

# METERS AND PROBES



Be Right™



# HQd Meters and IntelliCAL™ Probes

Meters and Probes



Secure waterproof connections and color-coded clips

All the information you need on one screen (backlit in low light conditions)

Meters record probe serial numbers, current calibration data, user ID, sample ID, time, and date with every reading

Easy-to-use, menu-driven interface

Great for field use—200+ hours of battery life

**One Meter. Choose Your Parameters. pH, Conductivity, or LDO® Luminescent Dissolved Oxygen**

## Versatile and Expandable

- Save money—Take up to 2 simultaneous measurements of pH, conductivity, and LDO with a single plug-and-play meter.
- No need to predetermine parameters—purchase just the probes you need now, and you're free to expand your parameters later!

## Time Savings

- Calibration history is stored in the IntelliCAL probes.
- Change probes without re-calibrating!
- Transfer GLP/ISO data effortlessly to PC or flash stick.
- Meter links results

## Confidence in Results

- Meter automatically recognizes type of probe and parameter.
- Automatic check standard routines and calibration reminders ensure accurate results.
- Link sample ID, user ID, and probe serial number to each measurement.

**HQ40d Dual-Input, Multi-Parameter Digital Meter**

"Calibration is easy, repeatability is very good, and we like the fact that it stores readings that can be tracked by operator and even be downloaded to a printer or PC."

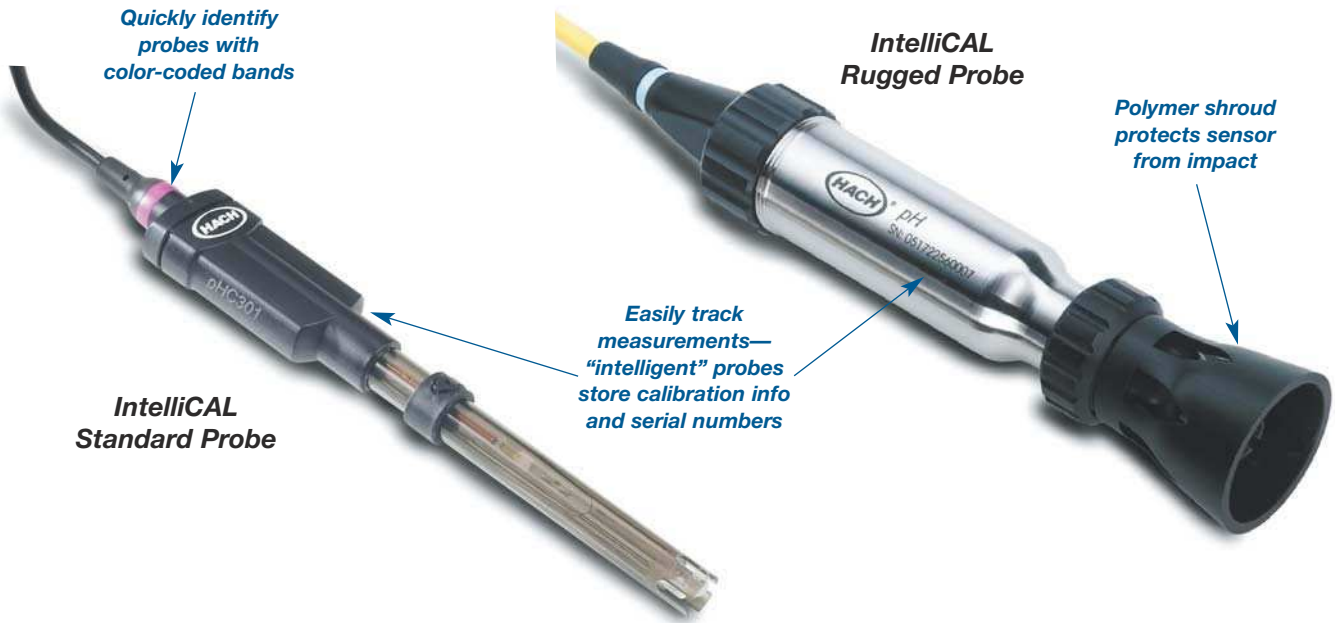
Cindi Rutledge, Plant Operator  
Monterey Bay Aquarium



To learn more, go to: [www.waterqualitymeters.com](http://www.waterqualitymeters.com)

# HQd Meters and IntelliCAL™ Probes

Meters and Probes



Quickly identify probes with color-coded bands

**IntelliCAL Standard Probe**

**IntelliCAL Rugged Probe**

Polymer shroud protects sensor from impact

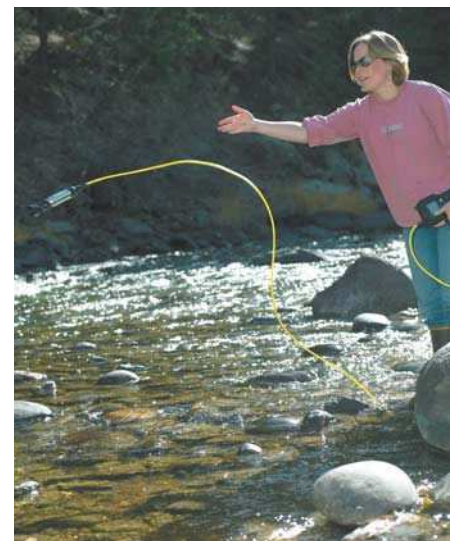
Easily track measurements—“intelligent” probes store calibration info and serial numbers

**Hach's Luminescent Dissolved Oxygen, LDO sensors feature:**

- No more membranes to change
- Less maintenance and calibration
- Fast, accurate readings with datalog



Hach's breakthrough LDO technology has been approved in numerous states across the nation for compliance monitoring. Visit [www.waterqualitymeters.com](http://www.waterqualitymeters.com) for more information and to learn if you are in an approved state.



