HI98129 (Combo) · HI98130 (Combo)

## pH/EC/TDS Testers

- Waterproof
  - Designed to float if accidentally dropped in a tank
- Automatic Temperature Compensation
  - All readings are compensated for variations in temperature
    Temperature displayed in °C or °F along
  - Temperature displayed in °C or °F along with pH reading
- Stability indicator
  - Meter displays a clock tag that will disappear when the reading has achieved stability
- HOLD button
  - Freezes reading on the display to allow recording of measurement
- BEPS (Battery Error Prevention System)
  - Meter will automatically shuts off if there is not enough power to get an accurate measurement
- Battery % level at startup
- Low Battery Indicator
- Auto-off
- Automatically shuts off after 8 minutes of non-use to maximize battery life

The HI98129 and HI98130 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 renewable 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 userselectable, as well as the temperature compensation coefficient ( $\beta$ ).

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









 Replaceable pH electrode cartridge
 The Combo features an easy-toreplace 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.



 Extendable cloth junction
 Simply pull out 3 mm (1/8") and cut when the cloth junction becomes dirty to improve response time and stability.



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### LCD Display Features



• On-screen battery life

• LCD indicates the percentage of battery power remaining upon startup.



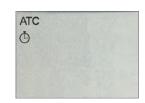
 Standard or N.I.S.T buffer calibration
 Automatic calibration is performed with two sets of memorized buffers for greater accuracy.



HOLD function
 The HOLD function "freezes" the LCD display temporarily.



 Adjustable temperature coefficient factor
 Users can choose between different factors (β) for precise temperature compensated measurements.



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



 Adjustable TDS conversion factor
 For measurement accuracy, users can choose between a range of conductivity to TDS conversion factors.

Specifications		HI98129	HI98130
Specifications	Range	0.00 to 14.00 pH	0.00 to 14.00 pH
pH Conductivity	Resolution	0.00 to 14.00 pH	0.01 pH
	Accuracy	±0.05 pH	±0.05 pH
	Range	0 to 3999 µS/cm	0.00 to 20.00 mS/cm
	Resolution	1 µS/cm	0.01 mS/cm
	Accuracy	±2% F.S.	±2% F.S.
	Range	0 to 2000 mg/L (ppm)	0.00 to 10.00 g/L (ppt)
TDS	Resolution	1 mg/L (ppm)	0.01 g/L (ppt)
	Accuracy	±2% F.S.	±2% F.S.
Temperature	Range	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	0.1°C / 0.1°F	0.1°C/0.1°F
	Accuracy	±0.5°C/±1°F	±0.5°C/±1°F
Additional Specifications	EC/TDS Calibration	automatic, one point at 1413 µS/cm or 1382 mg/L (ppm)	automatic, one point at 12.88 mS/cm or 6.44 g/L (ppt)
	pHCalibration	automatic, one or two-point with two sets of standard buffers (pH 4.01 / 7.01 / 10.01 or 4.01 / 6.86 / 9.18)	
	Temperature Compensation	pH: automatic; EC/TDS: automatic with $\beta$ adjustable from 0.0 to 2.4% / °C	
	TDS Conversion Factor	0.45 to 1.00	
	pH Electrode	HI73127 (replaceable; included)	
	Environment	0 to 50°C (32 to 122°F); RH max 100%	
	Battery Type / Life	1.5V (4) / approx. 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	HI98129 (Combo) and HI98130 (Combo) are supplied with HI73127 pH electrode and HI73128 electrode removal tool, batteries and instructions.		





• Calibrate directly in buffer solution sachets

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

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#### HI98127 (pHep®4) · HI98128 (pHep®5)

# pH and Temperature Testers

- Waterproof
  - Designed to float if accidentally dropped in a tank
- Automatic Temperature Compensation
  - All readings are compensated for variations in temperature
  - Temperature displayed in °C or °F along with pH reading
- Stability indicator
  - Meter displays a clock tag that will disappear when the reading has achieved stability
- HOLD button
  - Freezes reading on the display to allow recording of measurement
- BEPS (Battery Error Prevention System)
- Meter will automatically shuts off if there is not enough power to get an accurate measurement
- Battery % level at startup
- Low Battery Indicator
- Auto-off
- Automatically shuts off after 8 minutes of non-use to maximize battery life

The pHep®4 and pHep®5 are waterproof pH testers that have many advanced features found in more expensive portable instrumentation. These ergonomic meters feature automatic one or two point calibration to a known buffer, automatic temperature compensation, battery percent level indicator at start up, and a stability indicator to alert the user when a stable reading has been obtained. The large multi level LCD display shows both pH and temperature simultaneously.



These meters also feature the HI73127 replaceable electrode with a stainless steel round connector and extendable cloth junction. This cartridge design has no pins to line up or that can break.



Specifications		HI98127 (pHep®4)	HI98128 (pHep®5)
рН	Range	-2.0 to 16.0 pH	-2.00 to 16.00 pH
	Resolution	0.1 pH	0.01 pH
	Accuracy	±0.1 pH	±0.05 pH
Temperature	Range	-5.0 to 60.0°C / 23.0 to 140.0°F	-5.0 to 60.0°C / 23.0 to 140.0°F
	Resolution	0.1°C/0.1°F	0.1°C/0.1°F
	Accuracy	±0.5°C/±1°F	±0.5°C/±1°F
Additional Specifications	pH Calibration	automatic, one or two-point with two sets of standard buffers (pH 4.01 / 7.01 / 10.01 or pH 4.01 / 6.86 / 9.18)	
	Temperature Compensation	automatic	
	Battery Type / Life	1.5V (4) / approx. 300 hours of continuous use; auto-off after 8 minutes of non-use	
	Environment	-5 to 50°C (23 to 122°F); RH max 100%	
	Dimensions	163 x 40 x 26 mm (6.4 x 1.6 x 1.0")	
	Weight	100 g (3.5 oz.)	
Ordering Information	HI98127 (pHep®4) and HI98128 (pHep®5) are supplied with HI73127 pH electrode, HI73128 electrode removal tool, batteries and instructions.		



