



IP67  
waterproof

Bluetooth



Hanna Lab App  
Compatible

HI97115

## Marine Master Waterproof Wireless Multiparameter Photometer

*Measure pH, Alkalinity, Ammonia, Calcium, Magnesium, Nitrate LR, Nitrate HR, Nitrite ULR, and Phosphate ULR*

The HI97115 is a compact and versatile Marine multiparameter photometer designed to accurately determine pH, Alkalinity, Ammonia, Calcium, Magnesium, Nitrate, Nitrite, and Phosphate levels in aquariums and marine biology applications. The HI97115 is suitable for field and bench measurements.

The HI97115 can be used as a stand-alone photometer or can be connected to the Hanna Lab App with a compatible smart device via the integrated Bluetooth module. When connected, Hanna Lab App functions include measurement with the ability to add notes, data logging with extended storage capacity, data sharing, and the ability to create and save method groups.



Samples can be named along with annotations



The Hanna Lab App is available on the App Store® and on Google Play.

## Hanna Lab App

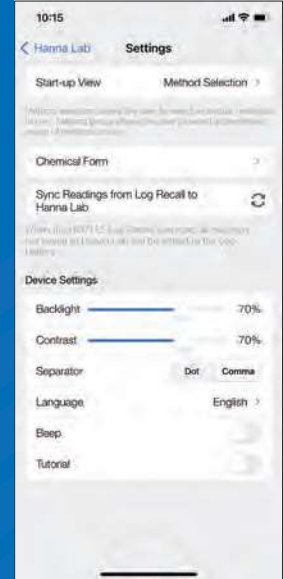
When the photometer is paired with a compatible smart device, the Hanna Lab App adds an enhanced user experience to the HI97115. Features include: measurement with the ability add notes, data logging with extended storage capacity, data sharing, and the ability to create and save method groups.



View logged detail with date and time



Share logged data in various formats



Control meter settings within the Hanna Lab App

### Backlit LCD

The 128 x 64 pixel LCD allows for a simplified user interface.

### Method and Parameter

Chosen parameter and method used are displayed along with the reading.

### Battery status indicator and auto-shut off

The auto-off feature automatically shuts off the meter after 15 minutes of inactivity in order to conserve battery life.

### Large cuvette size

The sample cell fits a round, glass cuvette with a 25 mm path length. The relatively long path length of the sample cuvette allows the light to pass through more of the sample solution, ensuring accurate measurements even in low absorbance samples. The cuvette holder features ridges to protect scratching of the optical path by the cuvette.

### Virtual keys

### Compact size

Measures 142.5 mm (5.6") x 102.5 mm (4") and only 50.5 mm (2") thick.

### Menu available at the touch of a button

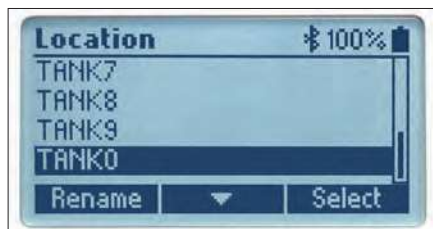
### Dedicated help

A dedicated help key provides information relating to the current meter operation, and can be used at any stage in the setup or measurement process to show contextual help.

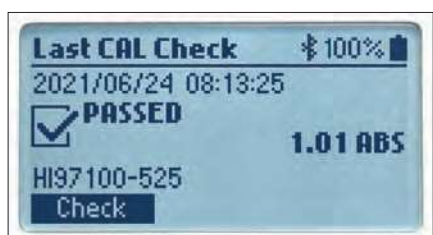




Waterproof and floating IP67 meter design



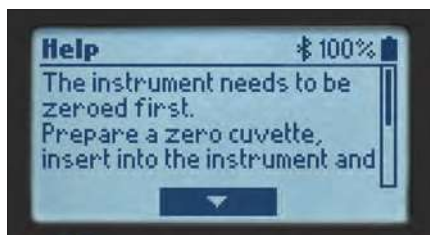
Option to select measurement location for better tracking consistency



CAL Check™ validation and calibration

Validate instrument performance at any time using Hanna® CAL Check cuvettes certified against NIST-traceable reference instrument(s). The CAL Check screen guides the user step-by-step through the validation process and user calibration.