To learn more, go to: [www.waterqualitymeters.com](http://www.waterqualitymeters.com)

**Find it here... Buy it today on [www.hach.com](http://www.hach.com)**





# HQd Meters and IntelliCAL™ Probes

## HQ40d Dual-Input Multi-Parameter Meter



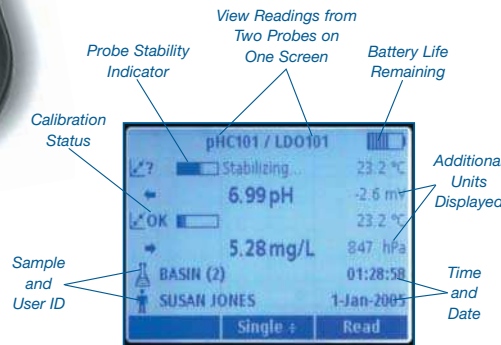
### Plug & Play with any Two IntelliCAL Probes!

- One meter measures pH, Conductivity (salinity, TDS, resistivity), and LDO®
- Simultaneously measure two different parameters
- Transfer reporting data (GLP/ISO) effortlessly to PC or flash stick
- HQ40d meter systems include Field Kit, which contains a protective meter glove, 2 probe holders, and sample cups in one organized portable case

#### HQ40d Meter Only

Product Number	Description	Price
HQ40d53000000	HQ40d Dual-Input, Multi-Parameter Digital Meter	\$700.00

Order meter and probes together, online at: [www.hach.com/config](http://www.hach.com/config)



The Hach HQ40d features three connection ports: 2 ports that allow simultaneous measurement of two different parameters using two different probes, and 1 port for USB and external power.



Backlit Dual Display

## HQ30d Single-Input Multi-Parameter Meter



### Plug & Play with any One IntelliCAL Probe!

- Lighten your load with a single meter to measure either pH, Conductivity (salinity, TDS, resistivity), or LDO® interchangeably
- Quick and easy swapping of parameter/probe without re-calibration

#### HQ30d Meter Only

Product Number	Description	Price
HQ30d53000000	HQ30d Single-Input, Multi-Parameter Digital Meter	\$550.00

Order meter and probes together, online at: [www.hach.com/config](http://www.hach.com/config)

The HQ30d features one probe port for use with any of Hach's IntelliCAL probes and one port for external power.



## Dedicated Parameter Meters

#### HQ11d pH Meter and HQ14d Conductivity Meter

Product Number	Description	Price
HQ11d53000000	HQ11d Digital pH Meter	\$340.00
HQ14d53000000	HQ14d Digital Conductivity Meter	\$340.00

Order meter and probes together, online at: [www.hach.com/config](http://www.hach.com/config)

To learn more, go to: [www.waterqualitymeters.com](http://www.waterqualitymeters.com)

# HQd Meters and IntelliCAL™ Probes

## IntelliCAL™ Standard Probes

Accurate, Pre-Calibrated, and Reliable.

### Combination pH

Gel-filled, non-refillable standard model pH probe also measures temperature. Waterproof for 24 hours fully immersed. Probe measures 17.8 cm (7") and weighs 45g (1.6 oz.) (probe only).

Cable Length	Product No.	Price
1 meter cable	pHC10101	\$165.00
3 meter cable	pHC10103	165.00

### Conductivity

4-pole graphite design, standard model probe measures conductivity (µS/cm, mS/cm), salinity, TDS, and temperature. Waterproof for 24 hours fully immersed. Probe measures 17.8 cm (7") and weighs 45g (1.6 oz.) (probe only).

Cable Length	Product No.	Price
1 meter cable	CDC40101	\$275.00
3 meter cable	CDC40103	275.00



### Refillable pH

Liquid-filled, refillable standard model pH probe also measures temperature. Probe measures 17.8 cm (7") and weighs 45g (1.6 oz.) (probe only).

Cable Length	Product No.	Price
1 meter cable	pHC30101	\$195.00
3 meter cable	pHC30103	195.00

### Luminescent Dissolved Oxygen (LDO)

Using patented Hach Luminescent Dissolved Oxygen technology, this standard model probe measures dissolved oxygen (mg/L, % saturation) pressure, and temperature. Waterproof for 24 hours fully immersed. Probe measures 17.8 cm (7") and weighs 45g (1.6 oz.) (probe only).

Cable Length	Product No.	Price
1 meter cable	LDO10101	\$550.00
3 meter cable	LDO10103	550.00

## IntelliCAL™ Rugged Probes

Reliable Measurements in Harsh Environments.

### Combination pH

Gel-filled rugged model pH probe also measures temperature. Waterproof for 24 hours fully immersed. Probe measures 21.6cm (8.5") and weighs 0.57kg (1.26 lbs.) (probe only).

Cable Length	Product No.	Price
5 meter cable	pHC10105	\$475.00
10 meter cable	pHC10110	495.00
15 meter cable	pHC10115	525.00
30 meter cable	pHC10130	575.00

### Luminescent Dissolved Oxygen (LDO)

Using patented Hach Luminescent Dissolved Oxygen technology, this rugged model probe measures dissolved oxygen (mg/L, % saturation) pressure, and temperature. Waterproof for 24 hours fully immersed. Probe measures 21.6cm (8.5") and weighs 0.57kg (1.26 lbs.) (probe only).

