



HI97712

Aluminum 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

Due to its vast occurrence in minerals, rocks and clays, aluminum is present in nearly all natural water as a soluble salt, a colloid, or an insoluble compound. These forms of aluminum may also appear in treated water and wastewater due to its use during coagulation processes. When concentrations are greater than 0.2 mg/L, water will be colored, but cause no significant human health effects.

| Specifications | HI97712 Aluminum | |
|---------------------------|-------------------------------------|---|
| Measurement | Range | 0.00 to 1.00 mg/L (ppm) (as Al ³⁺) |
| | Resolution | 0.01 mg/L (ppm) |
| | Accuracy @25°C (77°F) | ±0.04 mg/L ±4% of reading |
| | Method | adaptation of the aluminon method |
| Measurement System | Light Source | light emitting diode |
| | Bandpass filter | 525 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.) |

HI97712 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

HI97712C 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 HI7101412 rigid carrying case.

Reagents sold separately

Ordering Information

| Reagents and Standards | HI97712 | |
|------------------------|---------|--|
| | | HI97712-11 CAL Check standard cuvettes for aluminum |
| | | HI93712-01 aluminum reagents for 100 tests |
| | | HI93712-03 aluminum reagents for 300 tests |