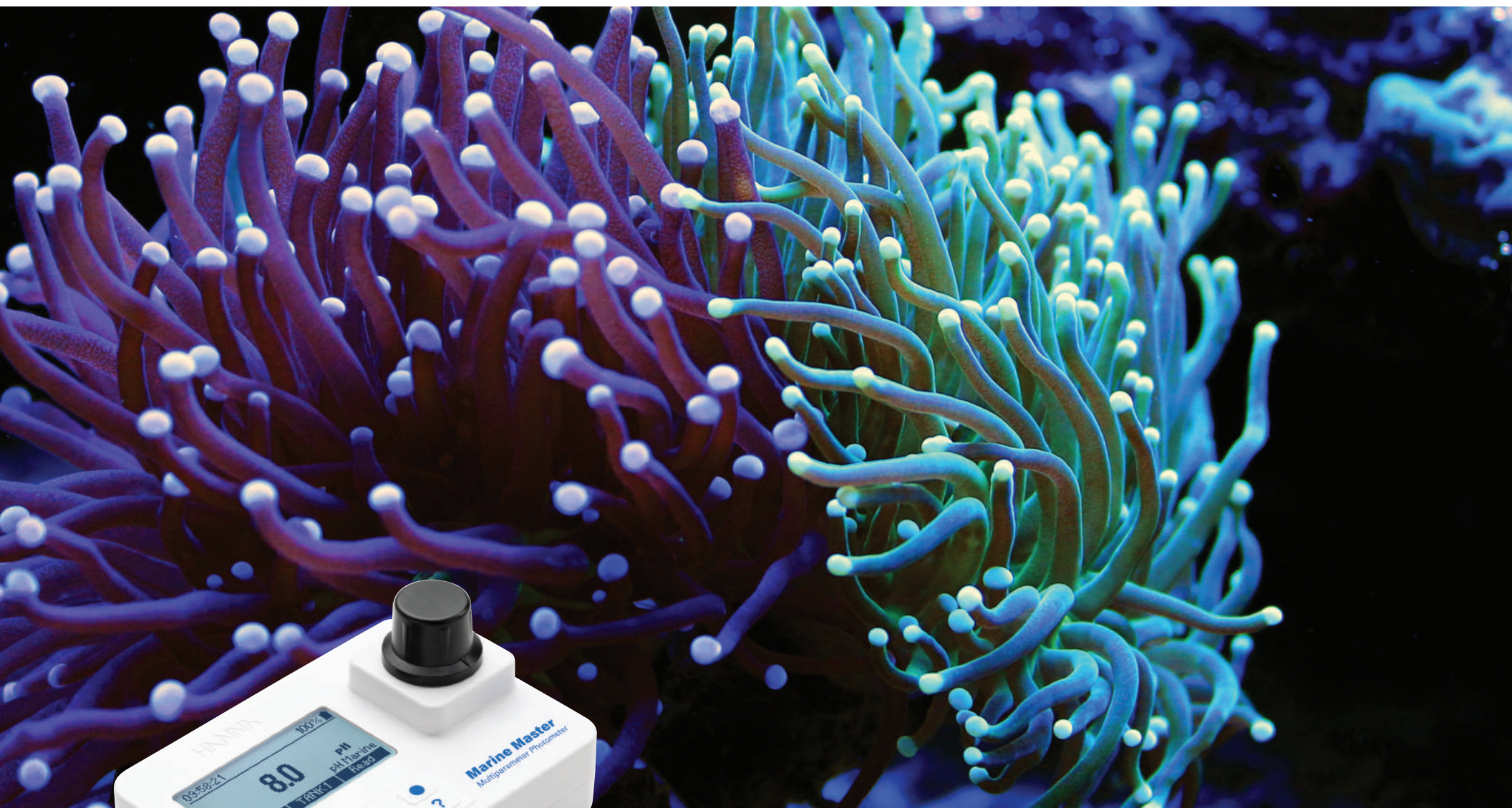




HI97105

Marine Master Multiparameter Photometer





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Marine Master Multiparameter Photometer