Cable Length	Product No.	Price
5 meter cable	LDO10105	\$700.00
10 meter cable	LDO10110	720.00
15 meter cable	LDO10115	750.00
30 meter cable	LDO10130	800.00



### Conductivity

4-pole graphite design, rugged model probe measures conductivity (µS/cm, mS/cm), salinity, TDS, and temperature. Waterproof for 24 hours fully immersed. Probe measures 21.6cm (8.5") and weighs 0.57kg (1.26 lbs.) (probe only).

Cable Length	Product No.	Price
5 meter cable	CDC40105	\$550.00
10 meter cable	CDC40110	570.00
15 meter cable	CDC40115	600.00
30 meter cable	CDC40130	650.00



To learn more, go to: [www.waterqualitymeters.com](http://www.waterqualitymeters.com)

Find it here... Buy it today on [www.hach.com](http://www.hach.com)





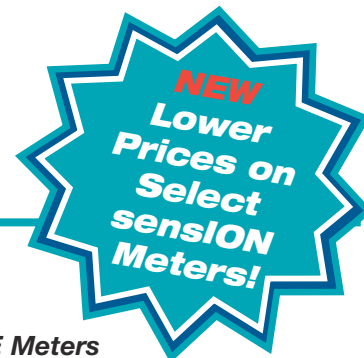
## pH sensION Meters

### Basic Portable and Benchtop pH Meters

- 1, 2, or 3 point calibration
- Resolution to 0.1, 0.01, and 0.001, for the right accuracy when you need it
- Fast response to changes in pH; true pH averaging
- sensION3 features RS232 communication to PC or printer
- sensION1 is waterproof (IP67) and floats

Range	Resolution	Accuracy
(pH): -2.00 to 19.99 mV: ±2000 Temperature: -10 to 110°C (-50 to 230°F)	(pH): 0.1; 0.01; 0.001 (selectable) mV: 0.1 mV Temperature: 0.1°C	(pH): ±0.002 mV: ±0.2 mV or ±0.1% of reading (whichever is greater) Temperature: ±0.3°C at -10 to 70°C; ±1.0°C at 70 to 110°C

Prod. No.	Description	Was	NOW
5170010	sensION1 Portable pH Meter with Platinum pH electrode (replaceable cartridges)	<del>\$525.00</del>	\$441.00
5170011	sensION1 Portable pH Meter with gel-filled electrode (disposable electrode)	<del>495.00</del>	415.80
5175010	sensION3 Benchtop pH Meter with Platinum pH electrode, 115V	<del>650.00</del>	546.00
5175011	sensION3 Benchtop pH Meter with Platinum pH electrode, 230V	<del>650.00</del>	546.00
5175012	sensION3 Benchtop pH Meter with gel-filled electrode, 115V	<del>650.00</del>	546.00
5175013	sensION3 Benchtop pH Meter with gel-filled electrode, 230V	<del>650.00</del>	546.00



## pH / ISE sensION Meters

### Advanced Portable and Benchtop pH / ISE Meters

- Automatic buffer recognition
- Resolution to 0.1, 0.01 and 0.001, for the right accuracy when you need it
- Measures/compensates temperature in °C or °F
- sensION2 is waterproof (IP67) and floats
- Recall/download/print data via built-in RS232 serial ports (sensION4) or via optional docking station (sensION2)
- sensION4 features selectable two-channel operation

Range	Resolution	Accuracy
(pH): -2.000 to 19.999 Concentration: 0.000 to 19900 mV: ±2000 Temperature: -10 to 110°C (-50 to 230°F)	(pH): 0.1; 0.01; 0.001 (selectable) Concentration: 0.1; 0.01; 0.001 (selectable) mV: 0.1 mV Temperature: 0.1°C	(pH): ±0.002 Concentration: ±0.5% of reading mV: ±0.2 mV or ±0.05% of reading (whichever is greater) Temperature: ±0.3°C at -10 to 70°C; ±1.0°C at 70 to 110°C

Prod. No.	Description	Was	NOW
5172510	sensION2 Portable pH/ISE Meter with Platinum pH electrode	<del>\$625.00</del>	\$590.60
5177510	sensION4 Benchtop pH/ISE Meter with Platinum pH electrode 115V	<del>1,100.00</del>	924.00



To view the complete portfolio of sensION meters, including multi-parameter meters, visit [www.hach.com](http://www.hach.com).

## Dissolved Oxygen sensION Meters

### Portable and Benchtop Dissolved Oxygen Meters

- Quick calibration
- All-in-one 5-pin connector
- Stable resolution to 0.1, 0.01 mg/L; 0.1% saturation
- Recall/download/print data via built-in RS232 serial ports (sensION8) or via optional docking station (sensION6)
- Dissolved Oxygen measurement using polarographic technology (Clark cell)

Range	Resolution	Accuracy
Dissolved Oxygen: 0-20 mg/L (ppm); 2-200% saturation	Dissolved Oxygen: 0.01 or 0.1 ppm (mg/L); 0.1% saturation	Dissolved Oxygen: ±1% full scale
Temperature: 0-50°C	Temperature: 0.1°C	Temperature: ±0.3°C at -10 to 70°C; ±1.0°C at 70 to 110°C

Prod. No.	Description	Was	NOW
5185010	sensION6 Dissolved Oxygen Meter with 3 m probe	<del>\$800.00</del>	\$672.00
5455010	sensION8 Benchtop Dissolved Oxygen Meter with electrode, 1-meter (40") cable, 115 V	Still only \$997.50	



## Conductivity sensION Meters

### Portable and Benchtop Conductivity Meters

- Fast response
- Quick single-point calibration
- All-in-one 5-pin connector
- Recall/download/print data via built-in RS232 serial ports (sensION5) or via optional docking station (sensION7)

