HQ430D Laboratory Single Input, Multi-Parameter Meter - pH, Conductivity, Optical Dissolved Oxygen, ORP, and ISE

Product #: HQ430D
USD Price: Available
Contact Hach

Multiparameter: Plug and Play any Intellical Probe!

Designed for water quality experts, the Hach HQ430d Laboratory Multi-Meter is an advanced laboratory meter that takes the guesswork out of measurements. HQD laboratory meters connect with smart Intellical electrodes that automatically recognize the testing parameter, calibration history, and method settings to minimize errors and setup time. The advanced HQD Laboratory Meter is designed to withstand years of continuous lab use. HQD bench meters feature a simple user interface that does not require manuals or training to operate. The HQD digital meter is ideal for any of the following measurement parameters as a pH meter, a mV/RedOx/ORP meter, an Ion Selective (ISE) meter, a Dissolved Oxygen (DO) meter, a Biochemical Oxygen Demand (BOD) meter, a conductivity meter for measuring electrical conductivity, salinity, resistivity, or total dissolved solids (TDS), in wastewater, drinking water or general water quality applications, soil, and food or beverages applications. A wide range of Intellical electrodes, cell, probes and sensors are available to perform accurate measurements in any sample media types.

Flexible Laboratory bench multi Meter for efficient water quality parameters testing

Single input channel for flexible measurement of pH, Conductivity, Total Dissolved Solid (TDS), Optical Dissolved Oxygen (DO), Biochemical Oxygen Demand (BOD), Oxydo Reduction Potential (ORP/RedOx), Temperature, Ion Selective Electrode (ISE) direct concentration reading for Ammonia, Ammonium, Fluoride, Chloride, Sodium - connect any Intellical™ smart 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.

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 data connectivity with easy to read results

Internal USB ports simplify data transfer, peripherals, and software updates and connection to PCs printer and keyboards, with a large ultra-bright backlit LCD screen with large font size for convenient reading.

Improve productivity and save laboratory space

Multi meter capabilities in one instrument with Intellical probes makes switching parameters fast and easy by automatically recalling your measurement settings.

Specifications

Automatic Buffer Recognition: Yes
Barometric Pressure Measurement: Automatic compensation of DO when using an LDO or LBOD probe
Calibration:
  Demal (1D/ 0.1D/ 0.01D);
  Molar (0.1M/ 0.01M/0.001M);
<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calibration Intervals/Alerts/Reminder:</td>
<td>Off, Selectable from 2 hours to 7 days</td>
</tr>
<tr>
<td>Communication:</td>
<td>Integrated USB type A (for USB 2.0 flash memory device, printer, keyboard) and Integrated USB type B (for PC)</td>
</tr>
<tr>
<td>Compliance Certifications:</td>
<td>CE.WEEE</td>
</tr>
<tr>
<td>Conductivity measurement:</td>
<td>Yes</td>
</tr>
<tr>
<td>Conductivity Measurement Range:</td>
<td>0.01 µS/cm - 200.0 mS/cm</td>
</tr>
<tr>
<td>Conductivity measurement: Temperature correction:</td>
<td>None; Linear; NaCl Non-Linear Natural Water.</td>
</tr>
<tr>
<td>Conductivity resolution:</td>
<td>0.01 µS/cm - 0.1 mS/cm upon selected measuring range</td>
</tr>
<tr>
<td>Contents:</td>
<td>Meter Only</td>
</tr>
<tr>
<td>Custom Calibration Standards:</td>
<td>Yes</td>
</tr>
<tr>
<td>Data Export:</td>
<td>Download via USB connection to PC or flash memory device. Automatically transfer entire data log or as readings are taken.</td>
</tr>
<tr>
<td>Data Memory:</td>
<td>500 records/FIFO</td>
</tr>
<tr>
<td>Data Storage:</td>
<td>Automatic, GLP ISO compliant reading data stored with calibration details.</td>
</tr>
<tr>
<td>Dimensions:</td>
<td>859 x 175 x 235 mm (3.38 x 6.88 x 9.25 in.)</td>
</tr>
<tr>
<td>Display:</td>
<td>Detailed mode/Large mode</td>
</tr>
<tr>
<td>Display Lock Function:</td>
<td>Continuous / Auto-stabilization (&quot;press to read&quot;) / At Interval</td>
</tr>
<tr>
<td>Display Type:</td>
<td>440 x 160 pixel LCD with backlight illumination</td>
</tr>
<tr>
<td>DO Measurement Range:</td>
<td>0.1 - 20.0 mg/L (ppm) 1 - 200% saturation</td>
</tr>
<tr>
<td>DO Resolution:</td>
<td>0.1</td>
</tr>
<tr>
<td>DO sensor calibration:</td>
<td>• 100% (water-saturated air (100%) calibration</td>
</tr>
<tr>
<td></td>
<td>• 100% with 0 (water-saturated air (100%) calibration with 0 point</td>
</tr>
<tr>
<td></td>
<td>• mg/L (calibration with a specified dissolved oxygen concentration (mg/L) solution)</td>
</tr>
<tr>
<td></td>
<td>• mg/L with 0 (calibration with a specified dissolved oxygen concentration (mg/L) solution with 0 point)</td>
</tr>
<tr>
<td></td>
<td>• Factory (calibration with the default LDO calibration)</td>
</tr>
<tr>
<td>Electrode Holder:</td>
<td>No</td>
</tr>
<tr>
<td>Electrode stand:</td>
<td>Optional</td>
</tr>
<tr>
<td>GLP Features:</td>
<td>Date; Time; Sample ID; Operator ID</td>
</tr>
<tr>
<td>Instrument:</td>
<td>Bench</td>
</tr>
<tr>
<td>IP Rating:</td>
<td>IP54 (Resistant to spray of water; Dust-proof)</td>
</tr>
<tr>
<td>ISE Direct Measurement Range:</td>
<td>Yes</td>
</tr>
<tr>
<td>ISE Electrode Calibration:</td>
<td>2 - 5 points</td>
</tr>
<tr>
<td>Languages:</td>
<td>English, French, German, Italian, Spanish, Danish, Dutch, Polish, Portuguese, Turkish, Swedish, Czech, Russian</td>
</tr>
<tr>
<td>Measurement Method:</td>
<td>Probe specific programmed method settings</td>
</tr>
<tr>
<td>Model:</td>
<td>HQ430D – Multi/1 Channel</td>
</tr>
<tr>
<td>mV Measurement at Stable Reading:</td>
<td>Yes</td>
</tr>
<tr>
<td>mV Measurement Range:</td>
<td>-1500 - 1500 mV</td>
</tr>
<tr>
<td>mV Resolution:</td>
<td>0.1 mV</td>
</tr>
</tbody>
</table>
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

