

HI97753

# Chloride 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

As one of the major inorganic anions in water and wastewater, chloride is often measured in a variety of industries. Due to its corrosive nature, chloride levels are monitored in boiler systems and cooling towers to prevent metal parts from being damaged. Not known to be toxic to humans, chloride is monitored in drinking water for aesthetic purposes due to its negative affect on taste. However, chloride can be toxic to plant life. Chloride may be monitored in agricultural applications in certain areas of the world where salinity levels are known to be naturally high.



| Specifications            | HI97753 Chloride   |   |
|---------------------------|--|---|
| Measurement               | Range  | 0.0 to 20.0 mg/L (ppm) ( as Cl <sup>-</sup> )   |
|                           | Resolution   | 0.1 mg/L  |
|                           | Accuracy @25°C (77°F)  | ±0.5 mg/L ±6% of reading  |
| Measurement System        | Method   | adaptation of the mercury (II) thiocyanate method   |
|                           | Light Source   | light emitting diode  |
|                           | Bandpass filter  | 466 nm  |
|                           | Bandpass filter bandwidth  | 8 nm  |
|                           | Bandpass filter wavelength accuracy  | ±1.0 nm   |
|                           | Light Detector   | silicon photodiode  |
| 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)   |
| Ordering Information      | 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.)  |
|                           |  | <b>HI97753</b> is supplied with sample cuvettes (2), sample caps (2), plastic stoppers (2), 1.5V AA batteries (3), instrument quality certificate, and instruction manual.<br><small>CAL Check standards and testing reagents sold separately</small> |
|                           | <b>HI97753C</b> includes photometer, CAL Check standards, sample cuvettes (2), sample caps (2), plastic stoppers (2), 1.5V AA batteries (3), cuvette wiping cloth, CAL Check standard certificate, instrument quality certificate, instruction manual, and HI7101412 rigid carrying case,<br><small>Reagents sold separately</small> |   |
| Reagents and Standards    | HI97753  | <b>HI97753-11</b> CAL Check standard cuvettes for chloride  |
|                           |  | <b>HI93753-01</b> chloride reagents for 100 tests   |
|                           |  | <b>HI93753-03</b> chloride reagents for 300 tests   |