

WATER QUALITY METERS & PROBES



- **HQd™ Meters & IntelliCAL™ Probes**
- **sensION™+ Meters & Probes**
- **H-Series Meters & Probes**
- **MP Meters**
- **Pocket Pro Testers**



Be Right™

UNIVERSAL METERS & PROBES

HQd™ Meters & IntelliCAL™ Probes



SMART PROBES

Hach, the leader in water quality, has developed a customized solution for water quality testing that takes the guesswork out of your measurements. Designed for your water applications, the Hach smart probes feature a built-in temperature sensor, and automatically recognize the testing parameter, calibration history, and method settings to minimize errors and setup time.

sensION®+ Meters & Probes



COMPLETE SIMPLICITY

Hach sensION+, an all-in-one system with guided menu navigation makes general testing fast and simple. Each system is designed to be used in a wide variety of applications and comes complete with everything you need to start testing.

	HQd	sensION+
Ease of Use	★★★★★	★★★★★
Accuracy & Performance	★★★★★	★★★★★
Durability	★★★★★	★★★★★
Flexibility	★★★★★	★★★

SPECIALTY METERS & PROBES



H-Series Meters & Probes

NON-GLASS

Hach's rugged, non-glass H-Series family of pH sensors resist damage and store dry to eliminate maintenance in laboratory and field testing of difficult applications. Use with Hach's H-Series benchtop or portable meters in areas where glass is not preferred such as rugged, outdoor, and food applications.



MP Meters

GO PROBELESS

Hach's MP Meters offer single-handed, portable operation for spot checking the pH, ORP, conductivity, resistivity, Total Dissolved Solids (TDS) and temperature of clean water. Fast and accurate in the laboratory, MP Meters are also rugged enough for daily process checks in challenging environments.



HACH'S METERS & PROBES FAMILY

UNIVERSAL METERS & PROBES

Smart

HQd Meters & IntelliCAL Probes

- Compliance monitoring for drinking water and wastewater
- Laboratory verification of process instrumentation
- Industrial plant control
- Environmental monitoring
- Rugged field applications

Simple

sensiON+ Meters & Probes

- Compliance monitoring for drinking water and wastewater
- Laboratory verification of process instrumentation
- Industrial plant control
- Environmental monitoring
- Beverage quality testing

SPECIALTY METERS & PROBES

Non-glass

H-Series Meters & Probes

- Food processing
- Beverage quality testing
- Academic teaching
- Pharmaceutical research/development
- Industrial plant control

Probeless

MP Meters

- Industrial plant control
- Boiler/cooling water applications
- Water treatment control
- Distribution monitoring
- Pool and spa maintenance
- Tap or spigot sampling

PARAMETERS

pH				
Glass	■	■	■	■
Non-glass (ISFET)			■	
Conductivity	■	■	■	■
Resistivity	■	■		■
Salinity	■	■	■	
TDS	■	■	■	■
Ammonia	■	■	■	
Ammonium	■	■		
Chloride	■	■		
Dissolved Oxygen				
Luminescent (LDO®)	■			
BOD Probe (with LDO)	■			
Galvanic			■	
Polarographic		■		
Fluoride	■	■	■	
Temperature	■	■	■	■
Nitrate	■	■	■	
ORP/Redox	■	■	■	■
Sodium	■	■	■	

ATTRIBUTES

Multi-parameter Options	■	■	■	■
Simultaneous Display	■	■		
Stainless Steel Probes	■		■	
Auto Probe Recognition	■			
Multiple Cable Lengths	■			
Multi-language Display	■	■		
On-screen Instructions	■			
Wireless Communication*			■	
USB Connectivity	■	■	■	

*For Bluetooth® capable models only

HACH pH PROBES BY APPLICATION

★
BEST

✓
GOOD

□
NOT APPLICABLE

APPLICATIONS	HQd				5010T	5011T	5014T	5021T
	PHC101	PHC201	PHC301	PHC281				
General Purpose		★	★		★		✓	
Drinking Water		✓		★			★	✓
Wastewater	★	✓	✓	✓	✓	★		✓
Boiler / Cooler				★			✓	★
Seawater	✓	✓	✓	★	✓	✓	✓	✓
Beverage		✓	✓	★		✓	★	✓
Food				✓			✓	✓
Education		★	★		★	✓		
Pool / Spa	✓	★			★			
Soils	✓							
Pharma				★				★
SAMPLE TYPES								
Field Measurements	★ rugged							
Low Ionic Strength				★				✓
High Temperature		★					★	
Low Temperature				★			★	