Range	Resolution	Accuracy
Conductivity: 0 to 199.9 µS/cm; 200 to 1999 µS/cm; 2 to 19.99 mS/cm; 20 to 199.9 mS/cm	Conductivity: 0.1 µS; 1µS; 0.01 mS; 0.1 mS	Conductivity: ±0.5% of range
TDS: 0 to 50,000 mg/L as NaCl Salinity: 0 to 42 g/L (ppt)	TDS: 3 significant digits Salinity: 0.1 g/L (ppt)	TDS: ±0.5% of full scale Salinity: ±0.1 ppt (-2 to 35°C)
Temperature: -10.0 to 110.0°C	Temperature: ±0.1°C	Temperature: ±0.3°C at -10 to 70°C; ±1.0°C at 70 to 110°C

Prod. No.	Description	Was	NOW
5180010	sensION5 Conductivity Meter with electrode 1-meter (40") cable	<del>\$650.00</del>	\$546.00
5450010	sensION7 Benchtop Conductivity Meter with electrode, 1-meter (40") cable, 115 V	Still only \$892.50	



To view the complete portfolio of sensION meters, including multi-parameter meters, visit [www.hach.com](http://www.hach.com).

Find it here... Buy it today on [www.hach.com](http://www.hach.com)





### sensION Electrochemical Probes

	Electrode Type	Range	Slope	Temp. Range	Interferences	Electrode Only
<b>51910 Platinum Series pH Combination (with temperature)</b>						
	Glass Membrane	pH: 0 to 14	58 (±3) mV/decade	Continuous Use: 0 to 45°C (32 to 113°F) Maximum Use: 0 to 100°C (32 to 212°F)	Na <sup>+</sup> above pH 12	<b>Product No. 5191000</b> \$221.10 pH Platinum Series Combination Electrode (use with sensION Meters) Features 5-pin connector. Includes two electrolyte cartridges and a manual. <b>Product No. 5191022</b> 204.80 With BNC and DIN connectors. <b>Product No. 5191011</b> 195.00 With BNC and 3.5 mm phone connectors.
<b>51915 Platinum Series pH Combination Flat-End</b>						
	Glass Membrane	pH: 0 to 14	58 (±3) mV/decade	Continuous Use: 0 to 45°C (32 to 113°F) Maximum Use: 0 to 80°C (32 to 176°F)	Na <sup>+</sup> above pH 12	<b>Product No. 5191500</b> 252.00 pH Platinum Series Combination Flat-End Electrode (use with ALL Hach meters) Features BNC connector. Includes two electrolyte cartridges and a manual
<b>51935 pH Combination (with temperature)</b>						
	Glass Membrane	pH: 0 to 14	58 (±3) mV/decade at 25°C	Continuous Use: 0 to 45°C (32 to 113°F) Maximum Use: 0 to 100°C (32 to 212°F)	Na <sup>+</sup> above pH 12	<b>Product No. 5193500</b> 136.10 pH Gel-Filled Combination Electrode (use with sensION Meters) Features 5-pin connector. Includes a manual. <b>Product No. 5193522</b> 126.00 With BNC and DIN connectors. <b>Product No. 5193511</b> 126.00 With BNC and 3.5 mm phone connectors.
<b>51940 Refillable Combination Electrode (with temperature)</b>						
	Glass Membrane	pH: 0 to 14	58 (±3) mV/decade at 25°C	Continuous Use: 0 to 45°C (32 to 113°F) Maximum Use: 0 to 100°C (32 to 212°F)	Na <sup>+</sup> above pH 12	<b>Product No. 5194000</b> 147.00 Refillable Combination Electrode (use with sensION Meters) Features 5-pin connector. Includes a manual. <b>Product No. 5194022</b> 147.00 With BNC and DIN connectors. <b>Product No. 5194011</b> 147.00 With BNC and 3.5 mm phone connectors.
<b>51975 Conductivity Probe</b>						
	Epoxy	0.1 µS-200 mS 0.5 (cm-1) cell constant	N/A	-10 to 110°C	N/A	<b>Product No. 5197500</b> (1 m Cable) 273.00 <b>Product No. 5197503</b> (3 m Cable) 294.00 Conductivity Probe with 5-Pin circular connector.
<b>51970 Dissolved Oxygen Probe</b>						
	Clark-type polarographic	0 to 20 mg/L or 0 to 200% saturation	N/A	0 to 50°C	N/A	<b>Product No. 5197000</b> (1 m Cable) 399.00 <b>Product No. 5197003</b> (3 m Cable) 420.00 <b>Product No. 5197015</b> (15 m Cable) 441.00 Dissolved Oxygen Probe with 5-Pin circular connector.
<b>51980 Temperature Probe</b>						
	Thermistor	N/A	N/A	0 to 80°C	N/A	<b>Product No. 5198000</b> 78.80 Temperature Probe (sensION Meter) with 5-pin connector. <b>Product No. 5198022</b> 96.60 Temperature Probe (EC Meter) with DIN Connector <b>Product No. 5198011</b> 105.00 Temperature Probe (Hach One Meter) with 3.5 mm phone connector

To view the complete portfolio of sensION probes, including ammonia, fluoride, nitrate, ORP, and sodium, visit [www.hach.com](http://www.hach.com).



## sensION Accessories



Low-Ionic-Strength (LIS)  
Sample Chamber  
Product No. 5189900



Electrode Washer  
Product No. 2704700



Electrode stands come with  
and without stirrers  
Product No. 45300XX



Probe Holder  
Product No. 5467100



Docking Station  
Product No. 51875XX



Kyoline Brand Thermal Printer  
Product No. A70P021  
(Pen shown for scale.)

