

HI83326

## Multiparameter Photometer

with Digital pH Electrode Input  
for Pool and Spa Applications

The HI83326 benchtop photometer measures 12 different key water quality parameters using 14 different methods. This photometer features an innovative optical system that uses an LED, a narrow band interference filter, a focusing lens, and both a silicon photodetector for absorbance measurement and a reference detector to maintain a consistent light source to ensure accurate and repeatable photometric readings every time.

Made with the pool and spa industry in mind, a basic necessity of pool water treatment is to maintain the water in a safe and pleasant condition for the swimmers. In pool and spa water treatment, disinfection is essential to rid the pool of bacteria and control nuisance organisms like algae which may occur in the pool, spa, filtration equipment, or piping. There are a number of available disinfectant compounds including chlorine, bromine, and ozone. In order to achieve ideal water conditions, water requires testing on a daily and sometimes hourly basis to ensure there is enough residual disinfectant and to maintain pH levels. Equally important is calcium hardness and alkalinity; these levels should be monitored weekly to ensure the pool or spa water is well balanced to avoid corrosion and scale formation.

- **Advanced 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
- **Backlit 128 x 64 Pixel Graphic LCD Display**
  - Backlit graphic display allows for easy viewing in low light conditions
  - The 128 x 64 Pixel LCD allows for a simplified user interface with virtual keys and on-screen help to guide the user through use of the meter



- **Built-in Reaction Timer for Photometric Measurements**

- The measurement is taken after the countdown timer expires.
- Countdown timer ensures that all readings are taken at the appropriate reaction intervals regardless of user for better consistency in measurements

- **Absorbance mode**

- Hanna's exclusive CAL Check™ cuvettes for validation of light source and detector
- Allows for the user to plot concentration versus absorbance for a specific wavelength for use with user supplied chemistry or for teaching principles of photometry

- **Units of Measure**

- Appropriate unit of measure along with chemical form is displayed along with reading

- **Result Conversion**

- Automatically convert readings to other chemical forms with the touch of a button

- **Data Logging**

- Up to 1000 photometric and pH readings can be stored by simply pressing the dedicated LOG button. Logged readings are just as easily recalled by pressing the RCL button

- Sample ID and User ID information can be added to a logged reading using the alphanumeric keypad

- **Connectivity**

- Logged readings can be quickly and easily transferred to a flash drive using the USB-A host port or to a computer using the micro USB-B port
- Data is exported as a .CSV file for use with common spreadsheet programs

- **Cuvette Cover**

- Aids in preventing stray light from affecting measurements

- **Rechargeable Battery**

- Li-polymer rechargeable battery lasts for 500 measurements or 50 hours of pH measurement

- **Battery Status Indicator**

- Indicates the amount of battery life left

- **Error Messages**

- Photometric error messages
- pH calibration messages include clean electrode, check buffer and check probe



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- Digital pH Electrode Input

- Measure pH and temperature with a single probe
- Good Laboratory Practice (GLP) to track calibration information including date, time, buffers used, offset and slope for traceability
- pH CAL Check™ alerts user to potential problems during the calibration process
- Space saving having a pH meter and photometer built into one meter