HACH pH PROBES BY APPLICATION

sensION+						H-Series				
5050T	5051T	5052T	5045	5048	5059	PH17	PH37	PH47	PH57	PH77
★			✓	✓	✓					✓
✓	★	✓	✓	✓	✓					
		★								
✓	✓	✓	✓	✓	✓					
	✓	★								
	✓	✓				✓	★	✓	★	✓
★	✓					✓				★
★			✓	✓	✓					
						✓	✓	✓	✓	✓
		★								
✓	✓	✓	✓	✓	✓	★ non-glass	★ non-glass	★ non-glass	★ non-glass	★ non-glass
		★								



HQd PORTABLE METERS



Now offering a complete water analysis portfolio of testing parameters with standard, rugged, and ultra options. Hach's HQd system gives maximum measurement flexibility and ease of operation with interchangeable probes and automatic parameter recognition.

Parameter	HQ11d DEDICATED pH/mV PORTABLE METER	HQ14d DEDICATED CONDUCTIVITY PORTABLE METER	HQ30d SINGLE INPUT MULTI-PARAMETER PORTABLE METER	HQ40d DUAL INPUT MULTI-PARAMETER PORTABLE METER
Temperature	■	■	■	■
pH				
Glass	■		■	■
Non-glass (ISFET)				
mV	■		■	■
Conductivity		■	■	■
TDS		■	■	■
Salinity		■	■	■
Resistivity		■	■	■
Dissolved Oxygen				
Luminescent (LDO)			■	■
BOD Sensor (with LDO)			■	■
ORP/Redox	■		■	■
Ion Selective Electrodes				
Ammonia			■	■
Ammonium			■	■
Chloride			■	■
Fluoride			■	■
Nitrate			■	■
Sodium			■	■

Specifications	HQ11d DEDICATED pH/mV PORTABLE METER	HQ14d DEDICATED CONDUCTIVITY PORTABLE METER	HQ30d SINGLE INPUT MULTI-PARAMETER PORTABLE METER	HQ40d DUAL INPUT MULTI-PARAMETER PORTABLE METER
IP Rating	IP67	IP67	IP67	IP67
Internal Data Storage	500*	500*	500*	500*
Inputs	M12 digital (1) for IntelliCAL probes	M12 digital (1) for IntelliCAL probes	M12 digital (1) for IntelliCAL probes	M12 digital (2) for IntelliCAL probes
Outputs	USB to PC / flash stick	USB to PC / flash stick	USB to PC / flash stick	USB to PC / flash stick
Resolution	0.1/ 0.01/ 0.001	0.1/ 0.01/ 0.001	0.1/ 0.01/ 0.001	0.1/ 0.01/ 0.001
Interface Languages	13**	13**	13**	13**
Warranty	3 years	3 years	3 years	3 years
Compliance	CE.WEEE	CE.WEEE	CE.WEEE	CE.WEEE
Benchtop	with stand	with stand	with stand	with stand
GLP Features	■	■	■	■
PC Data Transfer Software	included	included	included	included
Backlight	■	■	■	■
Battery Operation	■	■	■	■
AC and USB Operation	optional	optional	optional	included
Prod. No.	HQ11D53000000	HQ14D53000000	HQ30D53000000	HQ40D53000000

*Expanded storage with external USB storage device. **English, German, Spanish, Portuguese, French, Italian, Dutch, Turkish, Polish, Danish, Swedish, Russian, Czech

See pages 10-13 for HQd Bundles & Kits. See pages 14-15 for HQd Accessories.

HQd BENCHTOP METERS

All the benefits of the digital HQd system, with simplified data transfer and easy-to-read results on a large, backlit screen.



Parameter	HQ411d DEDICATED pH/mV BENCHTOP METER	HQ430d SINGLE INPUT MULTI-PARAMETER BENCHTOP METER	HQ440d DUAL INPUT MULTI-PARAMETER BENCHTOP METER
Temperature	■	■	■
pH			
Glass	■	■	■
Non-glass (ISFET)			
mV	■	■	■
Conductivity		■	■
TDS		■	■
Salinity		■	■
Resistivity		■	■
Dissolved Oxygen			
Luminescent (LDO)		■	■
BOD Sensor (with LDO)		■	■
ORP/Redox	■	■	■
Ion Selective Electrodes			
Ammonia		■	■
Ammonium		■	■
Chloride		■	■
Fluoride		■	■
Nitrate		■	■
Sodium		■	■

