

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 | |
| Additional Specifications | 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.) | | |

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

Ordering Information

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 | HI97709 |
|------------------------|--|---------|
| | 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 | |
| | HI97709-11 CAL Check standard cuvettes for manganese HR | |
| | HI93709-01 manganese HR reagents for 100 tests | |
| | HI93709-03 manganese HR reagents for 300 tests | |