



HQ440d Benchtop Dual Input, Multi-Parameter Meter - pH, Conductivity, Optical Dissolved Oxygen, ORP, and ISE

Product #: HQ440D

Multiparameter: Plug-and-Play any Two IntelliCAL Probes!

Designed for your water applications, the Hach HQ440d laboratory meter is an advanced meter that takes the guesswork out of measurements. HQd^{TM} meters connect with IntelliCALTM probes that automatically recognize the testing parameter, calibration history, and method settings to minimize errors and setup time.

Flexible benchtop meter makes your lab testing of critical water quality parameters more efficient

Two input channels for simultaneous measurement of pH, Conductivity, Optical Dissolved Oxygen, BOD, ORP, Ammonia, Ammonium, Fluoride, Chloride, Sodium, and temperature - any IntelliCAL™ smart probe.

Intuitive user interface for simple operation 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.

Trust your measurements - IntelliCALTM 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 GLP traceability..

Enhance productivity with an ultra-bright screen and large font size for easy to read results

Internal USB ports simplify data transfer, peripherals, and software updates and connection to PCs printer and keyboards.

Convenient kit includes everything you need to start testing

Meter kit includes 4 AA batteries, power adapter, USB cable for data transfer, quick start guide, and user manual

Specifications

AC and USB Operation:

Automatic Buffer Recognition: 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

Barometric Pressure Measurement: For automatic compensation of DO when using an LDO or LBOD probe

Battery Requirements: 4, AA

Benchtop: #

BOD5/CBOD resolution: Available when used with Hach WIMS BOD Manager software

Cable resistance correction: Digital - not needed

Calibration Curves Display: Calibration summary data logged and displayed

Calibration Intervals/Alerts/Reminder: 2 hours to 7 days

Compliance Certifications: CE.WEEE

Conductivity Accuracy: $\pm 0.5 \% \%$ from (1µS/cm - 200 mS/cm)

Conductivity measurement: 5 different stability modes
Conductivity Measurement Range: 0.01 µS/cm to 200 mS/cm

Conductivity resolution: 5 digits with 2 digits after decimal point

Custom Calibration Standards: User-defined standard sets

Data Export: Download via USB connection to PC or flash stick.

Automatically transfer entire data log or as readings are taken.

Data Memory: 500 results

Data Storage: GLP/ISO compliant reading data stored with calibration details. Calibration details and check

standard readings documented as events in data log. Automatically store in "press to read" mode

and inerval measurement mode. Manually store in "continuous read" mode.

Digital (intelligent) electrode inputs: 2 channel

Dimensions (H x W x D): 89 mm x 173 mm x 234 mm

Display: Display readings from one or two probes

Simultaneous readings from two probes (HQ440d only)

pH: pH, mV, temperature

Conductivity: Conductivity, TDS, salinity, resistivity, temperature

LDO: dissolved oxygen, pressure, temperature LBOD: dissolved oxygen, pressure, temperature

ORP/Redox: mV, temperature Sodium: Sodium, mV, temperature

Display Lock Function: Continuous measurement or "press to read" mode available with averaging function for LDO

measurement.

Display Type: 240 x 160 pixel Display readings from one or two probes

Simultaneous readings from two probes

pH: pH, mV, temperature

Conductivity: Conductivity, TDS, salinity, resistivity, temperature

LDO: dissolved oxygen, pressure, temperature

ORP/Redox: mV, temperature
Sodium: Sodium, mV, temperature

DO Measurement Range: 0.01 to 20.0 mg/L mg/L (0 to 200%)

DO Resolution: 0.01 mg/L or 0.1 % Fixed Buffer Selection: IUPAC standards

(DIN 19266) or Technical buffer (DIN 19267) or 4-7-10 series or user defined

GLP Features: #

Inputs: 2

Interface Languages: 13**

Internal Data Storage: 500
IP Rating: IP54

ISE Direct Measurement Range: Yes

ISE Electrode Calibration: Electrode specific - see electrode user instructions

Languages: English, French, German, Italian, Spanish, Danish, Dutch, Polish, Portuguese, Turkish, Sweedsh,

Czech, Russian

Length: 234 mm

Measuring Range ORP: -1500 to 1500 mV

mV Accuracy: $\pm 0.1 \text{ mV}$

mV Measurement at Stable Reading: 5 stabilization settings

mV Measurement Range: -1500 to 1500 mV

mV Resolution: 0.1 mV

Operating Error Messages: Full text messages

Operating Humidity: 90 % relative humidity (non-condensing)

Operating Interface: Keypad
Operating Temperature: 5 to 45 °C

ORP Electrode Calibration: Predefined ORP standards (including Zobell's solution)

Output: USB to PC / flash stick

Parameter: pH, mV, ISE, DO, Conductivity, TDS, Salinity, Resistivity, ORP, Temp

pH Accuracy: \pm 0.002 pH pH Measurement: 0 to 14 pH

pH Measurement at stable reading: 5 stabilization settings

pH Resolution: Selectable between 0.001 and 0.1 pH

Power Requirements (Voltage): 7 V

Printer: Optional accessory

Resistivity Accuracy: 0.5 %

Resistivity Measurement: 2.5 Ω cm to 49 M Ω cm

Resistivity Resolution: 5

Resolution: 0.1/ 0.01/ 0.001
Salinity Measurement Range: 0 to 42 g/kg
Salinity Resolution: 0.01 ppt
Sample Temperature: 2 channels

Sodium resolution: 0.001 mg/L (ppm)

TDS Measurement Range: 0.0 to 50.0 mg/L

Temperature Accuracy: 0.3 °C

Temperature Compensation: Off, automatic, and manual (auto correction is parameter dependent)

Temperature Range: -10 to 110 °C

Temperature Resolution: 0.1 °C
Warranty: 3 years

Water Resistance: IP54 (Resistant to spray of water; Dust-proof)

Weight: 1.87 lbs. (0.850 kg)

What's in the box?

Includes: meter, 4 AA batteries, universal power adapter, USB cable for data transfer, quick start guide and user manual

Required Accessories

- IntelliCAL™ LBOD101 Luminescent/Optical Dissolved Oxygen (LDO) Probe for BOD Measurement (1-meter cable) (Item LBOD10101)
- IntelliCAL PHC705 RED ROD General Purpose pH Electrode (Item PHC70501)
- IntelliCAL PHC735 RED ROD pH Electrode for Dirty Samples (Item PHC73501)
- IntelliCAL PHC74501 RED ROD pH Electrode for Challenging Samples (Item PHC74501)