Specifications	HQ411d DEDICATED pH/mV BENCHTOP METER	HQ430d SINGLE INPUT MULTI-PARAMETER BENCHTOP METER	HQ440d DUAL INPUT MULTI-PARAMETER BENCHTOP METER
IP Rating	IP54	IP54	IP54
Internal Data Storage	500*	500*	500*
Inputs	M12 digital (1) for IntelliCAL probes	M12 digital (1) for IntelliCAL probes	M12 digital (2) for IntelliCAL probes
Outputs	USB to PC / flash stick	USB to PC / flash stick	USB to PC / flash stick
Resolution	0.1/ 0.01/ 0.001	0.1/ 0.01/ 0.001	0.1/ 0.01/ 0.001
Interface Languages	13**	13**	13**
Warranty	3 years	3 years	3 years
Compliance	CE.WEEE	CE.WEEE	CE.WEEE
GLP Features	■	■	■
PC Data Transfer Software	included	included	included
Backlight	■	■	■
Battery Operation	■	■	■
Probe Stand	optional for all models	included	included
Prod. No.	HQ411D	HQ430D	HQ440D

*Expanded storage with external USB storage device. **English, German, Spanish, Portuguese, French, Italian, Dutch, Turkish, Polish, Danish, Swedish, Russian, Czech

See pages 10-13 for HQd Bundles & Kits. See pages 14-15 for HQd Accessories.

HQd IntelliCAL PROBES



Specifications	DO Luminescent Dissolved Oxygen	DO Luminescent Dissolved Oxygen	BOD Luminescent Dissolved Oxygen	Conductivity	Conductivity
Special Feature	LDO technology. No membranes.	LDO technology. No membranes.	LDO technology. Designed for BOD applications. No membranes.		
Probe Type	Laboratory Luminescent Dissolved Oxygen	Rugged Luminescent Dissolved Oxygen	Laboratory	Laboratory	Rugged Outdoor
Range	.05 to 20.00 mg/L	0.05 to 20.00 mg/L	0.05 to 20.00 mg/L	Cond.: 0.01 µS/cm to 200 mS/cm TDS: 0 to 50,000 mg/L as NaCl Salinity: 0 to 42 g/kg or Resist.: 2.5 Ω cm to 49 MΩ cm	Cond.: 0.01 µS/cm to 200 mS/cm TDS: 0 to 50,000 mg/L as NaCl Salinity: 0 to 42 g/kg or Resist.: 2.5 Ω cm to 49 MΩ cm
Accuracy	±0.1 from 0 to 8 mg/L ±0.2 for greater than 8 mg/L	±0.1 from 0 to 8 mg/L ±0.1 for greater than 10 mg/L	±0.05 from 0 to 10 mg/L ±0.1 for greater than 10 mg/L	Cond: ±0.5% of range TDS: ±0.5% ±1 digit Salinity: ±0.1, ±1 digit	EC: 0.01 µS/cm (5 digits, maximum) TDS: 0.001, 0.01, 0.1 mg/L Salinity: 0.01 ppt
Temperature Range	0 to 50 °C	0 to 50 °C	0 to 50 °C	-10 to 110 °C	-10 to 110 °C
Dimensions (D x L)	0.59 in x 7.87 in (15 mm x 200 mm)	1.77 in x 9.84 in (45 mm x 250 mm)	0.62 in x 7.87 in (15.875 mm x 200 mm)	0.55 in x 7.87 in (14 mm x 200 mm)	1.77 in x 9.84 in (45 mm x 250 mm)
Sensor Type	Lumiphore	Lumiphore	Lumiphore	4-pole graphite, k = 0.40 cm ⁻¹	4-pole graphite, k = 0.40 cm ⁻¹
Material	Sensor Body: Polycarbonate / Abs	Sensor Body: Polycarbonate / Abs with Stainless Steel	Sensor Body: Polycarbonate / Abs	Sensor Body: Noryl	Sensor Body: Noryl with Stainless Steel
Prod. No.	LDO10101	LDO10105	LBOD10101	CDC40101	CDC40105



