HI97748 • HI97709

Manganese, Low and High Range Portable Photometers

- 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		HI97748 Manganese LR	HI97709 Manganese HR
Measurement	Range	0 to 300 µg/L (as Mn)	0.0 to 20.0 mg/L (as Mn)
	Resolution	1 µg/L	0.1 mg/L
	Accuracy @25°C (77°F)	±10 µg/L ±3% of reading at 25°C	±0.2 mg/L ±3% of reading at 25°C
	Method	Adaptation of the PAN Method	adaptation of Standard Methods for the Examination of Water and Wastewater, 18th Edition, Periodate Method
Measurement System	Light Source	light emitting diode	
	Bandpass filter	575 nm	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	**HI97748** and **HI97709** 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 **HI97748C** and **HI97709C** 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 rigid carrying case. Reagents sold separately		
Reagents and Standards	HI97748	**HI97748-11** CAL Check standard cuvettes for manganese LR	
		HI93748-01 manganese LR reagents for 50 tests	
		HI93748-03 manganese LR reagents for 150 tests	
	HI97709		**HI97709-11** CAL Check standard cuvettes for manganese HR
			HI93709-01 manganese HR reagents for 100 tests
			HI93709-03 manganese HR reagents for 300 tests

See page 10.102 for standard reagents; see page 10.103 for CAL Check kits; see page 10.46 for general accessories