

HI 98129 • HI 98130

**pH/Conductivity/TDS Testers**[www.easeongear.com](http://www.easeongear.com)[click to buy: www.hannameters.com](http://www.hannameters.com)

- Waterproof and designed to float
- Cloth, renewable junction
- Close proximity temperature probe
- Automatic Temperature Compensation
- Automatic 1 or 2 point pH calibration
- Tactile grip casings
- HOLD function
- BEPS (Battery Error Prevention System)
- Battery % displayed at startup
- Automatic shut-off
- Efficient two button operation
- Temperature in °C or °F

Easily switch between Celsius and Fahrenheit readouts.



HI 98129 and HI 98130 are waterproof testers that offer high accuracy pH, EC/TDS and temperature measurements in a single tester! No more switching between meters for your routine measurements. These floating, waterproof combination testers have an easy to read, LCD and an automatic shut-off. pH and EC/TDS readings are automatically temperature compensated.

These testers feature a replaceable pH electrode cartridge with an extendable cloth junction as well as an EC/TDS graphite electrode. The extendable cloth junction provides an extended electrode life and the replaceable pH cartridge means that this tester does not need to be thrown away when the pH sensor is exhausted.

The EC/TDS conversion factor is user selectable as well as the temperature compensation coefficient ( $\beta$ ).

Fast, efficient, accurate and portable, the Combo pH, EC/TDS and temperature tester combines all the features users have requested and more!

**Replaceable pH electrode cartridge**

The Combo features an easy-to-replace pH electrode. The sturdy, snap-in connector means there are no pins to bend or break.

**High accuracy EC/TDS graphite probe**

The graphite conductivity probe provides greater accuracy because it cannot be contaminated by salt deposits in the solution. The exposed temperature sensor provides fast response times, and guarantees highly accurate temperature compensated readings.

**Cloth extendable junction**

When the cloth junction becomes dirty from routine testing, simply pull out 3 mm (1/8") to increase response time and stability.

[www.esseasongear.com](http://www.esseasongear.com)

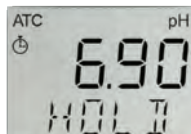
click to buy: [www.hannameters.com](http://www.hannameters.com)

## LCD Display Features



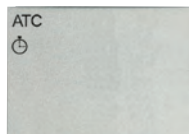
### On-screen battery life

LCD indicates the percentage of battery power remaining upon startup.



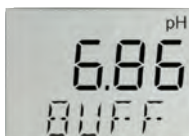
### HOLD function

The HOLD function “freezes” the LCD display temporarily.



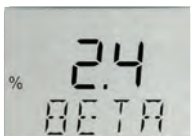
### Instability & ATC indicators

Ensures reliable EC and TDS measurements. ATC symbol is shown when active.



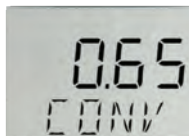
### Standard or N.I.S.T buffer calibration

Automatic calibration is performed with 2 sets of memorized buffers for greater accuracy.



### Adjustable temperature coefficient factor

Users can choose between different BETA ( $\beta$ ) factors for precise temperature compensated measurements.



### Adjustable TDS ratio

For measurement accuracy, users can choose between different conductivity to TDS conversion factors.



### Calibrate right in our buffer solution sachets

An easy calibration can be performed right in our buffer solution sachets for the most accurate readings.

| SPECIFICATIONS           |             | HI 98129                                                                                                      | HI 98130                                                                              |
|--------------------------|-------------|---------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Range                    | pH          | 0.00 to 14.00 pH                                                                                              |                                                                                       |
|                          | EC          | 0 to 3999 $\mu\text{S}/\text{cm}$                                                                             | 0.00 to 20.00 $\text{mS}/\text{cm}$                                                   |
|                          | TDS         | 0 to 2000 $\text{mg}/\text{L}$ (ppm)                                                                          | 0.00 to 10.00 $\text{g}/\text{L}$ (ppt)                                               |
|                          | Temperature | 0.0 to 60.0°C / 32.0 to 140.0°F                                                                               |                                                                                       |
| Resolution               | pH          | 0.01 pH                                                                                                       |                                                                                       |
|                          | EC          | 1 $\mu\text{S}/\text{cm}$                                                                                     | 0.01 $\text{mS}/\text{cm}$                                                            |
|                          | TDS         | 1 $\text{mg}/\text{L}$ (ppm)                                                                                  | 0.01 $\text{g}/\text{L}$ (ppt)                                                        |
|                          | Temperature | 0.1°C / 0.1°F                                                                                                 |                                                                                       |
| Accuracy (@20°C)         | pH          | $\pm 0.05$ 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 $\beta$ adjustable from 0.0 to 2.4% / °C                                |                                                                                       |
| Calibration              | pH          | automatic, one or two points with two sets of standard buffers (pH 4.01 / 7.01 / 10.01 or 4.01 / 6.86 / 9.18) |                                                                                       |
|                          | EC / TDS    | automatic, one point at 1413 $\mu\text{S}/\text{cm}$ or 1382 $\text{mg}/\text{L}$ (ppm)                       | automatic, one point at 12.88 $\text{mS}/\text{cm}$ or 6.44 $\text{g}/\text{L}$ (ppt) |
| TDS Conversion Factor    |             | 0.45 to 1.00                                                                                                  |                                                                                       |
| pH Electrode             |             | HI 73127 (replaceable; included)                                                                              |                                                                                       |
| Environment              |             | 0 to 50°C (32 to 122°F); RH max 100%                                                                          |                                                                                       |
| Battery Type / Life      |             | 1.5V (4) / approximately 100 hours of continuous use, auto-off after 8 minutes of non-use                     |                                                                                       |
| Dimensions/Weight        |             | 163 x 40 x 26 mm (6.4 x 1.6 x 1.0")/100 g (3.5 oz.)                                                           |                                                                                       |

## ORDERING INFORMATION

HI 98129 (Combo) and HI 98130 (Combo) are supplied with HI 73127 pH electrode and HI 73128 electrode removal tool, batteries and instructions.

## ELECTRODES

HI 73127 Spare pH electrode for (Combo)

## SOLUTIONS

HI 70004P pH 4.01 buffer solution, 20 mL sachets (25)  
 HI 70006P pH 6.86 buffer solution, 20 mL sachets (25)  
 HI 70007P pH 7.01 buffer solution, 20 mL sachets (25)  
 HI 70009P pH 9.18 buffer solution, 20 mL sachets (25)  
 HI 70010P pH 10.01 buffer solution, 20 mL sachets (25)  
 HI 70030P 12.88  $\text{mS}/\text{cm}$  buffer solution, 20 mL sachets (25)  
 HI 70031P 1413  $\mu\text{S}/\text{cm}$  buffer solution, 20 mL sachets (25)  
 HI 70032P 1382  $\text{mg}/\text{L}$  (ppm) buffer solution, 20 mL sachets (25)  
 HI 70038P 6.44  $\text{g}/\text{L}$  (ppt) buffer solution, 20 mL sachets (25)  
 HI 70442P 1500  $\text{mg}/\text{L}$  (ppm) buffer solution, 20 mL sachets (25)  
 HI 70300M Electrode storage solution, 250 mL  
 HI 7061M Electrode cleaning solution, 250 mL

## ACCESSORIES

HI 73128 Electrode removal tool

For a complete list of Solutions, see the end of pH Section 3 and Conductivity Section 6.