Specifications	pH Ultra Refillable Combination	pH Gel-filled Combination	pH Gel-filled Combination	pH Refillable Combination	pH Gel-filled Combination
Special Feature	Fast response time	Wastewater and difficult samples	General purpose. Clean water samples.		Low maintenance
Probe Type	Laboratory	Laboratory	Laboratory	Laboratory	Rugged Outdoor
Range	0 to 14 pH	2 to 14 pH	0 to 14 pH	0 to 14 pH	2 to 14 pH
Accuracy	±0.02 pH	±0.02 pH	±0.02 pH	±0.02 pH	±0.02 pH
Temperature Range	0 to 80 °C	0 to 50 °C	0 to 80 °C	0 to 80 °C	0 to 50 °C
Dimensions (D x L)	0.47 in x 7.87 in (12 mm x 200 mm)	0.47 in x 7.87 in (12 mm x 200 mm)	0.47 in x 7.87 in (12 mm x 200 mm)	0.47 in x 7.87 in (12 mm x 200 mm)	1.77 in x 9.84 in (45 mm x 250 mm)
Sensor Type	Glass	Glass	Glass	Glass	Glass
Reference Type	Ag/AgCl	Ag/AgCl	Ag/AgCl	Ag/AgCl	Ag/AgCl
Junction	Open	Open	Ceramic pin	Ceramic pin	Open
Material	Sensor Body: Zeonor™	Sensor Body: Epoxy	Sensor Body: Epoxy	Sensor Body: Zeonor™	Sensor Body: Zeonor™ with Stainless Steel
Filling Solution	2965026	Non-refillable solid gel	Non-refillable gel	2841700	Non-refillable solid gel
Prod. No.	PHC28101	PHC10101	PHC20101	PHC30101	PHC10105

1 meter standard and 5 meter rugged probes described above. All standard probes available in 1 or 3 meter cable lengths. All rugged probes available in 5, 10, 15 or 30 meter cable lengths.
*Fits BOD bottle neck size > 15.875mm inside diameter

HQd IntelliCAL PROBES



Specifications	ORP/Redox Combination Gel-filled	ORP/Redox Combination Refillable	ORP/Redox Combination Gel-filled	Ammonia Combination ISE	Ammonium Combination ISE
Special Feature	Flat disc sensor for easy cleaning. Low maintenance.	Flat disc sensor for easy cleaning.	Flat disc sensor for easy cleaning.	Easy-to-replace membrane modules.	Dry storage & fast response time. No replacement membranes.
Probe Type	Laboratory	Laboratory	Rugged Outdoor	Laboratory Combination ISE	Laboratory Combination ISE
Range	± 1200 mV	± 1200 mV	± 1200 mV	0.01 mg/L (5x10 ⁻⁷ M) to 14,000 mg/L (1 M) NH ₃ -N	0.018 mg/L (10 ⁻⁶ M) to 9,000 mg/L (0.5 M) NH ₄ ⁺ -N
Accuracy	±0.02mV or 0.05%, whichever is greater	±0.02mV or 0.05%, whichever is greater	±0.02mV or 0.05%, whichever is greater	±0.02mV or 0.05%, whichever is greater	±0.02mV or 0.05%, whichever is greater
Temperature Range	0 to 80 °C	0 to 80 °C	0 to 80 °C	0 to 50 °C	0 to 50 °C
Dimensions (D x L)	0.47 in x 7.87 in (12 mm x 200 mm)	0.47 in x 7.87 in (12 mm x 200 mm)	1.77 in x 9.84 in (45 mm x 250 mm)	0.47 in x 8.66 in (12 mm x 220 mm)	0.47 in x 8.66 in (12 mm x 220 mm)
Sensor Type	Platinum disc	Platinum disc	Platinum disc	Gas sensing: glass w/ replaceable NH ₃ sensitive membrane	Solid-state PVC membrane
Reference Type	Ag/AgCl	Ag/AgCl	Ag/AgCl	Ag/AgCl	Ag/AgCl
Junction	Open	Ceramic pin	Open	Porous Teflon Annular Ring	Porous Teflon Annular Ring
Material	Sensor Body: Epoxy	Sensor Body: Epoxy	Sensor Body: Zeonor™ with Stainless Steel	Sensor Body: Epoxy	Sensor Body: Epoxy
Filling Solution	Non-refillable gel	2841700	Non-refillable gel	4447226	Non-refillable driTEK gel
ISA Required	—	—	—	4447169	2980699
Prod. No.	MTC10101	MTC30101	MTC10105	ISENH318101	ISENH418101



