



# HQ4100 Portable Multi-Meter, pH, Conductivity, TDS, Salinity, Dissolved Oxygen (DO), ORP, and ISE, 1 channel, w/o electrodes

Product #: LEV015.98.4100A

AED Price: Contact Hach

### A robust and intuitive range of portable meters, instilling confidence in reporting and managing your results.

The HQ Series is for water quality professionals who want to perform electrochemical analysis for field and lab environments. Our new portable platform will allow you to collect intuitive, accurate measurements, manage data, and easily review results, while supplying an IP67 robustness rating.

They provide a true rugged, field-ready solution with on-screen, visual step-by-step operating guidance that provides users with confidence in reporting and managing their results. Unlike other field meters with basic user interfaces and without easily accessible data, the HQ Series secures, simplifies, and accelerates the complete measurement process for field users.

Choose from 4 models, including the three-input HQ4000 series, dual-input HQ2000 series, and single-input HQ1000 series. These meters offer a range in measurement versatility - eliminating the need for multiple pieces of equipment.

#### Performing a successful calibration has never been so simple

Most measuring issues are due to incorrect calibration procedures. With our illustrated, step-by-step on-screen calibration and troubleshooting procedures, water quality professionals can succeed every time.

#### Deliver your daily activity in just a few clicks

Whether you are at your facility or working in the field, the Hach<sup>®</sup> HQ Series portable meter ensures your data will be safely transferred via USB.

#### Sensors designed for every application

We offer standard laboratory and rugged field Intellical smart sensors available with the HQ Series to measure a wide variety of parameters including Total Dissolved Solids (TDS), Optical Dissolved Oxygen (DO), Biochemical Oxygen Demand (BOD), Temperature, Conductivity, and pH. Intellical smart probes are automatically recognised by HQ meters, retain calibration history and method settings to minimise errors and setup time. They incorporate proven technology to deliver superior accuracy and response times – even when measuring challenging samples or challenging operating environments.

#### Peace of mind: Hach service and support will be there for you

Our Technical Support, Field Service, and Central Service Teams work together with over 80 years of electrochemistry expertise to help you maximise instrument uptime, ensure data integrity, maintain operational stability, and reduce compliance risk. Never feel alone when you need support.

#### **Specifications**

Accessories included: USB charger, power cable, and clips

Auto-buffer recognition: Yes
Backlight: 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

Certifications: CE, FCC, ISED, RCM, KC, ETL Verified: US DOE/ NRCan Energy Efficiency, RoHS

Conductivity 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

Conductivity measurement range: Yes

Conductivity measurement: Temperature

correction:

None; Linear; NaCl Non-Linear Natural Water.

Custom calibration standards: Yes

USB connection to PC or USB storage device (limited to the storage device capacity). Data logger:

100,000 data points Data storage:

63 mm x 97 mm x 220 mm Dimensions ( $H \times W \times D$ ):

Display: Up to 3 parameters at a time, dependent on HQ model

Display type: 640x480 Colour TFT

DO measurement range: 0.1 - 20.0 mg/L (ppm), 1 - 200% saturation

DO resolution: 0.1

Electrode type: Intellical Standard Laboratory or Rugged Field

Enclosure waterproof rating: IP67 (with battery compartment installed)

Environmental conditions: relative

humidity:

90% (non-condensing)

0 - 60 °C Environmental conditions: temperature:

GLP features: Date; Time; Sample ID; Operator ID, Calibration

Inputs: 1

Instrument: Portable

Yes ISE direct measurement: ISE electrode calibration: Yes

Kit?: Meter only

Languages user interface: English, Chinese - Simplified, Spanish, French, German, Italian, Japanese, Turkish, Dutch,

Portuguese (PT & BR), Korean, Danish, Swedish, Polish, Norwegian, Hungarian, Greek, Finnish,

Czech, Romanian, Croatian, Bulgarian, Slovak, Lithuanian, Estonian, Slovenian, Russian

Lock function: Continuous / Auto-stabilisation ("press to read") / At Interval

Measurement method: Probe specific programmed method settings

Model: HQ4100 Multi/ISE/1 Channel

mV measurement at stable reading: Yes Yes

mV resolution: 0.1 mV

mV measurement range:

Operating error messages: Clear text error messages displayed

Operating Interface: Soft Touch Keypad

ORP electrode calibration: Predefined ORP standards (including Zobell's solution)

pH, Conductivity, TDS, Salinity, Dissolved Oxygen, ORP, ISE Parameter:

Colour-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

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

Power supply: Rechargeable lithium-ion battery 18650 (internal)

Class II, USB power adapter: 100 - 240 VAC, 50/60 Hz input; 5 VDC at 2 A USB power adapter

output (external)

Probes included?: None

Protection class: IEC Class III (SELV (Separated/Safety Extra-Low Voltage) powered); external

Resolution: 0.01 mg/L - 0.1 g/L upon measuring range

Salinity measurement range: 0 - 42 (ppt) (‰)
Salinity resolution: 0.01 (ppt) (‰)

Sensor A: None
Sensor B: None
Sensor C: None

Storage conditions: -20 - 60 °C, max. 90% relative humidity (non-condensing)

TDS measurement range: 0.00 mg/L - 50.0 g/L NaCl

Temperature compensation: Automatic Temperature compensation for pH

Temperature measurement range: °C or °F
Temperature resolution: 0.1 °C

Type of measurement: Field Measurements

Warranty: 36 months

Weight: 530 g (Meter only)

What's included?: HQ4100 Portable pH/ORP/EC/TDS/DO/ISE Multi-Meter, 1 channel, includes manuals, Li-Ion

batteries, USB charger with cable for EU.

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HQ4100 Portable pH/ORP/EC/TDS/DO/ISE Multi-Meter, 1 channel, includes manuals, Li-Ion batteries, USB charger with cable for EU.

#### 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 PHC725 Laboratory Low Ionic Strength Media RedRod Refillable Glass pH Electrode, 1 m Cable (Item PHC72501)
- Intellical PHC108 Laboratory Puncture Stainless Steel pH Electrode, 1 m Cable (Item PHC10801)
- Intellical PHC705 Laboratory General Purpose RedRod Refillable Glass pH Electrode, 1 m Cable (Item PHC70501)
- Intellical PHC805 Laboratory General Purpose Refillable Glass pH Electrode, 1 m Cable (Item PHC80501)
- 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 PHC705 Laboratory High Alkalinity Range RedRod Refillable Glass pH Electrode, 1 m Cable (Item PHC705A01)

- Intellical PHC729 Laboratory Surface Measurements RedRod Refillable Glass pH Electrode, 1 m Cable (Item PHC72901)
- 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 PHC101 Laboratory Low Maintenance Gel Filled pH Electrode, 1 m Cable (Item PHC10101)
- Intellical PHC101 Laboratory Low Maintenance Gel Filled pH Electrode, 3 m Cable (Item PHC10103)
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- Intellical PHC301 Laboratory General Purposes Refillable pH Electrode, 1 m Cable (Item PHC30101)
- Intellical PHC201 Laboratory General Purposes Gel Filled pH Electrode, 1 m Cable (Item PHC20101)
- Intellical PHC101 Field Low Maintenance Gel Filled pH Electrode, 5 m Cable (Item PHC10105)
- Intellical MTC101 Laboratory Low Maintenance Gel Filled ORP/RedOx Electrode, 3 m Cable (Item MTC10103)
- Intellical CDC401 Laboratory 4-Poles Graphite Conductivity Cell, 1 m Cable (Item CDC40101)
- Intellical CDC401 Field 4-Poles Graphite Conductivity Cell, 5 m Cable (Item CDC40105)
- 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 PHC201 Laboratory General Purposes Gel Filled pH Electrode, 3 m Cable (Item PHC20103)
- 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 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 MTC301 Laboratory General Purpose Refillable ORP/RedOx Electrode, 1 m Cable (Item MTC30101)
- Intellical CDC401 Laboratory 4-Poles Graphite Conductivity Cell, 3 m Cable (Item CDC40103)
- Intellical CDC401 Field 4-Poles Graphite Conductivity Cell, 10 m Cable (Item CDC40110)
- Intellical CDC401 Field 4-Poles Graphite Conductivity Cell, 30 m Cable (Item CDC40130)