

HI 2400

## Dissolved Oxygen Meter

- DO range up to 300%
- Altitude compensation up to 4000 m
- Salinity compensation up to 40 g/L
- Automatic temperature compensation
- Automatic calibration in air
- PC compatible via USB
- Datalogging and storage up to 8000 samples
- GLP Features



HI 2400 is a dissolved oxygen benchtop meter with automatic calibration and % or mg/L (ppm) measurement range. The measurement is automatically compensated for altitude and salinity compensation based on the user settings for altitude up to 4000 m and 40 g/L for salinity.

Calibration is performed at one or two points at 0% using HANNA's HI 7040 solution or 100% in air.

Measurements are automatically temperature compensated by using the polarographic DO probe with built-in temperature sensor. This probe features screw cap membranes for easy replacement.

With a built-in logging function, measurements are stored in non volatile memory, and can be transferred to a PC through the USB port using the optional HI 92000 software and HI 920013 USB cable. The

software is provided with an exclusive online guide of all the commands available and allows data printing, plotting and exporting.

The 8000 record logging interval allows the possibility of process and experimental monitoring of DO. The logging interval is automatic with user selectable intervals from 5 seconds to 180 minutes according with the speed of DO variation inside the process.

The HI 2400 also provides users with GLP (Good Laboratory Practice) capabilities. GLP is a set of functions that allow the storage and retrieval of data regarding calibration. The GLP feature provides data consistency and a calibration reminder which can be set to alert the user that too much time has elapsed since the last calibration and a new one should be performed.

7.13



HI 76407

## Standard DO Probe

HI 76407 dissolved oxygen probe is extremely rugged making it ideal for both laboratory and field applications. Calibration is fast, simple and all DO measurements are temperature compensated. The pre-tensioned, ready-made PTFE membrane can be changed in a few seconds without the need to stretch and cut replacements.

Several cable lengths are available.

7.15



HI 76408

## Thinner, Lighter DO Probe for Laboratories

The HANNA HI 76408 DO probe is rugged and perfect for both laboratory and field applications. Calibration is fast and simple, and measurements are temperature compensated. The sensitive PTFE membrane can be changed in a few seconds.

## Polarographic DO Probe

The HI 2400 utilizes Polarographic sensor technology based on the Ross and Clark polarographic measurement type solution. An oxygen probe is composed of a platinum electrode and a solid silver electrode. A concentrated potassium chloride solution is held in place over the surfaces of the electrodes by a PTFE membrane. An external voltage creates a difference in potential between the cathode and anode (less than 0.5 volts). The external voltage applied to the platinum electrode cathode, silver electrode anode, KCl solution and gas-permeable membrane material establishes a current that is proportional with the concentration of oxygen.

SPECIFICATIONS		HI 2400
Range	DO	0.00 to 45.00 mg/L (ppm)
	% Saturation O <sub>2</sub>	0.0 to 300.0 %
	Temperature	0.0 to 50.0°C
Resolution	DO	0.01 mg/L (ppm)
	% Saturation O <sub>2</sub>	0.1%
	Temperature	0.1°C
Accuracy (@20°C/68°F)	DO	±1.5% F.S.
	% Saturation O <sub>2</sub>	±1.5% F.S.
	Temperature	±0.2°C (excluding probe error)
Dissolved Oxygen Calibration	one or two points at 0% (HI 7040 solution) and 100% (in air)	
Altitude Compensation	0 to 4000 m (with 100 m resolution)	
Salinity Compensation	0 to 40 g/L (ppt) (with 1 g/L resolution)	
Temperature Compensation	automatic, 0.0 to 50.0°C (32.0 to 122°F)	
Probe	HI 76407/2 polarographic DO probe with internal temperature sensor, DIN connector and 2 m (6.6') cable (included)	
Logging Interval	5, 10, 30 seconds or 1, 2, 5, 10, 15, 30, 60, 120, 180 minutes	
PC Connection	opto-isolated USB	
Power Supply	12VDC adapter	
Environment	0 to 50°C; RH max 95%	
Dimensions	235 x 222 x 109 mm (9.2 x 8.7 x 4.3")	
Weight	1.3 kg (2.9 lbs.)	

## ORDERING INFORMATION

HI 2400-01 (115V) and HI 2400-02 (230V) are supplied with HI 76407/2 dissolved oxygen probe, HI 76407A membrane caps (2), HI 7041S electrolyte solution (30 mL), 12 VDC adapter and instructions.

## PROBES

- HI 76407/2** Polarographic DO probe with internal temperature sensor, DIN connector and 2 m (6.6') cable
- HI 76407/4** Polarographic DO probe with internal temperature sensor, DIN connector and 4 m (13') cable
- HI 76407/10** Polarographic DO probe with internal temperature sensor, DIN connector and 10 m (33') cable
- HI 76407/20** Polarographic DO probe with internal temperature sensor, DIN connector and 20 m (67') cable
- HI 76408** Thin body, polarographic DO probe with internal temperature sensor, DIN connector and 1 m (3.3') cable

## SOLUTIONS

- HI 7040M** Zero oxygen solution, 230 mL
- HI 7040L** Zero oxygen solution, 500 mL
- HI 7041S** Electrolyte solution, 30 mL
- HI 7041M** Refilling electrolyte solution (230 mL)
- HI 7041L** Refilling electrolyte solution (500 mL)

## ACCESSORIES

- HI 76407/A/P** Replacement membranes (5)
- HI 92000** Windows® compatible software
- HI 920013** USB cable for PC connection

For a complete list of Solutions, Probes and Accessories, see the end of this section.