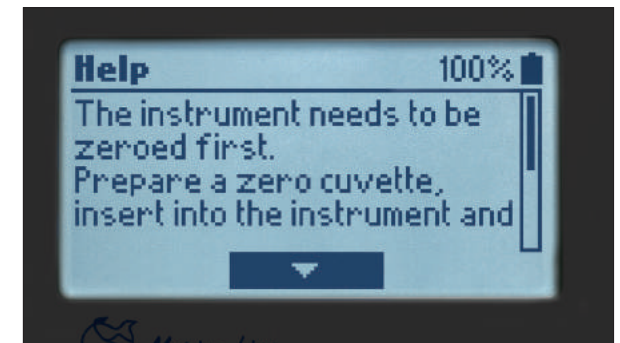
pH, Alkalinity, Calcium, Nitrate Low Range,
Nitrate High Range, Nitrite Ultra Low Range,
Phosphate Ultra Low Range

The HI97105 Marine Master is a compact and versatile Marine multiparameter photometer designed to accurately determine pH, Alkalinity, Calcium, Nitrate, Nitrite, and Phosphate levels in aquariums and marine biology applications.

Precise and advanced LED optical system

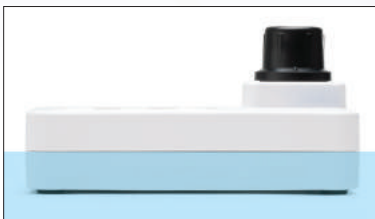
Innovative optical design that utilizes a reference detector and focusing lens to eliminate errors from changes in the light source and from imperfections in the glass cuvette.

LEDs have a much higher luminous efficiency, providing more light while using less power. They also produce little heat, which could otherwise affect electronic stability.

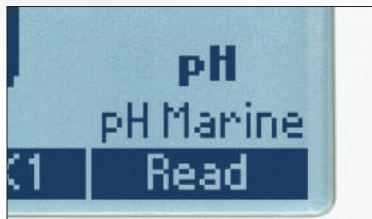


Backlit LCD

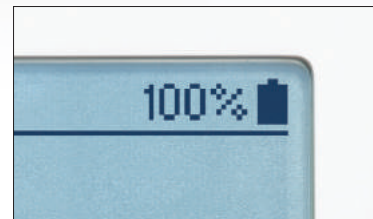
The backlit LCD allows for a simplified user interface with virtual keys and on-screen help to guide the user through use of the meter.



Waterproof and floating
IP67 meter design

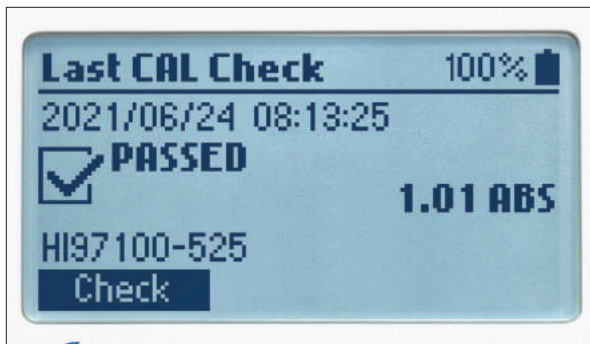


Unit of measure is displayed
along with reading



Battery status indicator
and auto-shut off

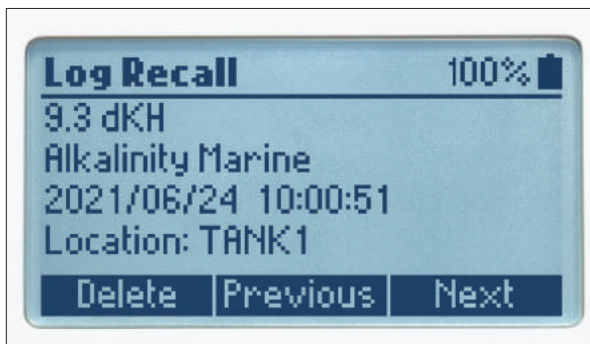




CAL Check™ validation and calibration

Validate instrument performance at any time using CAL Check cuvettes made with NIST traceable standards. The CAL Check screen guides the user step-by-step through the validation process and user calibration.

GLP data displays the last calibration date.



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. When the data log is full (200 data points), the meter will rewrite the oldest data point.

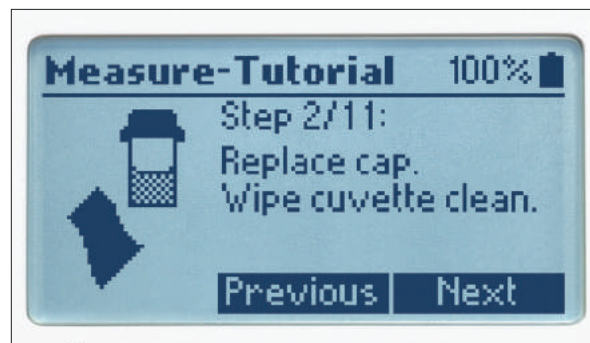
Consolidates testing needs into one unit using the same reagents



Option to select measurement location for better tracking consistency



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.



