

HI97732

# Dissolved Oxygen 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

Dissolved oxygen analysis measures the amount of gaseous oxygen (O<sub>2</sub>) dissolved in an aqueous solution. Dissolved oxygen is one of the most important parameters in aquatic systems. This gas is required for metabolism by aerobic organisms and also influences inorganic chemical reactions. Therefore, knowledge of the solubility and dynamics of oxygen distribution is essential to interpreting both biological and chemical processes within water bodies. Oxygen gets into water by diffusion from the surrounding air by aeration (rapid movement) and as a product of photosynthesis. The amount of oxygen that can dissolve in pure water is inversely proportional to the temperature of the water; the warmer the water, the less dissolved oxygen is present.



Specifications		HI97732 Oxygen, Dissolved
Measurement	Range	0.0 to 10.0 mg/L (ppm) (as O <sub>2</sub> )
	Resolution	0.1 mg/L
	Accuracy @25°C (77°F)	±0.4 mg/L ±3% of reading
	Method	Adaptation of Standard Methods for Examination of Water and Wastewater (18th edition) Azide modified Winkler method reaction causes a yellow tint in sample
Measurement System	Light Source	light emitting diode
	Bandpass filter	466 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.)
<b>Ordering Information</b>	<b>HI97732</b> is supplied with sample cuvettes (2), sample caps (2), plastic stoppers (2), 1.5V AA batteries (3), instrument quality certificate, and instruction manual. <small>CAL Check standards and testing reagents sold separately</small>	
<b>Reagents and Standards</b>	HI97732	<b>HI97732-11</b> CAL Check standard cuvettes for dissolved oxygen
		<b>HI93732-01</b> dissolved oxygen reagent for 100 tests
		<b>HI93732-03</b> dissolved oxygen reagent for 300 tests