HQ40D Portable Multi Meter pH, Conductivity, Salinity, TDS, Dissolved Oxygen (DO), ORP and ISE For Water

Product #: HQ40D53000000
USD Price: Contact Hach
Ships within 3 days

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

Designed for your water quality applications measuring pH, Conductivity, TDS, Salinity, Dissolved Oxygen (DO), ORP and ISE, 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.

Rugged multi 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 O₂ results without calibration or replacing the electrolyte.

Easy to Use in the Field
All connections between the meter and the probe are secure and waterproof. 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.

Designed for demanding field operating conditions
Rugged and waterproof meter design provides worry-free, reliable operation in field environments.

Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Description</th>
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<tbody>
<tr>
<td>AC Power Adapter and USB/DC Adapter:</td>
<td>Included</td>
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<tr>
<td>Automatic Buffer Recognition:</td>
<td>Yes</td>
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<tr>
<td>Barometric Pressure Measurement:</td>
<td>Automatic compensation of DO when using an LDO or LBOD probe</td>
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<tr>
<td>Calibration:</td>
<td>Demal (1D/ 0.1D/ 0.01D); Molar (0.1M/ 0.01M/0.001M); NaCl (0.05%; 25µS/cm; 1000µS/cm; 18mS/cm);</td>
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### Standard Sea Water Measurement

- **User Defined**

### Calibration Intervals/Alerts/Reminder
- Off, Selectable from 2 hours to 7 days

### Compliance Certifications
- CE, WEEE

### Conductivity Measurement
- Yes

### Conductivity Measurement Range
- 0.01 µS/cm - 200.0 mS/cm

### Conductivity Measurement: Temperature correction
- None; Linear; NaCl; Non-Linear Natural Water.

### Conductivity Resolution
- 0.01 µS/cm - 0.1 mS/cm upon selected measuring range

### Contents
- Meter Only

### 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 Lock Function
- Continuous / Auto-stabilization ("press to read") / At Interval

### 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)

### 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

### Languages
- English, French, German, Italian, Spanish, Danish, Dutch, Polish, Portuguese, Turkish, Swedish, Czech, Russian

### 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
- NA

### Operating Error Messages
- Clear text error messages displayed

### Operating Humidity
- 90 % relative humidity (non-condensing)
Operating Interface: Soft Touch Keypad
Operating Temperature: 0 - 60 °C (32 - 140 °F)
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: 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
Probe Type: Intellical Standard Laboratory or Rugged Field
Probes included: None
Region: US
Salinity Measurement Range: 0 - 42 (ppt) (%o)
Salinity Resolution: 0.01 (ppt) (%o)
Sensors: Sensor A: None
Sensor B: None
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: Portable/Field Water Quality Applications
Warranty: 3 years
Weight: 335 g (0.75 lb) without batteries; 430 g (0.95 lb) with
What's in the box?

Meter package includes HQ40D Portable Meter; 4 AA batteries; Power adapter, USB/DC power adapter for data transfer; quick-start guide and user manual; Standard Field case; Protective Glove for Portable HQd Meter; 120 mL Sample Container (x5).