Error messages on display

Alerts to problems including no cap, high zero, and standard too low



Positive locking system

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



Specifications

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; 0 to 357 ppm (as CaCO ₃)
	Resolution	0.1 dKH
	Accuracy	±0.3 dKH ±5% of reading at 25 °C ±5 ppm ±5% of reading at 25 °C
	Method	colorimetric 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
	LED	610 nm
Marine Nitrate LR	Range	0.00 to 5.00 ppm (as NO ₃ ⁻)
	Resolution	0.01 ppm
	Accuracy	±0.25 ppm ±2% of reading at 25 °C
	Method	colorimetric method
	LED	525 nm
Marine Nitrate HR	Range	0.0 to 75.0 ppm (as NO ₃ ⁻)
	Resolution	0.1 ppm
	Accuracy	±2.0 ppm ±5% of reading at 25 °C
	Method	zinc reduction method
	LED	525 nm
Marine Nitrite ULR	Range	0 to 200 ppb (as NO ₂ ⁻ -N)
	Resolution	1 ppb
	Accuracy	±10 ppb ±4% of reading at 25 °C
	Method	adaptation of the EPA Diazotization Method 354.1
	LED	525 nm
Marine Phosphate ULR	Range	0.00 to 0.90 ppm
	Resolution	0.01 ppm
	Accuracy	±0.02 ppm ±5% of reading at 25 °C
	Method	adaptation of Standard Methods for the Examination of Water and Wastewater, 20th Edition, Ascorbic Acid Method
	LED	610 nm

Measurement system	Light source	Light Emitting Diode (LED)
	Bandpass filter	wavelength 525 nm & 610 nm bandwidth 8 nm wavelength accuracy ±1.0 nm
	Light detector	silicon photocell
	Cuvette Type	round 24.6 mm diameter (22 mm inside diameter)
	Auto logging	200 readings
Additional Specifications	Display	128 x 64 pixel B/W LCD with backlight
	Auto-off	after 15 minutes of inactivity (30 minutes before a READ measurement)
	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

Ordering Information

HI97105 is supplied with sample cuvette (2 pcs.), sample cuvette cap (2 pcs.), 1.5V AA alkaline batteries (3 pcs.), instrument quality certificate, and instruction manual.

CAL Check standards and testing reagents sold separately

HI97105C includes photometer, sample cuvette (2 pcs.), sample cuvette cap (2 pcs.), marine pH reagent, 30 mL dropper (1 pc.), marine alkalinity reagent, 5 mL (1 pc.), marine calcium reagent A, 35 mL (1 pc.), marine calcium reagent B starter kit (reagent for 25 tests), marine nitrate high range starter kit (reagent for 25 tests), marine nitrite ultra low range starter kit (reagent for 25 tests), marine phosphate ultra low range starter kit (reagent for 25 tests), 1 mL graduated syringe with tip (2 pcs.), minipipette with tip (1 pc.), 3 mL Pasteur pipette (1 pc.), 1.5V AA alkaline batteries (3 pcs.), cloth for wiping cuvettes, scissors, instrument quality certificate, and instruction manual in a rugged carrying case.

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

Reagents, Standards, and Accessories	HI97105-11 CAL Check standard cuvettes
	HI758-26 marine calcium reagent - 25 tests
	HI758U-26 marine calcium reagent - 25 tests (ordering code for USA)
	HI764-25 marine nitrite ULR reagent - 25 tests
	HI772-26 marine alkalinity reagent - 25 tests
	HI774-25 marine phosphate ULR reagent - 25 tests
	HI780-25 marine pH Reagent - approx. 100 tests
	HI740273 marine nitrate LR measurement kit (1 pc.)
	HI781-25 marine nitrate LR Reagent - 25 tests
	HI782-25 marine nitrate HR reagent - 25 tests
	HI740270 10 mL syringe with Luer Lock (1 pc.)
	HI740271 Filter holder with Luer Lock (1 pc.)
	HI740272 16 gauge blunt needle (6 pcs.)
	HI740228 Filter disc (25 pcs.)
	HI7101418 Blue carrying case for HI97105C



HI97105C with Custom Carrying Case

Reagents and Accessories for 6 Parameters Included!

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