Prod. No.	Description	Price	Prod. No.	Description	Price
5197100	BOD Accessory Kit	\$76.40	4530000	Electrode Stand	\$65.10
5189900	LIS Sample Chamber	63.80	4530001	Electrode Stand with Stirrer 115V	210.00
2089400	Electrode Rack	41.30	5192900	Soaker Bottle for pH Electrode	3.80
2089500	Electrode Support Clamp	41.30	1938004	Replacement batteries, AA, pk/4	7.00
2615700	Electrode Holder, Flexible Arm	63.00	5190400	Soft-Sided Carrying Case	75.30
2089300	Electrode Holder, Universal	89.20	5190300	Hard-Sided Carrying Case	60.70
4531500	Extra Stir Bar	4.90	5191700	sensION156 Hard-Sided Carrying Case	52.50
2704700	Electrode Washer	74.80	4966500	HachLink™ Software	411.00
5187501	Docking Stations 115V	99.80	A70P021	Kyoline Brand Thermal Printer with cable, 115 V	273.00
5187502	Docking Stations 230V	99.80	A70P025	Thermal Paper for Kyoline Printer, pk/10 rolls	72.00
4812900	Computer Serial Cable	59.50			
5467100	Probe Holder	43.30			

Find it here... Buy it today on [www.hach.com](http://www.hach.com)



# Pocket Pal™ Testers

## Pocket-sized pH testers for quick, easy, accurate measurements.



### Applications

- Plating
- Water conditioning
- Boiler/cooling water
- Lakes and rivers
- Food processing
- Swimming pools and spas
- Anywhere humidity levels are high



Now IP67 rated\* (dustproof and waterproof), Pocket Pal Testers are immune to harsh environments and accidental spills that could harm electronics. If accidentally immersed in water, the circuitry will remain unharmed. Pocket Pal Testers clip onto your shirt pocket, produce immediate results, and feature an easy-to-read liquid crystal display (LCD). While not recommended as a replacement for a pH or ORP instrument/electrode system, or a Hach Conductivity or TDS meter, Pocket Pal Testers offer a

cost-effective alternative for routine, on-the-spot measurements.

### Temperature Pocket Pal Tester

Range: -15 to 170°C

The Temperature Pocket Pal Tester is an accurate, economical tester offering a wide range of measurement otherwise requiring two glass thermometers.

### pH Pocket Pal Tester

Range: 0.0-14.0 pH Resolution: 0.1 pH Accuracy: ±0.2 pH

The pH Pocket Pal Tester is ideal for quick, on-site pH testing. Applications include water quality testing at cooling towers, swimming pools and spas\*\*. Hach color-coded, unit-dose pH buffer powder pillows, which ensure freshness and eliminate the possibility of contamination, and prepared pH buffer solutions are available in three pH values, 4.01, 7.00, or 10.00 (see page 43). They are recommended for calibration adjustments.

### TDS Pocket Pal Tester

Range: 10-1990 TDS

IP67 rated (waterproof and dustproof). Ideal for quick TDS spot checks, this tester is not a replacement for a conductivity or TDS meter. Tester accuracy is ± 2% at 25°C and accuracy can be ±10% of reading over the temperature measurement range.

For more accurate measurement, use the sensION5 or sensION7 Conductivity Meter (page 37). Results are displayed digitally. Prepared sodium chloride solution is available and is required for calibration.

### Conductivity Pocket Pal Tester

Range: 10-1990 µS/cm

The Conductivity Pocket Pal Tester is ideal for swimming pools and drinking water control. Now IP67 rated. Rugged, dustproof and waterproof plastic body, and easy-to-read digital display make it perfect for on-site measurement. Other applications include water treatment (softener, demineralization, reverse osmosis, and drinking water), fish farming and aquariums, and pollution control. Prepared sodium chloride solution is available and is required for calibration.

### ORP Pocket Pal Tester

Range: ±999 mV

The ORP Pocket Pal Tester offers an accurate and affordable way of testing for redox potential. Because there are no chemical test kits or litmus paper for measuring this parameter, the ORP Pocket Pal Tester is a valuable tool, assuring accuracy, fast response, and excellent repeatability. The ORP Pocket Pal Tester is not IP67 rated. Lights solution is available to check electrode potential.

\*Only the Temperature, pH, TDS, and Conductivity Pocket Pal Testers are IP67 rated.

\*\*Testing in the presence of heavy metals or in liquids warmer than 50°C is not advised.

Prod. No.	Description	Price
4435001	pH Pocket Pal Tester	\$48.30
4440001	TDS Pocket Pal Tester	53.40
2686601	Conductivity Pocket Pal Tester	55.10
2727300	ORP Pocket Pal Tester	82.30
4445001	Temperature Pocket Pal Tester	47.10
4445010	Replacement Temperature Probe	17.20
2367800	Replacement batteries, 4/pk	9.20

NOTE: Calibration solutions are not included with Pocket Pal testers.





# IQ120 and IQ125 Pocket pH Meters

## Waterproof, pocket-sized pH meters with non-glass sensors.

- Silicon chip non-glass pH sensor
- Probe stores dry and needs no maintenance
- Measure samples as small as one drop
- 1-Point calibration on Model IQ120
- 1-point, 2-point or 3-point calibration on Model IQ125
- Automatic temperature compensation (ATC)
- Large, easy-to-read display
- Fast response time
- Low battery indicator
- Over 200-hour life on two watches batteries
- Error message on calibration errors
- Automatic power off
- Replaceable reference electrode

### Replacement Reference Electrode Module

The pH selective silicon chip pH sensor is very rugged and will outlast the reference electrode. Both the IQ120 and IQ125 have replaceable reference electrode modules. Each module will be good for ~10,000 measurements. When it is depleted, or when the reference junction becomes blocked and impossible to restore to useful condition, simply pull it out and replace it with a new one.



