

HI97714

## Cyanide 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

The term "cyanide" refers to all of the CN groups in cyanide compounds that can be determined as the cyanide ion,  $\text{CN}^-$ . Originating in water primarily from metallurgical and galvanic industrial plants, cyanide is highly toxic to the human nervous system.



| Specifications            |   | HI97714 Cyanide  |
|---------------------------|---|--|
| Measurement               | Range   | 0.000 to 0.200 mg/L (ppm) (as $\text{CN}^-$ )  |
|                           | Resolution  | 0.001 mg/L   |
|                           | Accuracy @25°C (77°F)   | ±0.005 mg/L ±3% of reading   |
| Measurement System        | Method  | adaptation of the Standard Methods for the Examination of Water and Wastewater, 18th edition, Pyridine-Pyrazolone method |
|                           | Light Source  | light emitting diode   |
|                           | Bandpass filter   | 610 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      | HI97714 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>  |  |
|                           | HI97714C 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.<br><small>Reagents sold separately</small> |  |
| Reagents and Standards    | HI97714   | HI97714-11 CAL Check standard cuvettes for cyanide   |
|                           |   | HI93714-01 cyanide reagents for 100 tests  |
|                           |   | HI93714-03 cyanide reagents for 300 tests  |