

HI97711

# Free and Total Chlorine 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		HI97711 Free and Total Chlorine
Measurement	Range (all methods)	0.00 to 5.00 mg/L (as Cl <sub>2</sub> )
	Resolution (all methods)	0.01 mg/L
	Accuracy @25°C (77°F) (all methods)	±0.03 mg/L ±3% of reading at 25 °C
	Method	adaptation of US EPA method 330.5, DPD Colorimetric method
Measurement System	Light Source	light emitting diode
	Bandpass filter	525 nm
	Bandpass filter bandwidth	8 nm
	Bandpass filter wavelength accuracy	±1.0 nm
Additional Specifications	Light Detector	silicon photocell
	Cuvette type	round 24.6 mm diameter (22 mm inside)
	Auto logging	50 readings
	Display	128 x 64 pixel B/W LCD with backlight
Additional Specifications	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	<b>HI97711</b> is supplied with sample cuvettes (2), sample caps (2), plastic stoppers (2), 1.5V AA batteries (3), instrument quality certificate, and instruction manual. <small>CAL Check standards and testing reagents sold separately</small>	
	<b>HI97711C</b> 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. <small>Reagents sold separately</small>	
Reagents and Standards	HI97711	<b>HI97701-11</b> CAL Check standard cuvettes for free and total chlorine
		<b>HI93701-01</b> free chlorine powder reagent for 100 tests
		<b>HI93701-03</b> free chlorine powder reagent for 300 tests
		<b>HI93701-F</b> free chlorine liquid reagent for 300 tests
		<b>HI93711-01</b> total chlorine powder reagent for 100 tests
		<b>HI93711-03</b> total chlorine powder reagent for 300 tests
		<b>HI93701-T</b> total chlorine liquid reagent for 300 tests