Specifications	Chloride Combination ISE	Fluoride Combination ISE	Nitrate Combination ISE	Sodium Combination ISE
Special Feature	Dry storage & fast response time. No replacement membranes.	Dry storage & fast response time. No replacement membranes.	Dry storage & fast response time. No replacement membranes.	Fast response time
Probe Type	Laboratory Combination ISE	Laboratory Combination ISE	Laboratory Combination ISE	Laboratory Combination ISE
Ranges	0.1 mg/L (3x10 ⁻⁶ M) to 35,500 mg/L (1 M) Cl ⁻	0.01 mg/L (5x10 ⁻⁷ M) to 19,000 mg/L (1 M) F ⁻	0.1 mg/L (7x10 ⁻⁶ M) to 14,000 mg/L (1 M) NO ₃ ⁻ -N	0.023 mg/L (1x10 ⁻⁶ M) to 23,000 mg/L (1 M) Na ⁺
Accuracy	±0.02mV or 0.05%, whichever is greater	±0.02mV or 0.05%, whichever is greater	±0.02mV or 0.05%, whichever is greater	±0.02mV or 0.05%, whichever is greater
Temperature Range	5 to 50 °C	5 to 50 °C	0 or 50 °C	0 to 50 °C
Dimensions (D x L)	0.47 in x 8.66 in (12 mm x 220 mm)	0.47 in x 8.66 in (12 mm x 220 mm)	0.47 in x 8.66 in (12 mm x 220 mm)	0.47 in x 8.66 in (12 mm x 220 mm)
Sensor Type	Solid-state crystal membrane	Solid-state crystal membrane	Solid-state PVC membrane	Glass
Reference Type	Ag/AgCl	Ag/AgCl	Ag/AgCl	Ag/AgCl
Material	Sensor Body: Epoxy	Sensor Body: Epoxy	Sensor Body: Epoxy	Sensor Body: Zeonor™
Filling Solution	Non-refillable driTEK gel	Non-refillable driTEK gel	Non-refillable driTEK gel	2965126
ISA Required	2318069	258999	2984799	4451569
Prod. No.	ISECL18101	ISEF12101	ISENO318101	ISENA38101

1 meter standard and 5 meter rugged probes described above. All standard probes available in 1 or 3 meter cable lengths. All rugged probes available in 5, 10, 15 or 30 meter cable lengths.

HQd & IntelliCAL BENCHTOP KITS



Lab LDO/pH/Conductivity Kit

Prod. No. Description

8508700 Lab LDO/pH/Conductivity Kit

Includes: HQ440d benchtop meter, PHC281 LIS pH Ultra probe with 1-m cable, CDC401 conductivity probe with 1-m cable, LDO101 optical DO probe with 1-m cable, probe stand, 300-mL disposable BOD bottle, BOD bottle stoppers, pH 4.01 buffer (red, 500 mL), pH 7.00 buffer (yellow, 500 mL), pH 10.01 buffer (blue, 500 mL), pH storage solution (500 mL), and NaCl conductivity standard (1000 μ S/cm, 100 mL).



Lab pH/Conductivity Kit

Prod. No. Description

8510200 Lab pH/Conductivity Kit

Includes: HQ440d benchtop meter, PHC281 pH Ultra electrode with 1-m cable, CDC401 conductivity probe with 1-m cable, probe stand, pH 4.01 buffer (red, 500 mL), pH 7.00 buffer (yellow, 500 mL), pH 10.01 buffer (blue, 500 mL), pH storage solution (500 mL), and NaCl conductivity standard (1000 μ S/cm, 100 mL).



Lab pH Ultra Kit

Prod. No. Description

8508600 Lab pH Ultra Kit

Includes: HQ440d benchtop meter, PHC281 pH Ultra probe with 1 m cable, probe stand, pH 4.01 buffer (red, 500 mL), pH 7.00 buffer (yellow, 500 mL), pH 10.01 buffer (blue, 500 mL), and pH storage solution (500 mL).



Lab pH Starter Kit

Prod. No. Description

8507560 Lab pH Starter Kit

Includes: HQ411d benchtop meter, PHC201 pH probe with 1-m cable, probe stand, pH 4.01 buffer (red, 500 mL), pH 7.00 buffer (yellow, 500 mL), pH 10.01 buffer (blue, 500 mL), and pH storage solution (500 mL).



Lab Conductivity Kit

Prod. No. Description

8509600 Lab Conductivity Kit

Includes: HQ430d benchtop meter, CDC401 conductivity probe with 1-m cable, probe stand, and NaCl conductivity standard (1000 μ S/cm, 100 mL).



Lab LBOD Kit

Prod. No. Description

8508500 Lab LBOD Kit

Includes: HQ440d benchtop meter, LBOD101 BOD probe, 117 disposable BOD bottles, bottle stoppers (qty 25), and snap-over bottle caps (qty 24).

Visit: hach.com/metersselect for more kits.

Ammonia ISE Measurement Kit

Prod. No. Description

8507600 Ammonia ISE Measurement Kit

Includes: HQ440d benchtop meter, ISENH3181 ammonia electrode with 1-m cable, probe stand, ammonia nitrogen standard (1 mg/L, 500 mL) ammonia nitrogen standard (10 mg/L, 500 mL), ammonia nitrogen standard (100 mg/L, 500 mL), ammonia ionic strength adjustor powder pillows (qty 100), and ammonia electrode storage solution (500 mL).