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#### HI98111 PICCOLO® · HI98112 PICCOLO® 2 HI98113 PICCOLO® plus

# Stick pH Tester

- Pre-amplified electrode
- Narrow, replaceable probe
- Easy to hold and operate

PICCOLO® is a revolutionary pH meter with a 4-in-1 amplified electrode.

Conventional pH meters are susceptible to the weak, high impedance signal which makes the electrode, connector, cable and meter vulnerable to noise, humidity and dirty environments. PICCOLO® has overcome these problems with a pre-amplified electrode that delivers a strong signal to the meter. The interchangeable electrode is inexpensive, rugged and houses the pH sensor, reference system, temperature sensor and the amplifier module.

**PICCOLO®** with a 9 cm (3.5") electrode (HI1280).

**PICCOLO® 2** with a 16 cm (6.3") electrode (HI1290).

**PICCOLO® plus** with a 16 cm (6.3") electrode (HI1295) and temperature readout on LCD.

Specifications		HI98111 (PICCOLO®)	HI98112 (PICCOLO®2)	HI98113 (PICCOLO® plus)		
рН	Range	1.00 to 13.00 pH	1.00 to 13.00 pH	1.00 to 13.00 pH; 0.0 to 70.0°C		
	Resolution	0.01 pH	0.01 pH	0.01 pH; 0.1°C		
	Accuracy (@25°C/77°F)	±0.01 pH	±0.01 pH	±0.01 pH; ±1°C		
	Electrode	HI1280	HI1290	HI1295		
	Calibration	manual, two-point	manual, two-point	manual, two-point		
Additional Specifications	Temperature Compensation	automatic, 0 to 70°C (32 to 150°F)				
	Battery Type / Life	1.5V (3) / approximately 100 hours of continuous use				
	Environment	0 to 50°C (32 to 122°F); RH max 95%				
	Dimensions (with electrode)	194 x 29 x 15 mm (7.6 x 1.1 x 0.6")	265 x 29 x 15 mm (10.4 x 1.1 x 0.6")	265 x 29 x 15 mm (10.4 x 1.1 x 0.6")		
	Weight	70 g (2.5 oz.)				
Ordering Information	All PICCOLO® models are supplied complete with pH electrode, pH 4.01 and pH 7.01 buffer solution sachets, calibration screwdriver, batteries, rugged carrying case and instructions.					
	HI98111 (PICCOLO®) is supplied with 90 mm (3.5") HI1280 amplified pH electrode. HI98112 (PICCOLO®2) is supplied with 160 mm (6.3") HI1290 amplified pH electrode.					
	<b>HI96112</b> (PICCOLO $^{\circ}$ ) is supplied with HI295 amplified electrode with temperature sensor.					
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#### HI98106 Champ<sup>®</sup> · HI98107 pHep<sup>®</sup> HI98108 pHep<sup>®</sup> +

# pHep pH Tester

- Renewable junction
- Easy one or two-point manual calibration
- 700 hour battery life
- Simple to use
- Economical

The pHep® revolutionized the pH industry by providing non-technical personnel with a simple, inexpensive solution to accurate pH measurement.

The HI98107 is used by millions of people around the world to monitor pH in laboratories and industrial applications as well as in agriculture, fish farming, food manufacturing and quality control, swimming pools and the printing industry.

With a renewable cloth junction, the pHep® has an extended life over typical pH testers. A normal junction clogs with use over time and a typical tester would normally have to be thrown away once the junction becomes contaminated. the HI98107 junction is 2 cm long and when dirty, can be pulled out to expose a fresh section to effectively renew the pHep's life.

Calibration is performed manually at one or two points with a trimmer located on the side of the tester.

With a battery life of 700 hours of continuous use, the pHep® will provide years of testing before the batteries need to be replaced.



Specifications		HI98106 (Champ®)	HI98107 (pHep®)	HI98108 (pHep®+)
рН	Range	0.0 to 14.0 pH	0.0 to 14.0 pH	0.0 to 14.0 pH
	Resolution	0.1 pH	0.1 pH	0.1 pH
	Accuracy (@25°C/77°F)	±0.2 pH	±0.1 pH	±0.1 pH
Additional Specifications	Calibration	manual, one-point	manual, two-point	manual, one-point
	Temperature Compensation	-	-	automatic from 0 to 50°C
	Battery Type / Life	1.5V (4) / approximately 800 hours of continuous use	1.5V (4) / approximately 700 hours of continuous use	1.5V (4) / approximately 200 hours of continuous use
	Environment	0 to 50°C (32 to 122°F); RH max 95%	0 to 50°C (32 to 122°F); RH max 95%	0 to 50°C (32 to 122°F); RH max 95%
	Dimensions	175 x 41 x 23 mm (6.9 x 1.6 x 0.9")	175 x 41 x 23 mm (6.9 x 1.6 x 0.9")	175 x 41 x 23 mm (6.9 x 1.6 x 0.9")
	Weight	78 g (2.7 oz.)	95 g (3.4 oz.)	95 g (3.4 oz.)
Ordering Information	HI98106 (Champ®), HI9 batteries and instruction	<b>8107</b> (рНер®), <b>НІЭВ108</b> (рНер®+) are sup ıs.	plied with protective cap, calibration scr	ewdriver,

