

HI97730

# Molybdenum 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

Molybdenum is commonly used in creating many types of high strength steel alloys. It has the ability to withstand extremely high temperatures without significant expansion or softening and displays a high resistance to corrosion. Wastewater from industries that use molybdenum must be treated to remove high amounts before discharge into the public collection system.



Specifications	HI97730 Molybdenum		
Measurement	Range	0.0 to 40.0 mg/L (ppm) ( as Mo <sup>6+</sup> )	
	Resolution	0.1 mg/L	
	Accuracy @25°C (77°F)	±0.3 mg/L ±5% of reading	
Measurement System	Method	adaptation of the mercaptoacetic acid method	
	Light Source	light emitting diode	
	Bandpass filter	420 nm	
	Bandpass filter bandwidth	8 nm	
	Bandpass filter wavelength accuracy	±1.0 nm	
	Light Detector	silicon photocell	
Additional Specifications	Cuvette type	round 24.6 mm diameter (22 mm inside)	
	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.)	
	Ordering Information	<b>HI97730</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>	
		Reagents and Standards	HI97730
	<b>HI93730-01</b> molybdenum reagents for 100 tests		
	<b>HI93730-03</b> molybdenum reagents for 300 tests		