Ammonium ISE Measurement Kit

Prod. No. Description

8507800 Ammonium ISE Measurement Kit

Includes: HQ440d benchtop meter, ISENH4181 ammonium electrode with 1-m cable, probe stand, ammonia nitrogen standard (1 mg/L, 500 mL), ammonia nitrogen standard (10 mg/L, 500 mL), ammonia nitrogen standard (100 mg/L, 500 mL), and ionic strength adjustor powder pillows (qty 100).



Chloride ISE Measurement Kit

Prod. No. Description

8507900 Chloride ISE Measurement Kit

Includes: HQ440d benchtop meter, ISECL181 chloride electrode with 1-m cable, probe stand, chloride standard (100 mg/L, 1 L), chloride standard (1000 mg/L, 500 mL), and ionic strength adjustor powder pillows (qty 100).



Fluoride ISE Measurement Kit

Prod. No. Description

8508000 Fluoride ISE Measurement Kit

Includes: HQ440d benchtop meter, ISEF121 fluoride electrode with 1-m cable, probe stand, fluoride standard (0.5 mg/L, 500 mL), fluoride standard (1.0 mg/L, 500 mL), fluoride standard (10 mg/L, 500 mL), and ionic strength adjustor powder pillows (qty 100).



Nitrate ISE Measurement Kit

Prod. No. Description

8508100 Nitrate ISE Measurement Kit

Includes: HQ440d benchtop meter, ISENO3181 nitrate electrode with 1-m cable, probe stand, nitrate nitrogen standard (10 mg/L, 500 mL), nitrate nitrogen standard (100 mg/L, 500 mL), nitrate nitrogen standard (1000 mg/L, 500 mL), and ionic strength adjustor powder pillows (qty 100).



Sodium ISE Starter Kit

Prod. No. Description

8507000 Sodium ISE Starter Kit

Includes: HQ440d benchtop meter, ISENA381 sodium electrode with 1-m cable, probe stand, sodium standard solution (10 mg/L, 1 L), sodium standard solution (100 mg/L, 1 L), sodium standard solution (1000 mg/L, 500 mL), and ionic strength adjustor powder pillows (qty 100).



Visit: hach.com/metersselect for more kits.

HQd RUGGED FIELD KITS



Rugged LDO/pH/Conductivity Field Kit

Prod. No. Description

8505300 Rugged LDO/pH/Conductivity Field Kit

Includes: HQ40d portable meter, LDO101 rugged dissolved oxygen probe with 5-m cable, PHC101 rugged pH probe with 5-m cable, CDC401 rugged conductivity probe with 5-m cable, rugged field case, protective meter glove, PMP erlenmeyer flask (250 mL), sample containers (qty 4, 120 mL), wash bottle (500 mL), disposable wipes (qty 280), pH 4.01 buffer solution (singlets, pk/20), pH 7.00 buffer solution (singlets, pk/20), pH 10.01 buffer solution (singlets, pk/20), pH storage solution (50 mL), and NaCl conductivity standard (1000 μ S/cm, 100 mL).



Rugged LDO/pH Field Kit

Prod. No. Description

8505400 Rugged LDO/pH Field Kit

Includes: HQ40d portable meter, LDO101 rugged dissolved oxygen probe with 5-m cable, PHC101 rugged pH probe with 5-m cable, rugged field case, protective meter glove, PMP erlenmeyer flask (250 mL), sample containers (qty 4, 120 mL), wash bottle (500 mL), disposable wipes (qty 280), pH 4.01 buffer solution (singlets, pk/20), pH 7.00 buffer solution (singlets, pk/20), pH 10.01 buffer solution (singlets, pk/20), and pH storage solution (50 mL).



Rugged Conductivity/LDO Field Kit

Prod. No. Description

8507500 Rugged Conductivity/LDO Field Kit

Includes: HQ40d portable meter, LDO101 rugged dissolved oxygen probe with 5-m cable, CDC401 rugged conductivity probe with 5-m cable, rugged field case, protective meter glove, PMP erlenmeyer flask (250 mL), sample containers (qty 4, 120 mL), wash bottle (500 mL), disposable wipes (qty 280), and NaCl conductivity standard (1000 μ S/cm, 100 mL).



