



## HQ40D Portable pH and Conductivity Meter, Laboratory Kit for Water Quality, with Refill pH Electrode and 4 Poles Graphite Conductivity Cell, 1 m Cable

Product #: 8507520



**Hazardous**

### **OBSOLETE ITEM**

This item is no longer available.

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

Suggested replacements:

- CDC40101
- PHC28101

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

### **Rugged portable meters for use in the field and plant.**

Designed for your water quality laboratory applications measuring simultaneously pH and conductivity/TDS, 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.

Intellical™ PHC281 and CDC401 are digital combination pH electrode and Conductivity cell with built-in temperature sensor. The PHC281 is a pH refillable probe made for difficult samples. The PHC281 refillable pH electrode has a high electrolyte flow rate and a large open junction ideal for difficult samples, such as Low Ionic Strength (LIS), Ultrapure, dirty samples and samples with high solids content. The CDC401 is ideal for measuring electrical conductivity, salinity, resistivity, or total dissolved solids (TDS). These laboratory electrodes are shockproof with plastic body protecting down to the sensing element. The PHC281 pH sensor and CDC401 Conductivity Cell are recommended for wastewater, drinking water and general aqueous applications. The PHC281 is not suitable for use with organic solvents.

Replaced by NEW HQ Series.

### **Rugged pH and Conductivity/TDS meter for outstanding and flexible field or laboratory 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
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:	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
Parameters:	pH
	Conductivity
	NA
	HQD Series Meter Data Transfer Utility
	Color-coded: 4.01, 7.00, 10.01 pH;
pH Buffer Sets:	IUPAC: 1.679, 4.005, 7.000, 10.012, 12.45
	DIN: 1.09, 4.65, 9.23
	User-defined custom buffer sets
	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:	PHC28101, CDC40101
Salinity Measurement Range:	0 - 42 (ppt) (‰)
Salinity Resolution:	0.01 (ppt) (‰)
Sensor A:	PHC28101 (1 m)
Sensor B:	CDC40101 (1 m)

Sensor C:	NA
Sensors:	Sensor A: PHC28101
	Sensor B: CDC40101
	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 Compensation:	Automatic Temperature compensation for pH
Temperature Measurement:	°C or °F
Temperature resolution:	0.1
Type of measurement:	QC Lab
Warranty:	36 months
Weight:	335 g (0.75 lb) without batteries; 430 g (0.95 lb) with
What's included?:	<p>Meter package includes HQ40D Portable Meter; 4 AA batteries; Power adapter, USB/DC power adapter for data transfer; quick-start guide and user manual. HQD Meter Stand; Probe stand; Sodium Chloride Standard Solution, 491 mg/L NaCl (1000 µS/cm), 100 mL; Buffer Solution, pH 4.01/7.00/10.01 (NIST), color-coded red, 500 mL.</p> <p>Intellical PHC281 Laboratory pH electrode with storage soaker bottle, 1 m cable, 59-mL bottle reference electrolyte filling solution (2.44 M KCl solution), Test certificate, and Basic User Manual.</p> <p>Intellical CDC401 Laboratory Conductivity Cell, 1 m cable, Test certificate, and Basic User Manual.</p>

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