

HI97742

# Iron Low Range and Manganese Low Range 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	HI97742	
Iron LR	Range	0.00 to 1.60 mg/L (ppm)
	Resolution	0.01 mg/L
	Accuracy @25°C (77°F)	±0.01 mg/L ±8% or reading
	Method	adaptation of the TPTZ method
Manganese LR	Range	0 to 300 µg/L (as Mn)
	Resolution	0.01 µg/L
	Accuracy @25°C (77°F)	±10 µg/L ±3% of reading at 25°C
Measurement System	Method	adaptation of the 1-(2-pyridylazo)-2-nphtol PAN method
	Light Source	light emitting diode
	Bandpass filter	575 nm
	Bandpass filter bandwidth	8 nm
Additional Specifications	Bandpass filter wavelength accuracy	±1.0 nm
	Light Detector	silicon photocell
Ordering Information	Cuvette type	round 24.6 mm diameter (22 mm inside)
	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.)	
Reagents and Standards	<b>HI97742</b> 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	
	HI97742	<b>HI97742-11</b> CAL Check standard cuvettes for iron LR
		<b>HI93746-01</b> iron LR reagents for 50 tests
		<b>HI93746-03</b> iron LR reagents for 150 tests
		<b>HI97748-11</b> CAL Check standard cuvettes for manganese LR
		<b>HI93748-01</b> manganese LR reagents for 50 tests
<b>HI93748-03</b> manganese LR reagents for 150 tests		