



## HQ440D Drinking Water Lab Package with PHC281 pH Ultra and ISEF121 Fluoride ISE Electrodes

**Product #:** 8508200  
**ZAR Price:** Contact Hach  
**Ships within 1 week**

Designed for water quality experts, the Hach HQ440D benchtop meter is an advanced laboratory meter that takes the guesswork out of measurements. HQD meters connect with smart probes that automatically recognize the testing parameter, calibration history, and method settings to minimize errors and setup time. The advanced benchtop meter is designed to withstand years of continuous lab use. HQD meters feature a simple user interface that does not require manuals or training to operate. The high-flowing reference and open junction of the pH Ultra electrode included in this package delivers fast stabilization time even in the most difficult sample types and low ionic strength waters.

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

Two input channels for simultaneous measurement of pH, Conductivity, 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 - 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 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 package includes HQ440D Benchtop Meter, PHC281 pH Ultra electrode with 1 m cable, ISEF121 fluoride electrode with 1 m cable, pH Buffer Kit (500 mL), pH storage solution (500 mL), fluoride standards, ionic strength adjustor powder pillows (qty 100), probe stand, 4 AA batteries, power adapter, USB cable for data transfer, quick-start guide, user manual, and documentation

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## Specifications

Automatic Buffer Recognition:	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

Communication:	Integrated USB type A (for USB 2.0 flash memory device, printer, keyboard) and Integrated USB type B (for PC)
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:	Meter + Probe(s) + Lab. Accessories + Reagents
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.
Dimensions:	859 x 175 x 235 mm
Display:	Detailed mode/Large mode
Display Type:	440 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:	<ul style="list-style-type: none"> <li>• 100% (water-saturated air (100%) calibration</li> <li>• 100% with 0 (water-saturated air (100%) calibration with 0 point</li> <li>• mg/L (calibration with a specified dissolved oxygen concentration (mg/L) solution)</li> <li>• mg/L with 0 (calibration with a specified dissolved oxygen concentration (mg/L) solution with 0 point)</li> <li>• Factory (calibration with the default LDO calibration)</li> </ul>
Electrode Holder:	NA
Electrode stand:	Included
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
Instrument:	Bench
IP Rating:	IP54 (Resistant to spray of water; Dust-proof)
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:	HQ440D – Multi/2 Channels
mV Measurement at Stable Reading:	Yes
mV Measurement Range:	-1500 - 1500 mV
mV Resolution:	0.1 mV

Needed Cable Length:	1
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/Resistivity
	Dissolved Oxygen (DO)
	Biochemical Oxygen Demand (BOD)
	Ion Selective Electrode (ISE): Ammonia, Ammonium, Chloride, Fluoride, Nitrate, Sodium
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 pH
	DIN: 1.09, 4.65, 9.23 pH
	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:	ISEF12101, PHC28101
Resistivity Measurement:	2.5 Ω.cm - 49 MΩ.cm
Resistivity Resolution:	0.1
Salinity Measurement Range:	0 - 42 (ppt) (‰)
Salinity Resolution:	0.01 (ppt) (‰)
Sensor A:	ISEF12101
Sensor B:	PHC28101
Sensor C:	NA
Sensors:	Sensor A: ISEF12101
	Sensor B: PHC28101
	Sensor C: NA
Simultaneous measurements:	Yes
TDS Measurement Range:	0.00 mg/L - 50.0 g/L as NaCl
TDS Resolution:	0.01 mg/L - 0.1 g/L upon measuring range.
Temperature Compensation:	Automatic Temperature compensation for pH
Temperature Measurement:	°C or °F
Temperature Range:	-10°C - 110 °C
Temperature resolution:	0.1
Type of measurement:	Lab Water Quality applications.
Warranty:	36 months

Weight:	750 g (1.65 lb) without batterie; 850 g (1.87 lb) with batteries
What's included?:	Meter package includes HQ440D Laboratory Multi Meter, Universal electrode Stand with electrode holder, ISEF121 Fluoride Ion Selective Electrode with 1 m cable, Fluoride standard solutions (500 mL): 0,5 mg/L, 1 mg/L, 10 mg/L. Fluoride ISAB powder pillows pack (100 pcs). PHC281 pH Ultra Refillable pH Electrode with 1 m cable, pH Buffer Kit 4,01/7,00/10,01 (500 mL), pH electrode storage solution (500 mL), 4 Alkaline 1.5V AA batteries, Power Supply Adapter, Power Cord, USB cable for data transfer, and Operating Documentation.

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