement for electrode check
- Selectable temperature unit (°C or °F)
- Battery life indication and low battery detection



HI9814 is a durable, portable pH, conductivity, total dissolved solids and temperature meter for most measurements encountered in hydroponics, aquaponics or general agriculture applications. All operations and settings, are made through only two buttons and the housing is waterproof and rated for IP67 conditions. User-selectable features include selectable TDS factors of 0.5 and 0.7 as well as auto-off after 8 minutes or 60 minutes to prolong battery life.

The supplied HI1285-7 multiparameter probe measures pH, EC/TDS, and temperature in one convenient, rugged probe.



- Calibrate pH and EC with one solution
  - The HI9814 offers a quick calibration feature that allows for calibration of both parameters with a single solution. Simply enter calibration mode and the meter will automatically detect and calibrate pH and EC sensors. EC calibration is automatically applied to TDS readings.



- Optional shockproof silicon rubber boot
- Specially designed to protect your instrument from damage or impact

**HI710030** Green



## HI1285-7 Multiparameter Probe

- 3 sensors in a single probe
- Gel filled maintenance free pH electrode
- Amplified pH electrode
- Polypropylene body
  - The polypropylene body houses all the sensors in a single body design and is durable. The probe is gel filled for maintenance free operation. It does not have to be refilled periodically.

The specially engineered HI1285-7 pH/EC/TDS/temperature probe utilizes a fiber junction and gel electrolyte which provides a fast response and reduced potential for contamination. These features make this probe ideal for use in fertilizer solutions.

A solid-state preamplifier is integrated into the probe to protect the pH measurement from transient electrical noise. Sources of electrical noise include ballasts used in lighting and pumps to circulate water and nutrient solutions.

The HI1285-7 probe features a Quick Connect DIN connector that makes a waterproof connection with the meter.

### Specifications

### HI9814

|                           |  |  |
|---------------------------|--|--|
| pH                        | Range*   | -2.00 to 16.00 pH  |
|                           | Resolution   | 0.01 pH  |
|                           | Accuracy   | ±0.02 pH   |
|                           | Calibration  | automatic, one or two-point calibration (using pH 4.01, 7.01, 10.01 buffers); one-point calibration using quick calibration solution |
|                           | Temperature Compensation   | automatic  |
| pH-mV                     | Range  | ±825 mV  |
|                           | Resolution   | 1 mV   |
|                           | Accuracy   | ±1 mV  |
| EC                        | Range  | 0.00 to 6.00 mS/cm**   |
|                           | Resolution   | 0.01 mS/cm   |
|                           | Accuracy   | ±2% F.S.   |
|                           | Calibration  | automatic, one-point at 1.41 mS/cm or 5.00 mS/cm; one-point calibration using quick calibration solution                             |
|                           | Temperature Compensation   | automatic, with $\beta = 1.9\%/^{\circ}\text{C}$   |
| TDS                       | Range  | 0 to 3000 ppm (500 CF); 0 to 3999 ppm (700 CF)   |
|                           | Resolution   | 10 ppm (mg/L)  |
|                           | Accuracy   | ±2% F.S.   |
|                           | Conversion Factor (CF)***  | 0.5 (500 ppm) or 0.7 (700 ppm)   |
| Temperature               | Range*   | -5.0 to 105.0°C / 23.0 to 221.0°F  |
|                           | Resolution   | 0.1°C/0.1°F  |
|                           | Accuracy   | ±0.5°C / ±1.0°F  |
| Additional Specifications | Probe (included)   | HI1285-7 pH/EC/TDS/temperature sensor, DIN connector and 1 m (3.3') cable  |
|                           | Battery Type/Life  | 1.5V AAA (3) /approx. 500 hours of continuous use  |
|                           | Auto-off   | user selectable: after 8 min, 60 min or disabled   |
|                           | Environment  | 0 to 50°C (32 to 122°F); RH max. 100%  |
|                           | Meter Dimensions   | 154 x 63 x 30 mm (6.1 x 2.5 x 1.2")  |
|                           | Meter Mass (with batteries)  | 196 g (6.91 oz.)   |
|                           | Casing Ingress Protection Rating   | IP67   |
| Ordering Information      | <b>HI9814</b> is supplied with HI1285-7 pH/EC/TDS probe with built-in temperature sensor, DIN connector and 1m (3.3') cable, HI50036 Quick calibration solution sachets (3), HI700661 electrode cleaning solution sachets for agriculture (3), 100 mL beaker, 1.5V AAA batteries (3), calibration certificate of meter, calibration certificate of probe, instruction manual and rugged carrying case. |  |

\* the pH range is limited from 0 to 13 pH and the temperature range from 0 to 50°C (32 to 122°F) using HI1285-7 probe.  
 \*\* mS/cm is displayed as mS on the display.  
 \*\*\* TDS Conversion Factor: 1000  $\mu\text{S}/\text{cm} = 500$  ppm with 0.5 CF.

pH and Quick Cal solutions begin on page 2.154; EC and TDS solutions begin on page 5.34; See page 7.50 for probe specifications



## HI12943 pH Electrode

HI9814 is also compatible with the HI12943 pH electrode.

See page 2.139 for more information