Required Accessories

- Intellical™ LDO101 Laboratory Luminescent/Optical Dissolved Oxygen (DO) Sensor, 3 m Cable  (Item LDO10103)
- Intellical™ LDO101 Field Luminescent/Optical Dissolved Oxygen (DO) Sensor, 5 m Cable  (Item LDO10105)
- Intellical™ LDO101 Field Luminescent/Optical Dissolved Oxygen (DO) Sensor, 10 m Cable  (Item LDO10110)
- Intellical™ LDO101 Field Luminescent/Optical Dissolved Oxygen (DO) Sensor, 15 m Cable  (Item LDO10115)
- Intellical™ LDO101 Field Luminescent/Optical Dissolved Oxygen (DO) Sensor, 30 m Cable  (Item LDO10130)
- Intellical™ LBOD101 Luminescent/Optical Dissolved Oxygen (LDO) Sensor for BOD Measurements, 1 m Cable  (Item LBOD10101)
- Intellical™ CDC401 Laboratory 4-Poles Graphite Conductivity Cell, 3 m Cable  (Item CDC40103)
- Intellical™ CDC401 Field 4-Poles Graphite Conductivity Cell, 5 m Cable  (Item CDC40105)
- Intellical™ CDC401 Field 4-Poles Graphite Conductivity Cell, 10 m Cable  (Item CDC40110)
- Intellical™ CDC401 Field 4-Poles Graphite Conductivity Cell, 15 m Cable  (Item CDC40115)
- Intellical™ CDC401 Field 4-Poles Graphite Conductivity Cell, 30 m Cable  (Item CDC40130)
- Intellical™ PHC301 Laboratory General Purposes Refillable pH Electrode, 3 m Cable  (Item PHC30103)
- Intellical™ PHC281 Water Quality Laboratory Refillable pH Electrode, 1 m Cable  (Item PHC28101)
- Intellical™ PHC281 Water Quality Laboratory Refillable pH Electrode, 3 m Cable  (Item PHC28103)
- Intellical™ PHC101 Field Low Maintenance Gel Filled pH Electrode, 5 m Cable  (Item PHC10105)
- Intellical™ PHC101 Field Low Maintenance Gel Filled pH Electrode, 10 m Cable  (Item PHC10110)
- Intellical™ PHC101 Field Low Maintenance Gel Filled pH Electrode, 15 m Cable  (Item PHC10115)
- Intellical™ PHC101 Field Low Maintenance Gel Filled pH Electrode, 30 m Cable  (Item PHC10130)
- Intellical™ ISENa381 Sodium (Na<sup>+</sup>) Ion Selective Electrode (ISE), 1 m Cable  (Item ISENa38101)
- Intellical™ ISENa381 Sodium (Na<sup>+</sup>) Ion Selective Electrode (ISE), 3 m Cable  (Item ISENa38103)
- Intellical™ ISENH3181 Ammonia (NH<sub>3</sub>) Ion Selective Electrode (ISE), 1 m Cable  (Item ISENH318101)
- Intellical™ ISENH3181 Ammonia (NH<sub>3</sub>) Ion Selective Electrode (ISE), 3 m Cable  (Item ISENH318103)
- Intellical™ ISENH4181 Ammonium (NH<sub>4</sub><sup>+</sup>) Ion Selective Electrode (ISE), 1 m Cable  (Item ISENH418101)
- Intellical™ ISENH4181 Ammonium (NH<sub>4</sub><sup>+</sup>) Ion Selective Electrode (ISE), 3 m Cable  (Item ISENH418103)
- Intellical™ ISECL181 Chloride (Cl<sup>-</sup>) Ion Selective Electrode (ISE), 1 m Cable  (Item ISECL18101)
- Intellical™ ISECL181 Chloride (Cl<sup>-</sup>) Ion Selective Electrode (ISE), 3 m Cable  (Item ISECL18103)
- Intellical™ ISEF121 Fluoride (F<sup>-</sup>) Ion Selective Electrode (ISE), 1 m Cable  (Item ISEF12101)
- Intellical™ ISEF121 Fluoride (F<sup>-</sup>) Ion Selective Electrode (ISE), 3 m Cable  (Item ISEF12103)
- Intellical™ ISEN03181 Nitrate (NO<sub>3</sub>⁻) Ion Selective Electrode (ISE), 1 m Cable  (Item ISEN0318101)
- Intellical™ ISEN03181 Nitrate (NO<sub>3</sub>⁻) Ion Selective Electrode (ISE), 3 m Cable  (Item ISEN0318103)
- Intellical™ MTC101 Field Low Maintenance Gel Filled ORP/RedOx Electrode, 5 m Cable  (Item MTC10105)
- Intellical™ MTC101 Field Low Maintenance Gel Filled ORP/RedOx Electrode, 10 m Cable  (Item MTC10110)
- Intellical™ MTC101 Field Low Maintenance Gel Filled ORP/RedOx Electrode, 15 m Cable  (Item MTC10115)
- Intellical™ MTC101 Field Low Maintenance Gel Filled ORP/RedOx Electrode, 30 m Cable  (Item MTC10130)
- Intellical™ MTC101 Laboratory Low Maintenance Gel Filled ORP/RedOx Electrode, 1 m Cable  (Item MTC10101)
- Intellical™ MTC101 Laboratory Low Maintenance Gel Filled ORP/RedOx Electrode, 3 m Cable  (Item MTC10103)
- Intellical™ MTC301 Laboratory General Purpose Refillable ORP/RedOx Electrode, 1 m Cable  (Item MTC30101)
- Intellical™ MTC301 Laboratory General Purpose Refillable ORP/RedOx Electrode, 3 m Cable  (Item MTC30103)
- Intellical™ PHC201 Laboratory General Purposes Gel Filled pH Electrode, 1 m Cable  (Item PHC20101)
- Intellical™ PHC201 Laboratory General Purposes Gel Filled pH Electrode, 3 m Cable  (Item PHC20103)
- Intellical™ PHC705 Laboratory General Purpose RedRod Refillable Glass pH Electrode, 1 m Cable  (Item PHC70501)
- Intellical™ PHC725 Laboratory Low Ionic Strength Media RedRod Refillable Glass pH Electrode, 1 m Cable  (Item PHC72501)
- Intellical™ PHC705 Laboratory High Alkalinity Range RedRod Refillable Glass pH Electrode, 1 m Cable  (Item PHC705A01)
- Intellical™ PHC735 Laboratory Dirty Media RedRod Refillable Glass pH Electrode, 1 m Cable  (Item PHC73501)
- Intellical™ PHC745 Laboratory Clogging Media RedRod Refillable Glass pH Electrode, 1 m Cable  (Item PHC74501)
- Intellical™ PHC805 Laboratory General Purpose Refillable Glass pH Electrode, 1 m Cable  (Item PHC80501)
- Intellical™ PHC729 Laboratory Surface Measurements RedRod Refillable Glass pH Electrode, 1 m Cable  (Item PHC72901)