



HI96706

Phosphorus Portable Photometer

- **CAL Check**
 - Allows for performance verification and calibration of the meter using NIST traceable standards.
- **GLP**
 - Review of the last calibration date.
- **Auto-shut off**
 - Automatic shut off after 10 minutes of non-use when the meter is in measurement mode. Prevents wastage of batteries in the event the meter is accidentally left on.
- **Battery status indicator**
 - Indicates the amount of battery life left.
- **Built-in timer**
 - Display of time remaining before a measurement is taken. Ensures that all readings are taken at the appropriate reaction intervals for the test being performed.
- **Error messages**
 - Messages on display alerting to problems including no cap, high zero, and standard too low.
- **Cooling lamp indicator**
 - To maintain the desirable wavelength to be used for absorbance, it is necessary to ensure components are not overheated from the heat generated by the tungsten lamp. Each photometer is designed to allow a minimal amount of time for components to cool. The cooling lamp indicator is displayed prior to a reading being taken.
- **Units of measure**
 - Appropriate unit of measure is displayed along with reading.

The HI96706 portable photometer is for the measurement of phosphorus. 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

Common in natural systems, such as lakes, oceans, and soil, phosphorus is an essential element for plant and animal growth. However, when present in large concentrations, phosphorus can cause excessive microorganism and algae growth. For hobbyists with saltwater aquaria, a high amount of phosphorus can be problematic to fish and coral. The main source of phosphorus in reef aquaria is through food that is introduced on a daily basis, but it is also produced through the breakdown of plant material and excretion from fish. Replacement water can also be a source of phosphorus in aquaria, where tap water or reverse osmosis water is used to replace evaporated water and control the salt concentration in tanks. Both forms of water contain phosphorus, albeit in varying concentrations, and will have negative effects if the accumulating levels are not controlled. Phosphorus is also responsible for corrosion of piping systems if present in high enough amounts.

Specifications	HI96706 Phosphorus
Range	0.0 to 15.0 mg/L (ppm)
Resolution	0.1 mg/L
Accuracy @ 25°C (77°F)	± 0.3 mg/L ±4% 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	Amino Acid Method, adapted from Standard Method for the Examination of Water and Wastewater
Ordering Information	HI96706 is supplied with sample cuvettes (2) with caps, 9V battery, instrument quality certificate and instruction manual CAL Check™ standards and testing reagents sold separately HI96706C includes photometer, CAL Check™ standards, sample cuvettes (2) with caps, 9V battery, scissors, cuvette wiping cloth, instrument quality certificate, instruction manual and rigid carrying case. Reagents sold separately
Reagents and Standards	HI96706-11 CAL Check™ standard cuvettes HI93706-01 reagents for 100 tests HI93706-03 reagents for 300 tests