HI97712

Aluminum 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

Specifications		HI97712 Aluminum
Measurement	Range	0.00 to 1.00 mg/L (ppm) (as Al^{3+})
	Resolution	0.01 mg/L (ppm)
	Accuracy @25°C (77°F)	±0.04 mg/L ±4% of reading
	Method	adaptation of the aluminon method
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	**HI97712** 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 **HI97712C** 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	HI97712	**HI97712-11** CAL Check standard cuvettes for aluminum
		HI93712-01 aluminum reagents for 100 tests
		HI93712-03 aluminum reagents for 300 tests

Significance of Use

Due to its vast occurrence in minerals, rocks and clays, aluminum is present in nearly all natural water as a soluble salt, a colloid, or an insoluble compound. These forms of aluminum may also appear in treated water and wastewater due to its use during coagulation processes. When concentrations are greater than 0.2 mg/L, water will be colored, but cause no significant human health effects.

See page 10.114 for standard reagents; see page 10.115 for CAL Check kits; see page 10.52 for general accessories