

Research grade DO & BOD bench meter

part no: HI 4421

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bench

Advanced dissolved oxygen measurement with colour display

HI 4421 is a research grade dissolved oxygen bench meter with extensive measuring capabilities

BOD

(Biological Oxygen Demand)

OUR

(Oxygen Uptake Rate)

SOUR

(Specific Oxygen Uptake Rate)

Atmospheric pressure

Temperature



HI 190M magnetic stirrer sold separately

This is a highly advanced instrument featuring an intuitive menu system to streamline the workflow process and provide accurate measurements quickly and efficiently. With the facility to display a range of graphs, help screens and calibration reminders, the colour screen is designed to support complex operations.

Supplied with

- HI 76408 DO probe
- HI 76404N electrode holder
- HI 7041S electrolyte solution
- HI 76407A membrane caps
- 12 Vdc adaptor
- Instructions

- Large colour screen with dot matrix LCD display
- Multi language support and contextual help available through dedicated HELP key
- Intuitive on-screen tutorial messaging and directions guide users through all measurement and calibration procedures to support correct performance
- The BOD, OUR and SOUR methods are supported with a dedicated tutorial and step by step indication to support optimum operation throughout the procedure
- Polarographic DO probe includes built-in temperature sensor
- Measurements plotted in graph format in real time on colour screen
- Soft and hard splash resistant keys

Spares and accessories available for this meter

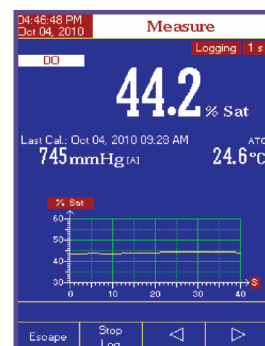
Main benefits

- Extended range up to 90ppm and 600% saturation featuring automatic or manual temperature and barometric atmospheric pressure compensation and manual salinity compensation
- Automatic and manual calibration of DO can be performed in one or two points using standard or user defined standards. Users can set the reading stability criteria selecting one of three modes - Fast, Medium and Accurate
- Direct/autohold automatically holds the reading on display when measurement stability is reached. In direct reading mode, the user interface can be set to basic with or without GLP, graphic or logging information
- Up to 10 profiles can be saved and recalled eliminating the need to reconfigure each time when a different electrode is used. User definable configurations can include reading mode: direct or BOD, OUR and SOUR, measurement units, temperature units, stability criteria, and temperature, atmospheric pressure and salinity compensation
- Flexible datalogging with choice of Automatic, Manual or Autohold logging for up to 10,000 samples
 - Automatic logging features a selectable area and sampling period
 - GLP information includes complete data about user calibration of each parameter and identification information for the instrument, user, and company
- Data can be transferred to a PC via USB port. Hanna HI 92000 software available as optional

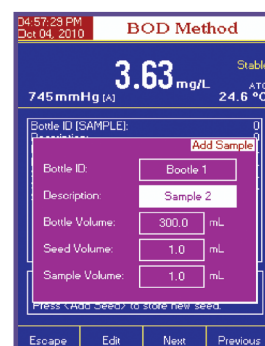
Specifications

Product Code	HI 4421	
Range	Dissolved Oxygen	0.00 to 90.00 ppm; 0.0 to 600.0% saturation
	Barometric Pressure	450 to 850 mmHg; 560 to 1133 mBar
	Salinity Compensation	0 to 45 ppt (g/L)
	Temperature	-20.0 to 120°C; -4.0 to 248.0°F; 253.15 to 393.1 K
Resolution	Dissolved Oxygen	0.01 ppm; 0.1% saturation
	Barometric Pressure	1 mm Hg
	Temperature	0.1°C
Accuracy	Dissolved Oxygen	±1.5% of reading ±1 digit
	Barometric Pressure	±3 mm Hg + 1 least significant digit
	Temperature	±0.2°C
Measurement Modes		Direct D.O.; BOD (Biochemical Oxygen Demand); OUR (Oxygen Uptake Rate); SOUR (Specific Oxygen Uptake Rate)
Calibration	Dissolved Oxygen	Automatic/user standard, 1 or 2 points
	Barometric Pressure	Single point
Temperature Compensation		0.0 to 50.0°C
Probe		Polarographic with built-in temperature sensor
Logging	Record Samples	Up to 100 lots 10000 samples/lot for automatic logging; 5000 samples/lot for manual logging
	Logging Interval	from 1 second
GLP		Last Calibration Data/Calibration Info
Alarm (DO, BOD, OUR, SOUR)		Yes (Inside/Outside Limits)
PC Connectivity		Opto-isolated USB and RS232
Display		240 x 320 dot matrix color LCD with on-screen help, graphing, language selection and custom configuration
Power Supply		12 Vdc adapter (included)
Dimensions		159 x 230 x 93 mm
Weight		800 g

HI 4421 research bench meter offers extensive measurement capabilities



Direct measurement



BOD (Biological Oxygen Demand)



OUR (Oxygen Uptake Rate)



SOUR (Specific Oxygen Uptake Rate)



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



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Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.