### Replacement Calibration Buffer Sets

The calibration buffer sets consist of three 6-mL dropper bottles of buffer plus 65 mL refill bottles. These are convenient to carry, and deliver the single drop of buffer easily all that is required for calibration. The IQ125 calibration buffer set contains one bottle each of pH 4.0, 7.0, and 10.0 buffer, plus a 65 mL refill bottle for each. The IQ120 buffer set contains three bottles of pH 7 buffer plus one 65 mL refill bottle.



Model IQ120 miniLab is the basic version, allowing a single point calibration. The pocket meter comes in a plastic case, with a 6-mL bottle of pH 7 buffer. Calibration is very simple to perform: simply press the cal button, and then place one drop of buffer on the pH sensitive silicon chip in contact with the reference junction.



Model IQ125 miniLab is the Professional version, allowing for up to a three-point calibration. It comes with 6 mL dropper bottles of pH 4, 7, and 10 calibration buffers.

Prod. No.	Description	Price
2889600	IQ 125 miniLab pH Meter	\$208.00
2889700	IQ 120 miniLab pH Meter	166.20
2889800	IQ 125 Calibration Buffer Set	15.00
2889900	IQ 120 Calibration Buffer Set	9.00
2890000	IQ120-125 Reference Electrode Module	59.00

Specifications*	
<b>Meter</b>	Display
Pocket-sized waterproof pH meter	LCD digital display (0.1 pH resolution)
<b>Sensor</b>	<b>Temperature Compensation</b>
Silicon chip pH sensor	Automatic
<b>Calibration</b>	<b>Power</b>
IQ120: 1 Point	Two 3v lithium batteries (CR2032)
IQ125: 1,2, or 3 Point	<b>Battery Life</b>
<b>Reference</b>	200 hours continuous
Replaceable KCl gel filled	10 hour advance low battery warning
<b>pH Range</b>	<b>Dimensions</b>
pH 2.0 to pH 12.0	142 x 28 x 15mm
<b>Resolution</b>	<b>Shipping Weight</b>
0.1 pH	1.0 lbs. (.45 kg)
<b>Accuracy</b>	
± 0.1 pH	
<b>Operating Temperature Range</b>	
5 to 40 °C	

\*Subject to change without notice.

Find it here... Buy it today on [www.hach.com](http://www.hach.com)



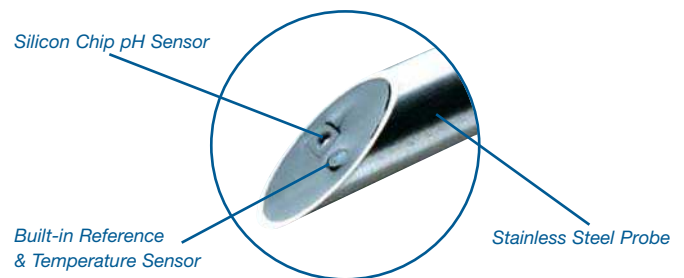
# IQ150 Portable pH Meter



## Portable pH meter with non-glass electrode.

- Dual Technology pH meter accepts both stainless steel probes with almost unbreakable silicon chip sensors as well as any traditional glass sensor pH electrode with BNC connector
- Ultra-rugged system is engineered to withstand a two-meter (six foot) drop onto concrete
- Probe stores dry and needs no maintenance.
- Non-glass probe can be used in liquids, viscous samples, and semi-solids
- Buffer recognition of 7 buffers
- .1 or .01 pH resolution
- Automatic or manual temperature compensation
- One or two point calibration

The rugged pH system for use in the lab, field, or right on the production line. The stainless steel probe stores dry and requires no maintenance. Non-glass probe is excellent for applications where glass electrode breakage is a problem. Slanted tip is suitable for liquids, semi-solids, and even piercing applications. Silicon chip sensor cleans easily with a toothbrush and detergent. Use the heavy-duty graphite body probe for high temperatures or long term immersion.



### Specifications\*

<b>Meter Type</b> pH/mV/Temperature Meter	<b>Calibration</b> 1-Point or 2-Point
<b>Probe Type</b> Accepts traditional glass electrode with BNC connectors or stainless steel probes with silicon chip pH sensors	<b>Buffer Recognition</b> 1.68, 4.00, 6.86, 7.00, 9.18, 10.01, 12.45
<b>Range</b> pH 0.00 to 14.00 mV $\pm 1999$ mV Temperature 0 to 100.0°C	<b>Temp. Compensation</b> Manual or Automatic 0 to 100°C
<b>Resolution</b> pH 0.1 to 0.01 pH mV 1.0 or 0.1 mV Temperature 0.1°C	<b>Display</b> 3-1/2 Digit LCD
<b>Accuracy</b> pH $\pm 0.01$ pH mV 1.0 or 0.1 mV Temperature 0.5°C	<b>Power</b> 9 volt battery 120 Vac or 240 Vac adapter (optional)
	<b>Dimensions</b> 3.50" W x 7" H x 1.50" D
	<b>Shipping Weight</b> 3.0 lbs. (1.3 kg)

\*Subject to change without notice.

<b>Prod. No.</b>	<b>Description</b>	<b>Price</b>
<b>2814700</b>	pH meter with stainless steel probe, silicon chip pH electrode, buffers, and a carrying case	<b>\$644.80</b>
<b>OPTIONAL ACCESSORIES</b>		
<b>2814800</b>	Replacement stainless steel pH probe with silicon chip sensor	<b>270.70</b>



## ISE Calibration Standards

Hach's high-quality, low-cost standards for ISE calibrations are accurate and stable to ensure that your ion measurements are as precise as possible. Hach standards are available in liquid form, in a variety of concentrations and quantities.

