



## HQ40D Portable Dissolved Oxygen Meter, Premium Field Kit for Environmental Monitoring, with Field Luminescent DO Sensor, 5 m Cable

Product #:

8505200



**Hazardous**

**OBSOLETE ITEM**

This item is no longer available.

Items with this mark may be considered hazardous under some shipping conditions.

If necessary, we will change your selected shipping method to accommodate these items.

### Rugged DO Field Kit

Designed for your water quality field applications measuring Dissolved Oxygen (DO), the Hach HQ40D portable multi meter is a two channels advanced handheld digital meter that takes the guesswork out of measurements. The Hach HQD digital multimeter combines reliability, flexibility and ease of use. The HQD portable meters connect with a wide range of Intellical smart electrodes addressing different parameters, sample types and operating environment for water quality, environmental and treatment process purposes. The Intellical probe automatically recognize the testing parameter, store the calibration history, and method settings to minimize errors and setup time. In their Rugged outdoor version the Intellical sensors are nearly indestructible and available with multiple cable lengths.

Intellical™ LDO101 is a digital, luminescent/optical dissolved oxygen (LDO) probe. This Rugged DO sensor version is built with a stainless steel body ensuring sufficient weight to the probe for an easy outside handling, the sensing part is protected by a shroud, and the connection is ensured by strong and visible yellow coloured cable onto which you can clip depth markers (optional accessories), making the LDO101 rugged models specially designed for field use. The LDO101 is fitted with an automatic pressure sensor module and a temperature sensor. The DO sensing cap comes with an iButton to track days in use and remind remaining life of the sensing cap element. The LDO101 Rugged is ideal for measuring dissolved oxygen in all type of external environment such as river, surface and ground waters, ponds, lakes, sea, wastewater plant, source water, drinking water reservoir for water quality, environmental and treatment process purposes.

Replaced by NEW HQ Series.

#### Rugged DO meter for outstanding and flexible field water testing.

Dual input channels for flexible measurements without the need for multiple instruments, for pH, Conductivity, Resistivity, Total Dissolved Solids (TDS), Optical Dissolved Oxygen (DO), Biochemical Oxygen Demand (BOD), Oxidation Reduction Potential (ORP), Ammonia, Ammonium, Fluoride, Chloride, Sodium, and temperature - connect to any Intellical™ smart electrode, sensor or probe.

#### Intuitive user interface for simple operation, reliable and accurate results

Guided calibration and check standard routines reduce calibration errors while stabilization alerts and visual measurement lock ensure that you can trust the accuracy of the results. Calibration status indicator and custom calibration alerts ensure accurate results.

#### Trust your measurements - Intellical™ smart probes store all calibrations in the probe

Calibration history allows quick and easy change out of probes without re-calibrating. The HQD smart system records serial numbers, current calibration data, user ID, sample ID, time, and date automatically in the data log for complete Good Laboratory Practice (GLP) traceability. Error-free O<sub>2</sub> results without calibration or replacing the electrolyte.

#### Designed for demanding field operating conditions and ease of use

Rugged and waterproof meter design provides worry-free, reliable operation in field environments. All connections between the meter and the probe are secure. Connectors can be color-coded for quick identification. Information is clearly displayed on the one screen with back light for low light conditions. Display results can be enlarged.

#### Complete convenient kit

## Specifications

AC Power Adapter and USB/DC Adapter:	Included
Automatic Buffer Recognition:	Yes
Backlight:	Yes
Barometric Pressure Measurement:	Automatic compensation of DO when using an LDO or LBOD probe
Calibration Intervals/Alerts/Reminder:	Off, selectable from 2 hours to 7 days
CDC Electrode Calibration:	Demal (1D/ 0.1D/ 0.01D);
	Molar (0.1M/ 0.01M/0.001M);
	NaCl (0.05%; 25µS/cm; 1000µS/cm; 18mS/cm);
	Standard sea water;
	User defined
Compliance Certifications:	CE.WEEE
Conductivity Measurement at Stable Reading:	Yes
Conductivity measurement: Temperature correction:	None; Linear; NaCl Non-Linear Natural Water.
Conductivity Range:	0.01 µS/cm - 200.0 mS/cm
Conductivity resolution:	0.01 µS/cm - 0.1 mS/cm upon selected measuring range
Contents:	No
Custom Calibration Standards:	Yes
Data Export:	Download via USB connection to PC or flash memory device. Automatically transfer entire data log or as readings are taken.
Data Memory:	500 records/FIFO
Data storage:	Automatic, GLP ISO compliant reading data stored with calibration details.
Digital (intelligent) electrode inputs:	2 channels
Display:	Detailed mode/Large mode
Display Type:	240 x 160 pixel LCD with backlight illumination
DO Measurement Range:	0.1 - 20.0 mg/L (ppm) 1 - 200% saturation
DO Resolution:	0.1
DO sensor calibration:	* 100% (water-saturated air (100%) calibration
	* 100% with 0 (water-saturated air (100%) calibration with 0 point
	* mg/L (calibration with a specified dissolved oxygen concentration (mg/L) solution)
	* mg/L with 0 (calibration with a specified dissolved oxygen concentration (mg/L) solution with 0 point)
	* Factory (calibration with the default LDO calibration)
Electrode Type:	Intellical Standard Laboratory or Rugged Field
Environmental Conditions: Relative Humidity:	90 % relative humidity (non-condensing)
Environmental Conditions: Temperature:	0 - 60 °C (32 - 140 °F)
GLP Features:	Date; Time; Sample ID; Operator ID