Rugged ORP/LDO Field Kit

Prod. No. Description

8507400 Rugged ORP/LDO Field Kit

Includes: HQ40d portable meter, LDO101 rugged dissolved oxygen probe with 5-m cable, MTC101 rugged ORP probe with 5-m cable, rugged field case, protective meter glove, PMP erlenmeyer flask (250 mL), sample containers (qty 4, 120 mL), wash bottle (500 mL), disposable wipes (qty 280), ORP standard solution (Zoebell's, 500 mL), pH storage solution (500 mL), ORP reducing solution (500 mL), and electrode cleaning solution (500 mL).



Rugged LDO Field Kit (w/ HQ40d Meter)

Prod. No. Description

8505200 Rugged LDO Field Kit (w/ HQ40d Meter)

Includes: HQ40d portable meter, LDO101 rugged dissolved oxygen probe with 5-m cable, rugged field case, protective meter glove, PMP erlenmeyer flask (250 mL), sample containers (qty 4, 120 mL), wash bottle (500 mL), and disposable wipes (qty 280).



Rugged LDO Field Kit (w/ HQ30d Meter)

Prod. No. Description

8505100 Rugged LDO Field Kit (w/ HQ30d Meter)

Includes: HQ30d portable meter, LDO101 rugged dissolved oxygen probe with 5-m cable, rugged field case, protective meter glove, PMP erlenmeyer flask (250 mL), sample containers (qty 4, 120 mL), wash bottle (500 mL), and disposable wipes (qty 280).

Visit: hach.com/metersselect for more kits.

Portable LDO/pH/Conductivity Kit

Prod. No. Description

8506000 Portable LDO/pH/Conductivity Kit

Includes: HQ40d portable meter, LDO101 optical dissolved oxygen probe with 1-m cable, PHC301 pH probe with 1-m cable, CDC401 conductivity probe with 1-m cable, probe stand, meter stand, disposable BOD bottle, BOD bottle stoppers, pH 4.01 buffer solution (red, 500 mL), pH 7.00 buffer solution (yellow, 500 mL), pH 10.01 buffer solution (blue, 500 mL), pH storage solution (500 mL), and NaCl conductivity standard (1000 μ S/cm, 100 mL).



Portable pH/Conductivity Kit

Prod. No. Description

8505800 Portable pH/Conductivity Kit

Includes: HQ40d portable meter, LDO101 optical dissolved oxygen probe with 1-m cable, PHC301 pH probe with 1-m cable, CDC401 conductivity probe with 1-m cable, probe stand, meter stand, disposable BOD bottle, BOD bottle stoppers, pH 4.01 buffer solution (red, 500 mL), pH 7.00 buffer solution (yellow, 500 mL), pH 10.01 buffer solution (blue, 500 mL), pH storage solution (500 mL), and NaCl conductivity standard (1000 μ S/cm, 100 mL).



Portable pH Starter Kit

Prod. No. Description

8507530 Portable pH Starter Kit

Includes: HQ11d portable meter, PHC201 pH probe with 1-m cable, probe stand, meter stand, pH 4.01 buffer solution (red, 500 mL), pH 7.00 buffer solution (yellow, 500 mL), pH 10.01 buffer solution (blue, 500 mL), and pH storage solution (500 mL).



Portable Conductivity Starter Kit

Prod. No. Description

8506100 Portable Conductivity Starter Kit

Includes: HQ14d portable meter, CDC401 conductivity probe with 1-m cable, probe stand, meter stand, and NaCl conductivity standard (1000 μ S/cm, 100 mL).



Portable LBOD Kit

Prod. No. Description

8505700 Portable LBOD Kit

Includes: HQ40d portable meter, LBOD101 optical BOD probe with 1-m cable, meter stand, disposable BOD bottle (qty 117), BOD bottle stoppers (qty 25), and BOD bottle caps (qty 24).



Portable LDO Kit

Prod. No. Description

8506300 Portable LDO Kit

Includes: HQ30d portable meter, LDO101 optical dissolved oxygen probe with 1-m cable, meter stand, disposable BOD bottle, and BOD bottle stoppers.



Visit: hach.com/metersselect for more kits.

HQd METER & PROBE ACCESSORIES

Meter Stand

Perfect for use in the laboratory or other applications where hands-free meter operation is desired. Black molded plastic is durable and easy to clean.



Prod. No.
4754900

Universal Probe Stand for Standard Electrode Sizes

Also supports Hach IntelliCAL and sensION+ probes.



Prod. No.
8508850

Protective Glove

Provides added impact protection that field use requires. Wrist and neck straps keep the meter secure. Two probe holders (not included in kit) can slide onto glove.



