HI97771

Free Chlorine and Total Chlorine UHR Portable Photometer

- 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.
- CAL Check™
  - 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.
- On-screen tutorial mode with animations
  - Guides users step-by-step through the measurement process
- Waterproof and floating IP67 case
- Unit of measure is displayed along with reading
- Built-in timer
  - Built-in reaction timer that ensures consistency between tests.
- Error messages on display
  - Alerts to problems including no cap, high zero, and standard too low
- GLP data
  - Displays the last calibration date.
- Auto logging
- Battery status indicator
- Auto-shut off

Significance of Use

As one of the most common forms of disinfectants used, chlorine improves water quality by destroying disease-producing microorganisms and by reacting with other organic and inorganic substances. Chlorine levels must be actively monitored to ensure sufficient chlorine is present for disinfection, as well as to control adverse effects such as taste, odor, and potential reactions with organic matter to form harmful disinfection byproducts.

Specifications		HI97771 Free Chlorine and Total Chlorine UHR
Free Chlorine (powder and liquid)	Range	0.00 to 5.00 mg/L (as Cl_2)
	Resolution	0.01 mg/L
	Accuracy @25°C (77°F)	±0.03 mg/L ±3% of reading at 25°C
	Method	Adaptation of the EPA DPD method 330.5
Total Chlorine Ultra High Range	Range	0 to 500 mg/L (as Cl_2)
	Resolution	1 mg/L
	Accuracy @25°C (77°F)	±3 mg/L ±3% of reading at 25 °C
	Method	adaptation of the Standard Methods for Examination of Water and Wastewater, 20th edition, 4500-Cl.
Measurement System	Light Source	light emitting diode
	Bandpass filter	525 nm
	Bandpass filter bandwidth	8 nm
	Bandpass filter wavelength accuracy	±1.0 nm
	Light Detector	silicon photocell
	Cuvette type	round 24.6 mm diameter (22 mm inside)
Additional Specifications	Auto logging	50 readings
	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.)
Ordering Information	**HI97771** is supplied with sample cuvettes (2), sample caps (2), plastic stoppers (2), 1.5V AA batteries (3), instrument quality certificate, and instruction manual. CAL Check standards and testing reagents sold separately **HI97771C** includes photometer, CAL Check standards, sample cuvettes (2), sample caps (2), plastic stoppers (2), 1.5V AA batteries (3), cuvette wiping cloth, scissors, CAL Check standard certificate, instrument quality certificate, instruction manual, and HI7101412 rigid carrying case. Reagents sold separately	
Reagents and Standards	HI97771	**HI97701-11** CAL Check standard cuvettes for free and total chl orine
		HI93701-01 free chlorine powder reagent for 100 tests
		HI93701-03 free chlorine powder reagent for 300 tests
		HI93701-F free chlorine liquid reagent for 300 tests
		HI97771-11 CAL Check standard cuvettes for total chlorine UHR
		HI95771-01 total chlorine UHR reagent for 100 tests
		HI95771-03 total chlorine UHR reagent for 300 tests