Inputs:	2
Instrument:	Portable
IP Rating:	IP67
ISE Direct Measurement Range:	Yes
ISE Electrode Calibration:	2 - 5 Points
Kit?:	Yes
Languages user interface:	English, French, German, Italian, Spanish, Danish, Dutch, Polish, Portuguese, Turkish, Swedish, Czech, Russian
Lock Function:	Continuous / Auto-stabilization ("press to read") / At Interval
Measurement method:	Probe specific programmed method settings
Model:	HQ40D – Multi/2 Channels
mV Measurement at Stable Reading:	Yes
mV Measurement Range:	-1500 - 1500 mV
mV Resolution:	0.1 mV
Needed Cable Length:	5
Operating Error Messages:	Clear text error messages displayed
Operating Interface:	Soft Touch Keypad
ORP Electrode Calibration:	Predefined ORP standards (including Zobell's solution)
Parameter:	pH/Oxydo Reduction Potential (ORP)Conductivity/Total Dissolved Solid (TDS)/Salinity/ResistivityDissolved Oxygen (DO)Biochemical Oxygen Demand (BOD)Ion Selective Electrode (ISE): Ammonia, Ammonium, Chloride, Fluoride, Nitrate, Sodium
Parameters:	Dissolved Oxygen
	NA
	NA
PC Data Transfer Software :	HQD Series Meter Data Transfer Utility
pH Buffer Sets:	Color-coded: 4.01, 7.00, 10.01 pH;
	IUPAC: 1.679, 4.005, 7.000, 10.012, 12.45
	DIN: 1.09, 4.65, 9.23
	User-defined custom buffer sets
pH Electrode calibration:	1 - 3 Calibration points
	Calibration summary data logged and displayed
pH Measurement Range:	0 - 14 pH
pH Resolution:	Selectable:
	0.001/0.01/0.1 pH
Printer:	Yes, Optional
Probes included:	LDO10105
Salinity Measurement Range:	0 - 42 (ppt) (‰)
Salinity Resolution:	0.01 (ppt) (‰)
Sensor A:	LDO10105 (5 m rugged)
Sensor B:	NA
Sensor C:	NA
Sensors:	Sensor A: LDO10105
	Sensor B: NA

	Sensor C:
Simultaneous measurements:	Yes, 2 channels
TDS Measurement Range:	0.00 mg/L - 50.0 g/L NaCl
TDS Resolution:	0.01 mg/L up - 0.1 g/L upon measuring range
Temperature Accuracy:	± 0.3 °C
Temperature Compensation:	Automatic Temperature compensation for pH
Temperature Measurement:	°C or °F
Temperature resolution:	0.1
Type of measurement:	Field Measurements
Warranty:	36 months
Weight:	335 g (0.75 lb) without batteries; 430 g (0.95 lb) with
What's included?:	Meter package includes HQ40D Portable Meter; 4 AA batteries; Power adapter, USB/DC power adapter for data transfer; quick-start guide and user manual; Protective Glove for Portable HQd Meter; 120 mL Sample Container (x4); Flask, Erlenmeyer, Polymethylpentene Capacity 250 mL (x1); Bottle, Wash, Polyethylene, 500 mL; Disposable Wipes, 11 x 22 cm, 280 per package; Rugged Field Case for Two Rugged Probes.
	Intellical LDO101 Rugged Luminescent Dissolved Oxygen (LDO) probe, 5 m cable, protective shroud kit, DO cap with iButton (already mounted) Test certificate, and Basic User Manual.

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