GLP data displays the last calibration date.



Backlit LCD and on-screen help



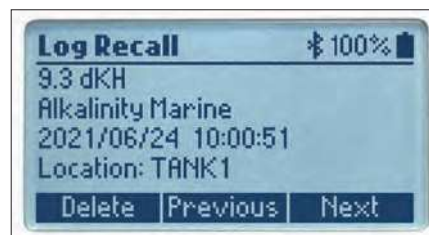
Built-in reaction timer that ensures consistency between tests.



On-screen tutorial mode with animations

The built-in tutorial mode guides users step-by-step through the measurement process. It includes all steps required for sample preparation, the required reagents, and quantities.

Tutorial mode can be enabled or disabled from the setup menu.



Includes auto-data logging features to easily record water testing results

The instrument features a data autolog function to help users keep track of all measurements. Every time a measurement is made the data is automatically saved.

The data log can hold 200 individual measurements (data points). When the log is full, the instrument rewrites the oldest data point.



Positive locking system

The Hanna positive-locking system ensures cuvettes are placed into the holder in the same position every time.

#### Specifications

HI97115 pH, Alkalinity, Ammonia, Calcium, Magnesium, Nitrate LR, Nitrate HR, Nitrite ULR, and Phosphate ULR

Marine pH	Range	6.3 to 8.6 pH
	Resolution	0.1 pH
	Accuracy	±0.2 pH of reading at 25 °C
	Method	colorimetric adaptation of the Phenol Red Method
	LED	525 nm
Marine Alkalinity	Range	0.0 to 20.0 dKH
	Resolution	0.1 dKH
	Accuracy	±0.3 dKH ±5% of reading at 25 °C
	Method	Colorimetric Method
	LED	610 nm
Marine Ammonia	Range	0.00 to 2.50 ppm (as NH <sub>3</sub> )
	Resolution	0.01 ppm
	Accuracy	±0.05 ppm ±5% of reading at 25 °C
	Method	adaptation of the Salicylate Method
	LED	610 nm

Marine Calcium	Range	200 to 600 ppm
	Resolution	1 ppm
	Accuracy	±6% of reading at 25 °C
	Method	adaptation of the Zincon Method
Marine Magnesium	LED	610 nm
	Range	1000 to 1800 ppm (as Mg <sup>2+</sup> )
	Resolution	5 ppm
	Accuracy	±5% of reading at 25 °C
Marine Nitrate LR	Method	adaptation of the Colorimetric EDTA Method using calmagite indicator
	LED	610 nm
	Range	0.00 to 5.00 ppm (as NO <sub>3</sub> <sup>-</sup> )
	Resolution	0.01 ppm
Marine Nitrate HR	Accuracy	±0.25 ppm ±2% of reading at 25 °C
	Method	Zinc Reduction Method
	LED	525 nm
	Range	0.0 to 75.0 ppm (as NO <sub>3</sub> <sup>-</sup> )
Marine Nitrite ULR	Resolution	0.1 ppm
	Accuracy	±2.0 ppm ±5% of reading at 25 °C
	Method	Zinc Reduction Method
	LED	525 nm
Marine Phosphate ULR	Range	0 to 200 ppb (as NO <sub>2</sub> <sup>-</sup> -N)
	Resolution	1 ppb
	Accuracy	±10 ppb ±4% of reading at 25 °C
	Method	adaptation of the EPA Diazotization Method 354.1
Measurement system	LED	525 nm
	Range	0.00 to 0.90 ppm
	Resolution	0.01 ppm
	Accuracy	±0.02 ppm ±5% of reading at 25 °C
Additional Specifications	Method	adaptation of Standard Methods for the Examination of Water and Wastewater, 20th Edition, Ascorbic Acid Method
	LED	610 nm
	Light source	Light Emitting Diode (LED)
	Bandpass filter	wavelength 525 nm & 610 nm bandwidth 8 nm wavelength accuracy ±1.0 nm
Additional Specifications	Light detector	silicon photocell
	Cuvette Type	round 24.6 mm diameter (22 mm inside diameter)
	Auto logging	200 readings
	Display	128 x 64 pixel B/W LCD with backlight
	Auto-off	after 15 minutes of inactivity (after 30 minutes of inactivity if a Zero has been done but not a Read)
	Battery type / Life	alkaline 1.5 V AA (3) / > 800 measurements (without backlight)
	Environment	0 to 50 °C (32 to 122 °F); 0 to 100% RH, non-serviceable
	Dimensions	142.5 x 102.5 x 50.5 mm (5.6 x 4.0 x 2.0")
	Weight	380 g (13.4 oz.); with batteries
	Casing	IP67 rating, floating

