

HI97734

Free and Total Chlorine HR 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

Chlorine is one of the most cost-effective disinfectants used in a variety of different applications. Its use varies from light application in surface sanitation, to heavy duty disinfection of medical devices, to removal of microorganism infections in piping systems. The advantage of using chlorine over peroxide-type disinfectants is that chlorine is not only a strong oxidant, it also is capable of breaking tough chemical bonds found in cell walls or biofilms. Correct and effective use of chlorine helps to destroy disease-causing pathogens, reduce odors, and eliminate bacteria.

| Specifications | | HI97734 Free and Total Chlorine HR |
|---------------------------|---|--|
| Chlorine | Range (all methods) | 0.00 to 10.00 mg/L (as Cl ₂) |
| | 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 EPA DPD method 330.5 |
| 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 |
| 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.) | |
| Ordering Information | HI97734 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> | |
| | HI97734C 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 certificates, instrument quality certificate, instruction manual, and HI7101412 rigid carrying case. <small>Reagents sold separately</small> | |
| Reagents and Standards | HI97734 | HI97734-11 CAL Check standard cuvettes for free and total chlorine HR |
| | | HI93734-01 free and total chlorine HR reagent for 100 tests |
| | | HI93734-03 free and total chlorine HR reagent for 300 tests |