#### HI96104

# pH, Free and Total Chlorine and Cyanuric Acid Portable Photometer

#### CAL Check

- · Allows for performance verification and calibration of the meter using NIST traceable standards
- · Auto-shut off
- Built-in timer
  - Display of time remaining before a measurement is taken

Specifically designed for swimming pool and spa applications, the HI96104 measures pH, free and total chlorine and cyanuric acid content.

Hanna's portable photometers feature an advanced optical system; the combination of a special tungsten lamp, a narrow band interference filter, and silicon photodetector ensure accurate photometric readings every time. The Hanna exclusive CAL Check™ feature utilizes ready-made, NIST traceable standards to verify both meter validation and calibration. The exclusive cuvette locking system ensures that the cuvette is inserted into the measurement cell in the same position every time to maintain a consistent path length.

## Significance of Use

Chlorine is the most commonly used water disinfectant used by homeowners, hotels, and commercial businesses. In swimming pools, spas, and similar applications, cyanuric acid helps to stabilize chlorine and prevent its breakdown, especially in sunlight. Frequent testing of both cyanuric acid and pH helps to minimize chlorine consumption.

## Reagents and Standards

| HI96701-11 | CAL Check™ standard cuvettes<br>(free CI)       |  |
|------------|---|--|
| HI93701-01 | reagents for 100 tests (free CI)                |  |
| HI93701-03 | reagents for 300 tests (free CI)                |  |
| HI96710-11 | CAL Check™ standard cuvettes (pH)               |  |
| HI93710-01 | reagents for 100 tests (pH)                     |  |
| HI93710-03 | reagents for 300 tests (pH)                     |  |
| НІ96711-11 | CAL Check™ standard cuvettes<br>(total CI)      |  |
| HI93711-01 | reagents for 100 tests (total CI)               |  |
| HI93711-03 | reagents for 300 tests (total CI)               |  |
| HI96722-11 | CAL Check™ standard cuvettes<br>(cyanuric acid) |  |
| HI93722-01 | reagents for 100 tests<br>(cyanuric acid)       |  |
| HI93722-03 | reagents for 300 tests<br>(cyanuric acid)       |  |



### Specifications

### HI96104 pH, Chlorine and Cvanuric Acid

|                           | ni96104 pn, chiorine and cyanunc Acid  |   |  |
|---------------------------|--|---|--|
|                           | pH (P1)  | CI, Free (P2)   |  |
| Range                     | 6.5 to 8.5 pH  | 0.00 to 5.00 mg/L (ppm)   |  |
| Resolution                | 0.1 pH   | 0.01 mg/L under 3.50 mg/L;<br>0.10 mg/L above 3.50 mg/L   |  |
| Accuracy<br>@ 25°C (77°F) | ±0.1 pH  | ±0.03 mg/L (ppm)<br>±3% of reading  |  |
|                           | Chlorine, Total (P3)   | Cyanuric Acid (P4)  |  |
| Range                     | 0.00 to 5.00mg/L (ppm)   | 0 to 80 mg/L (ppm)  |  |
| Resolution                | 0.01 mg/L under 3.50 mg/L;<br>0.10 mg/L above 3.50 mg/L  | 1 mg/L  |  |
| Accuracy<br>@ 25°C (77°F) | ±0.03 mg/L ±3%<br>of reading   | ±1 mg/L ±15%<br>of reading  |  |
| Light Source              | tungsten lamp  |   |  |
| Light Detector            | silicon photocell with narrow band interference filter @ 525 nm  |   |  |
| Power Supply              | 9V battery   |   |  |
| Auto-off                  | after ten minutes of non-use in measurement mode; after one hour of non-use in calibration mode; with last reading reminder  |   |  |
| Environment               | 0 to 50°C (32 to 122°F); RH max 95% non-condensing   |   |  |
| Dimensions                | 193 x 104 x 69 mm (7.6 x 4.1 x 2.7")   |   |  |
| Weight                    | 360 g (12.7 oz.)   |   |  |
| Method                    | <b>pH:</b> phenol red method; <b>CI:</b> adaptation of the EPA recommended DPD method 330.5; <b>Cyanuric Acid:</b> adaptation of the Turbidimetric method  |   |  |
| certificate and in        | nstruction manual.<br>and testing reagents sold separately   |   |  |
|                           | Resolution  Accuracy @ 25°C (77°F)  Range  Resolution  Accuracy @ 25°C (77°F)  Light Source  Light Detector  Power Supply  Auto-off  Environment  Dimensions  Weight  Method  HI96104 is supply  Auto-cettificate and in CALCheck™standards. | pH (P1)           Range         6.5 to 8.5 pH           Resolution         0.1 pH           Accuracy<br>@ 25°C (77°F)         ±0.1 pH           Chlorine, Total (P3)           Range         0.00 to 5.00 mg/L (ppm)           Resolution         0.01 mg/L under 3.50 mg/L;<br>0.10 mg/L above 3.50 mg/L           Accuracy<br>@ 25°C (77°F)         ±0.03 mg/L ±3%<br>of reading           Light Source         tungsten lamp           Light Detector         silicon photocell with narrow bar           Power Supply         9V battery           Auto-off         after ten minutes of non-use in non-use in calibration mode; with           Environment         0 to 50°C (32 to 122°F); RH max 9           Dimensions         193 x 104 x 69 mm (7.6 x 4.1 x 2.7           Weight         360 g (12.7 oz.)           Method         pH: phenol red method; CI: adapted |  |

# Information

**HI96104C** includes photometer, CAL Check™ standards, sample cuvettes (2) with caps, scissors, cuvette wiping cloth, 9V battery, instruction manual and rigid carrying case. Reagents sold separately