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: None
Region: US
Resistivity Measurement: 2.5 Ω.cm - 49 MΩ.cm
Resistivity Resolution: 0.1
Salinity Measurement Range: 0 - 42 (ppt) (‰)
Salinity Resolution: 0.01 (ppt) (‰)
Sensors: Sensor A: NA
Sensor B: NA
Sensor C: NA

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: 3 years
Weight: 750 g (1.65 lb) without batterie; 850 g (1.87 lb) with batteries
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™ LDO101 Laboratory Luminescent/Optical Dissolved Oxygen (DO) Sensor, 1 m Cable  (Item LDO10101)
- Intellical™ LDO101 Laboratory Luminescent/Optical Dissolved Oxygen (DO) Sensor, 3 m Cable  (Item LDO10103)
- Intellical™ LBOD101 Luminescent/Optical Dissolved Oxygen (LDO) Sensor for BOD Measurements, 1 m cable  (Item LBOD10101)
- Intellical™ CDC401 Laboratory 4-Poles Graphite Conductivity Cell, 1 m Cable  (Item CDC40101)
- Intellical™ CDC401 Laboratory 4-Poles Graphite Conductivity Cell, 3 m Cable  (Item CDC40103)
- Intellical™ PHC301 Laboratory General Purposes Refillable pH Electrode, 1 m Cable  (Item PHC30101)
- 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™ ISENa381 Sodium (Na⁺) Ion Selective Electrode (ISE), 1 m cable  (Item ISENA38101)
- Intellical™ ISENa381 Sodium (Na⁺) Ion Selective Electrode (ISE), 3 m cable  (Item ISENA38103)
- Intellical™ ISENH3181 Ammonia (NH₃) Ion Selective Electrode (ISE), 1 m cable  (Item ISENH318101)
- Intellical™ ISENH3181 Ammonia (NH₃) Ion Selective Electrode (ISE), 3 m cable  (Item ISENH318103)
- Intellical™ ISENH4181 Ammonium (NH₄⁺) Ion Selective Electrode (ISE), 1 m cable  (Item ISENH418101)
- Intellical™ ISENH4181 Ammonium (NH₄⁺) Ion Selective Electrode (ISE), 3 m cable  (Item ISENH418103)
- Intellical™ ISECL181 Chloride (Cl⁻) Ion Selective Electrode (ISE), 1 m cable  (Item ISECL18101)
- Intellical™ ISECL181 Chloride (Cl⁻) Ion Selective Electrode (ISE), 3 m cable  (Item ISECL18103)
- Intellical™ ISEF121 Fluoride (F⁻) Ion Selective Electrode (ISE), 1 m cable  (Item ISEF12101)
- Intellical™ ISEF121 Fluoride (F⁻) Ion Selective Electrode (ISE), 3 m cable  (Item ISEF12103)
- Intellical™ ISENO3181 Nitrate (NO₃⁻) Ion Selective Electrode (ISE), 1 m cable  (Item ISENO318101)
- Intellical™ ISENO3181 Nitrate (NO₃⁻) Ion Selective Electrode (ISE), 3 m cable  (Item ISENO318103)
- 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)