Parameter	Range	Resolution	Accuracy	Wavelength	Method	Reagent Code
Alkalinity	0 to 500 mg/L (as CaCO <sub>3</sub> )	1 mg/L	±5 mg/L ±5% of reading at 25 °C	610 nm	Bromocresol Green	<b>HI775-26</b> Reagents for 25 tests
Bromine	0.00 to 8.00 mg/L (as Br <sub>2</sub> )	0.01 mg/L	±0.08 mg/L ±3% of reading at 25 °C	525 nm	Adaptation of the Standard Methods for the Examination of Water and Wastewater, 18th Edition, DPD Method	<b>HI93716-01</b> Reagents for 100 tests <b>HI93716-03</b> Reagents for 300 tests
Chlorine Dioxide	0.00 to 2.00 mg/L (as ClO <sub>2</sub> )	0.01 mg/L	±0.10 mg/L ±5% of reading at 25 °C	575 nm	Adaptation of the Chlorophenol Red Method	<b>HI93738-01</b> Reagents for 100 tests <b>HI93738-03</b> Reagents for 300 tests
Chlorine Dioxide (Rapid)	0.00 to 2.00 mg/L (as ClO <sub>2</sub> )	0.01 mg/L	±0.10 mg/L ±5% of reading at 25 °C	525 nm	Adaptation of Standard Methods for the Examination of Water and Wastewater, 18th Edition, 4500 ClO <sub>2</sub> D	<b>HI96779-01</b> Reagents for 100 tests <b>HI96779-03</b> Reagents for 300 tests
Chlorine, Free	0.00 to 5.00 mg/L (as Cl <sub>2</sub> )	0.01 mg/L	±0.03 mg/L ±3% of reading at 25 °C	525 nm	Adaptation of the EPA DPD Method 330.5	<b>HI93701-F</b> 300 tests (liquid) <b>HI93701-01</b> 100 tests (powder) <b>HI93701-03</b> 300 tests (powder)
Chlorine, Total	0.00 to 5.00 mg/L (as Cl <sub>2</sub> )	0.01 mg/L	±0.03 mg/L ±3% of reading at 25 °C	525 nm	Adaptation of the EPA DPD Method 330.5	<b>HI93701-T</b> 300 tests (liquid) <b>HI93711-01</b> 100 total tests (powder) <b>HI93711-03</b> 300 total tests (powder)
Copper High Range	0.00 to 5.00 mg/L (as Cu <sup>2+</sup> )	0.01 mg/L	±0.02 mg/L ±4% of reading at 25 °C	575 nm	Adaptation of the EPA Method	<b>HI93702-01</b> Reagents for 100 tests <b>HI93702-03</b> Reagents for 300 tests
Cyanuric Acid	0 to 80 mg/L (as CYA)	1 mg/L	±1 mg/L ±15% of reading at 25 °C	525 nm	Adaptation of the Turbidimetric Method	<b>HI93722-01</b> Reagents for 100 tests <b>HI93722-03</b> Reagents for 300 tests
Hardness, Calcium	0.00 to 2.70 mg/L (as CaCO <sub>3</sub> )	0.01 mg/L	±0.11 mg/L ±5% of reading at 25 °C	525 nm	Adaptation of the Standard Methods for the Examination of Water and Wastewater, 18th Edition, Calmagite Method	<b>HI93720-01</b> Reagents for 100 tests <b>HI93720-03</b> Reagents for 300 tests
Iron High Range	0.00 to 5.00 mg/L (as Fe)	0.01 mg/L	±0.04 mg/L ±2% of reading at 25 °C	525 nm	Adaptation of Standard Methods for the Examination of Water and Wastewater, 23rd Edition, 3500-Fe B, Phenanthroline Method	<b>HI93721-01</b> Reagents for 100 tests <b>HI93721-03</b> Reagents for 300 tests
Nitrate	0.0 to 30.0 mg/L (as NO <sub>3</sub> <sup>-</sup> -N)	0.1 mg/L	±0.5 mg/L ±10% of reading at 25 °C	525 nm	Adaptation of the Cadmium Reduction Method	<b>HI93728-01</b> Reagents for 100 tests <b>HI93728-03</b> Reagents for 300 tests
Ozone	0.00 to 2.00 mg/L (as O <sub>3</sub> )	0.01 mg/L	±0.02 mg/L ±3% of reading at 25 °C	525 nm	Colorimetric DPD Method	<b>HI93757-01</b> Reagents for 100 tests <b>HI93757-03</b> Reagents for 300 tests <b>HI93703-52</b> Reagents for 100 tests (Optional)
pH	6.5 to 8.5 pH	0.1 pH	±0.1 pH at 25 °C	525 nm	Adaptation of the Phenol Red Method	<b>HI93710-01</b> Reagents for 100 pH tests <b>HI93710-03</b> Reagents for 300 pH tests
Phosphate Low Range	0.00 to 2.50 mg/L (as PO <sub>4</sub> <sup>3-</sup> )	0.01 mg/L	±0.04 mg/L ±4% of reading at 25 °C	610 nm	Adaptation of the Ascorbic Acid Method	<b>HI93713-01</b> Reagents for 100 tests <b>HI93713-03</b> Reagents for 300 tests

#### Ordering Information

**HI83326-01** (115V) and **HI83326-02** (230V) is supplied with sample cuvette (4 pcs.), sample cuvette cap (4 pcs.), cloth for wiping cuvettes, scissors, 100 mL graduated beaker, USB cable, 5 Vdc power adapter, instrument quality certificate, and instruction manual.

#### Standards

**HI83326-11** CAL Check Cuvette Kit for HI83326