Parameter	Concentration	Quantity	Prod. No.	Price
<b>Ammonia</b>	100 mg/L	500 mL	<b>2406549</b>	<b>\$18.90</b>
<b>Calcium</b>	10 mg/L	500 mL	<b>2305449</b>	<b>42.30</b>
	100 mg/L	500 mL	<b>4457649</b>	<b>20.60</b>
	1000 mg/L	500 mL	<b>2240349</b>	<b>19.30</b>
<b>Chloride</b>	100 mg/L	1 L	<b>2370853</b>	<b>20.00</b>
	1000 mg/L	500 mL	<b>18349</b>	<b>21.30</b>
<b>Fluoride</b>	1 mg/L	500 mL	<b>29149</b>	<b>14.50</b>
	10 mg/L	500 mL	<b>35949</b>	<b>21.20</b>
<b>Nitrate</b>	1 mg/L	500 mL	<b>204649</b>	<b>16.00</b>
	10 mg/L	500 mL	<b>30749</b>	<b>12.90</b>
	100 mg/L	500 mL	<b>194749</b>	<b>15.50</b>
<b>Potassium</b>	10 mg/L	500 mL	<b>2351849</b>	<b>31.10</b>
	100 mg/L	500 mL	<b>2351749</b>	<b>31.10</b>
<b>Sodium</b>	100 mg/L	1 L	<b>2318153</b>	<b>21.30</b>
	1000 mg/L	500 mL	<b>1474949</b>	<b>20.00</b>

## Singlet™ Solution Packs

Singlet single-use standard solutions are ideal for on-site analysis, eliminating the need to prepare standardized buffer solutions for pH meter calibration. You can have fresh pH buffer solutions without having to purchase and carry deionized or demineralized water. The convenient foil-pouch packaging maintains freshness, and keeps the solutions contaminant-free and ready to travel with you anywhere.

Item	Quantity	Prod. No.	Price
pH 7.00 and pH 10.01 Buffer Solution	pk/10 of ea.	<b>2769820</b>	<b>\$24.60</b>
pH 4.01 and pH 7.00 Buffer Solution	pk/10 of ea.	<b>2769920</b>	<b>24.60</b>
pH 4.01 Buffer Solution	pk/20	<b>2770020</b>	<b>24.60</b>
pH 7.00 Buffer Solution	pk/20	<b>2770120</b>	<b>24.60</b>
pH 10.01 Buffer Solution	pk/20	<b>2770220</b>	<b>24.60</b>



## Calibration Buffers

Hach standard calibration buffers are available in convenient, unit-dose powder pillows or color-coded liquids. Powder pillows assure freshness and eliminate the possibility of contamination. They are recommended for automatic calibration. Simply open the pillow and add the contents to 50 mL of deionized or demineralized water. Both liquid and powder buffers assure accuracy ( $\pm 0.02$  pH units) and are NIST traceable.

### pH Buffer Pillows

Buffers with pH values of 4.01, 7.00, and 10.01 are color-coded for added convenience. All carry the DOT code  $\Delta$ NR and are for 50-mL solution volumes. pH is  $\pm 0.02$  at 25°C.

pH	Quantity	Prod. No.	Price
<b>Color-Coded</b>			
4.01 (Red)	15	<b>2226995</b>	<b>\$7.80</b>
	50	<b>2226966</b>	<b>14.50</b>
	250	<b>2226964</b>	<b>59.80</b>
7.00 (Yellow)	15	<b>2227095</b>	<b>7.80</b>
	50	<b>2227066</b>	<b>14.50</b>
	250	<b>2227064</b>	<b>59.80</b>
10.01 (Blue)	15	<b>2227195</b>	<b>7.80</b>
	50	<b>2227166</b>	<b>14.50</b>
	250	<b>2227164</b>	<b>59.80</b>
4.01 (Red) 7.00 (Yellow)	10 of each	<b>2299264</b>	<b>9.80</b>
<b>Colorless</b>			
5.00	15	<b>1409795</b>	<b>9.30</b>
6.00	50	<b>1405566</b>	<b>15.40</b>
6.86	15	<b>1409895</b>	<b>9.30</b>
8.00	15	<b>1407995</b>	<b>9.30</b>
9.00	50	<b>1410766</b>	<b>14.50</b>
pH Storage Solution	500 mL	<b>2756549</b>	<b>24.60</b>

### pH Buffer Solutions

pH is  $\pm 0.02$  at 25°C.

Item	Unit	Prod. No.	Price
<b>pH 4.01 Color-Coded Red (NIST)</b>			
	500 mL	<b>2283449</b>	<b>\$9.20</b>
	4 L	<b>2283456</b>	<b>36.50</b>
	20 L	<b>2283461</b>	<b>97.75</b>
<b>pH 7.00 Color-Coded Yellow (NIST)</b>			
	500 mL	<b>2283549</b>	<b>9.20</b>
	4 L	<b>2283556</b>	<b>36.50</b>
	20 L	<b>2283561</b>	<b>97.75</b>
<b>pH 10.01 Color-Coded Blue (NIST)</b>			
	500 mL	<b>2283649</b>	<b>9.20</b>
	4 L	<b>2283656</b>	<b>36.50</b>
	20 L	<b>2283661</b>	<b>97.75</b>
<b>pH 4.01 Colorless (NIST)</b>			
	500 mL	<b>1222349</b>	<b>8.70</b>
	4 L	<b>1222356</b>	<b>35.30</b>
<b>pH 7.00 Colorless (NIST)</b>			
	500 mL	<b>1222249</b>	<b>8.70</b>
	4 L	<b>1222256</b>	<b>35.30</b>
<b>pH 10.01 Colorless (NIST)</b>			
	500 mL	<b>1222149</b>	<b>8.70</b>
	4 L	<b>1222156</b>	<b>35.50</b>

