



# HQ40D Portable pH and Conductivity/TDS Meter, Field Kit for Environmental Monitoring, with Gel pH Electrode and Conductivity Cell, 3 m Cable

Product #:

**HQ40D53103203 A Hazardous** 

**OBSOLETE ITEM** 

This item is no longer available.

Suggested replacements:

- CDC40103
- PHC10103

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

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

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

Designed for your water quality 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<sup>TM</sup> PHC101 and CDC401 are digital combination pH and Conductivity/TDS electrodes with built-in temperature sensor. PHC101 has low maintenance needs thanks to a non-refillable gel-filled single open reference junction. These electrodes are shockproff with their plastic body protecting down to the sensing element. The PHC101 and CDC401 electrodes are ideal for measuring pH and Conductivity/TDS in wastewater, drinking water and general aqueous applications. The PHC101 is not suitable for use with organic solvents or samples with pH less than 2.

Replaced by NEW HQ Series.

#### Rugged pH and Conductivity/TDS 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 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

Package content includes everything you need to start testing. Details below

## **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:  $0.01 \mu S/cm - 200.0 mS/cm$ 

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: 3

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

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:

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0.001/0.01/0.1 pH

Printer: Yes, Optional

Probes included: PHC10103, CDC40103

Salinity Measurement Range: 0 - 42 (ppt) (%)

Salinity Resolution: 0.01 (ppt) (%)

Sensor A: PHC10103 (3 m)

Sensor B: CDC40103 (3 m)

Sensor C: NA

Sensors: Sensor A: PHC10103

Sensor B: CDC40103

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: Field Measurements

Warranty: 36 months

Weight: 335 g (0.75 lb) without batteries; 430 g (0.95 lb) with

What's included?: 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).

Intellical CDC401 Laboratory Conductivity Cell, 3 m cable, Test certificate, and Basic User

Manual.Intellical.

Intellical PHC101 Laboratory pH electrode with storage soaker bottle, 3 m cable, Test certificate,

and Basic User Manual.

#### What's included?

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