**HI97115** is supplied with sample cuvette (2 pcs.), sample cuvette cap (2 pcs.), 1.5V AA alkaline batteries (3 pcs.), instrument quality certificate, and quick reference guide with QR code for instruction manual download.

CAL Check standards and testing reagents sold separately

**HI97115C** and **HI97115UC** (ordering code for USA) is delivered in a rugged carrying case and is supplied with sample cuvette (2 pcs.), sample cuvette cap (2 pcs.), marine pH reagent, 30 mL dropper (1 pc.), Marine Alkalinity reagent, 30 mL bottle (1 pc.), Marine Ammonia starter kit - reagent A and C, 30 mL dropper (2 pcs., 1 of each), reagent B (reagent for 25 tests), Marine Calcium starter kit - reagent A, 30 mL bottle (1 pc.), reagent B (reagent for 25 tests), Marine Magnesium starter kit - reagent A, 120 mL bottle (1 pc.), Magnesium Indicator reagent (for 25 tests), Marine Nitrate High Range reagent (reagent for 25 tests), Marine Nitrite Ultra Low Range reagent (reagent for 25 tests), Marine Phosphate Ultra Low Range reagent (reagent for 25 tests), 1 mL graduated syringe with tip (2 pcs.), minipipette with tip (1 pc.), 3 mL Pasteur pipette (2 pcs.), 5 mL syringe (black printing) and tip (1 pc.), 5 mL syringe (blue printing) and tip (1 pc.), 1.5V AA Alkaline batteries (3 pcs.), cloth for wiping cuvettes, scissors, instrument quality certificate, and quick reference guide with QR code for instruction manual download.

CAL Check standards sold separately. Nitrate LR testing reagent not included.

### Ordering Information

### Reagents, Standards, and Accessories

<b>HI97105-11</b> CAL Check standard cuvettes for HI97105	<b>HI783-25</b> marine magnesium reagent - 25 tests
<b>HI758-26</b> marine calcium reagent - 25 tests	<b>HI784-25</b> marine ammonia reagent - 25 tests
<b>HI758U-26</b> marine calcium reagent - 25 tests (ordering code for USA)	<b>HI740270</b> 10 mL syringe with Luer Lock (1 pc.)
<b>HI764-25</b> marine nitrite ULR - 25 tests	<b>HI740271</b> Filter holder with Luer Lock (1 pc.)
<b>HI772-26</b> marine alkalinity reagent - 25 tests	<b>HI740272</b> 16 gauge blunt needle (6 pcs.)
<b>HI774-25</b> marine phosphate ULR reagent - 25 tests	<b>HI740273</b> marine nitrate LR measurement kit (1 pc.)
<b>HI780-25</b> marine pH reagent - approximately 100 tests	<b>HI740228</b> Filter disc (25 pcs.)
<b>HI781-25</b> marine nitrate LR reagent - 25 tests	<b>HI731360</b> glass cuvette with cap (2 pcs.)
<b>HI782-25</b> marine nitrate HR reagent - 25 tests	<b>HI7101419</b> blue carrying case for Marine Master photometer