Find it here... Buy it today on [www.hach.com](http://www.hach.com)



# Standard Solutions and Reagents

Prod. No.	Description	Price
<b>BOD NUTRIENTS AND SEED INOCULUM</b>		
1416066	BOD Nutrient Buffer Pillows, prepares 300 mL, 50/pk	\$7.80
1486166	BOD Nutrient Buffer Pillows, prepares 3 L, 50/pk	25.50
1486266	BOD Nutrient Buffer Pillows, prepares 6 L, 50/pk	32.40
1486398	BOD Nutrient Buffer Pillows, prepares 19 L, 25/pk	42.60
253335	Formula 2533™ Nitrification Inhibitor, 35 g	15.60
253334	Formula 2533™ Nitrification Inhibitor, 500 g	122.20
2918700	BOD Seed Inoculum, 50 capsules, Polyseed	107.60

Prod. No.	Description	Price
<b>CHLORINE, TOTAL BACK TITRATION METHOD REAGENT (FOR AUTOCAT™ 9000)</b>		
2333353	Iodine standard, 0.0282 N, 1000 mL	23.40

Prod. No.	Description	Price
<b>CHLORINE DIOXIDE/CHLORITE METHOD REAGENTS (FOR AUTOCAT™ 9000)</b>		
141832	Hydrochloric acid std. solution, 2.5 N, 100 mL	11.30
16726H	Potassium Iodide, ACS, 100 g	34.70

Prod. No.	Description	Price
<b>CONDUCTIVITY STANDARDS</b>		
2307542	85.47 mg/L NaCl, 180 µS/cm, 100 mL	10.10
1440042	491 mg/L NaCl, 1000 µS/cm, 100 mL	11.40
2307442	10,246 mg/L NaCl, 18,000 µS/cm, 100 mL	9.80

Prod. No.	Description	Price
<b>FLUORIDE IONIC STRENGTH ADJUSTOR</b>		
258901	Powder, 454 g	61.20
258999	Powder Pillows, 100	38.60
2829017	Solution, 3.78 L	45.70

Prod. No.	Description	Price
<b>PLATINUM SERIES PH PROBE KCL GEL CARTRIDGE</b>		
2546902	KCl Reference Electrolyte Gel, cartridges 2/pk	10.30

Prod. No.	Description	Price
<b>FLUORIDE STANDARD SOLUTIONS AS F (NIST)</b>		
40505	0.5 mg/L, 500 mL	\$14.50
29149	1.0 mg/L, 500 mL	14.50
29153	1.0 mg/L, 1 L	20.40
40520	2.0 mg/L, 500 mL	14.50
2797149	5.0 mg/L 500 mL	18.20
35949	10 mg/L, 500 mL	21.20
23249	100 mg/L, 500 mL	25.60

Prod. No.	Description	Price
<b>NITROGEN-AMMONIA STANDARD SOLUTIONS AS NH<sub>3</sub>-N</b>		
189149	1 mg/L, 500 mL	16.00
15349	10 mg/L, 500 mL	16.00
1479120	50 mg/L, 2-mL PourRite™ Ampule, 20	34.60
1479110	50 mg/L, 10-mL Voluette® Ampule, 16	40.40
2406549	100 mg/L, 500 mL	15.90
2128420	150 mg/L, 2-mL PourRite™ Ampule, 20	35.70
2109110	160 mg/L, 10-mL Voluette® Ampule, 16	40.70

Prod. No.	Description	Price
<b>NITROGEN-NITRATE STANDARD SOLUTIONS AS NO<sub>3</sub>-N (NIST)</b>		
204649	1 mg/L as NO <sub>3</sub> -N, 4.43 mg/L as NO <sub>3</sub> <sup>-</sup> , 500 mL	16.00
2557810	5 mg/L, 10-mL Voluette® Ampule, 16	38.20
30749	10 mg/L, 44.3 mg/L as NO <sub>3</sub> <sup>-</sup> , 500 mL	12.90
2415132	15 mg/L, 100 tests MDB	8.50
194749	100 mg/L as NO <sub>3</sub> -N, 443 mg/L as NO <sub>3</sub> <sup>-</sup> , 500 mL	15.50
2557710	250 mg/L, 10-mL Voluette® Ampule, 16	43.40
1426010	500 mg/L, 10-mL Voluette® Ampule, 16	40.40
1279249	1000 mg/L as NO <sub>3</sub> -N; 4430 mg/L as NO <sub>3</sub> <sup>-</sup> , 500 mL	19.60

Prod. No.	Description	Price
<b>SODIUM ELECTRODE STORAGE SOLUTION</b>		
4451659	50 mL	7.80

Prod. No.	Description	Price
<b>SODIUM STANDARD SOLUTION AS Na</b>		
2318153	100 mg/L, 1 L (NIST)	21.30
1474949	1000 mg/L, 500 mL (NIST)	20.00



### Hach Buffers for pH Calibration (NIST Traceable)

Prod. No.	Description	Price
2283461	Buffer Solution, pH 4.01 (red), 20 liter (NIST)	\$97.75
2283561	Buffer Solution, pH 7.00 (yellow), 20 liter (NIST)	97.75
2283661	Buffer Solution, pH 10.01 (blue), 20 liter (NIST)	97.75

