



HI97731

## Zinc 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

Zinc is normally introduced into drinking water through industrial effluents, especially due to dezincification of brass and deterioration of galvanized iron. In addition to drinking water, zinc is measured in surface finishing, boilers and cooling towers, water conditioning, and effluent waters

| Specifications            |                                     | HI97731 Zinc   |
|---------------------------|-------------------------------------|--|
| Measurement               | Range                               | 0.00 to 3.00 mg/L (ppm) (as Zn)  |
|                           | Resolution                          | 0.01 mg/L  |
|                           | Accuracy @25°C (77°F)               | ±0.03 mg/L ±3% of reading  |
|                           | Method                              | adaptation of the Standard Methods for the Examination of Water and Wastewater, 20th edition, Zincon method causes a brownish-green tint in the sample |
| Measurement System        | Light Source                        | light emitting diode   |
|                           | Bandpass filter                     | 575 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

**HI97731** 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

### Reagents and Standards

|         |  |
|---------|--|
| HI97731 | <b>HI97731-11</b> CAL Check standard cuvettes for zinc |
|         | <b>HI93731-01</b> zinc reagents for 100 tests          |
|         | <b>HI93731-03</b> zinc reagents for 300 tests          |