Prod. No.
5828700

HQd Field Meter Protective Caps

Further protect your HQd meter from harsh (corrosive) field environments. For use with HQd Meter Protective Glove kit (5828700).



Prod. No.
9345200

Probe Holder (Standard IntelliCAL Probes Only)

For use with the Protective Glove. Simply wrap 1- or 3-meter cables around the holder and slide probe into protective sheath. Protective Glove can hold one or two Probe Holders.



Prod. No.
5829400

Field Kit

Includes protective glove and (5) 120 mL sample cups. Carry your HQd system anywhere. Custom inserts organize and securely position your meter and probes.



Prod. No.
5825800

Probes and Meter not included.

Rugged Field Case for Two Probes with 5-m Cables

Includes: Empty case and insert for meter and probe storage; (4) Containers for sample collection; 500 mL Wash Bottle.



Prod. No.
8505500

Rugged Field Case for Three Probes with 5-m Cables

Includes same accessories as case 8505500.

Prod. No.
8505501



Color Coded Probe Clips

Clip a color-coded band to each end of your probe cable for identification. Ten clips of five different colors per package.

NOTE: One package of clips included with each probe.



Prod. No.
5818400

Probe Cable Depth Markers

Taking reading at specific depths with rugged probes is a snap with these Depth Markers. Visually identify the depth of your probe by attaching Depth Marker securely on cable at points to meet your needs. Five Depth Markers per package.

NOTE: For use with rugged probes only.



Prod. No.
5828610

Replacement Stirrer Assembly for IntelliCAL LBOD Probe

Prod. No.
5850800



Replacement Shroud Kit for Rugged Probes

Includes protective bell and locking ring. The rugged shroud absorbs the impact from rough wear and tear.



Prod. No.
5825900

Shroud Kit
(Probe not included.)

Replacement LDO Sensor Cap

Includes i-button™ and sensor cap.

Prod. No.
5811200



Replacement LBOD Sensor Cap

Prod. No.
5838000



Replacement Membranes for IntelliCAL ISENH3181 Ammonia ISE

Pack of 3 replacement membrane modules designed for the IntelliCAL ISENH3181 Ammonia ISE.

Prod. No.
5812711

HQd Meter USB and AC Power Adapter Kit

Provides A/C power in the lab. The USB adapter can be used to transfer data from the meter to a PC, memory stick, or printer.

NOTE: Meter will remain water-proof after using the A/C power adapter. Included with HQ40d meter systems.



Prod. No.	Description
5826300	HQd Meter USB and AC Power Adapter Kit

Printer



Prod. No.	Description
2960100	Citizen PD-24 Includes printer, universal power supply, 115V North American power cord, RS-232 cable and gender adapter, USB cable, battery pack, one roll of thermal paper, and instruction manual. Compatible with 2100Q Portable Turbidimeters (USB+Power Module required), HQd Series Water Quality Meters, DR Spectrophotometers with USB interface, and the BODTrak II Apparatus.
5836000	Printer Paper for PD-24, Thermal 5/pk

sensION+ PORTABLE METERS



sensION+ FIELD KITS work as complete mobile measurement stations with everything you need to start testing.

Screw-on calibration tubes simplify on-site calibration and minimize consumption of standard solutions.

Parameter	PH1 BASIC PORTABLE pH METER	MM110 PORTABLE MULTI-METER	EC5 PORTABLE CONDUCTIVITY METER	DO6 PORTABLE DISSOLVED OXYGEN METER	MM150 PORTABLE MULTI-METER
Temperature	■	■	■	■	■
pH	■	■			■
Conductivity			■		■
Salinity			■		■
TDS			■		■
Dissolved Oxygen				■	
ORP/Redox	■	■			■

Specifications	PH1 BASIC PORTABLE pH METER	MM110 PORTABLE MULTI-METER	EC5 PORTABLE CONDUCTIVITY METER	DO6 PORTABLE DISSOLVED OXYGEN METER	MM150 PORTABLE MULTI-METER
IP Rating	IP67	IP67	IP67	IP67	IP67
Internal Data Storage	—	—	—	—	—
Resolution	0.01 pH 0.1 mV (±199.9 mV range)	0.01 pH 1 mV	EC: 0.01 µS/cm - 1 mS/cm TDS: 1mg/L - 1g/L depending on range Salinity: 0.1 mg/L - 0.1 g/L depending on range	0.01 mg/L	pH: 0.01 ORP: 1 mV EC: 0.01 µS/cm - 1 mS/cm depending on range 1 mg/L - 1 g/L depending on range
Inputs	MP-5	MP-8	MP-5	MP-5	MP-8
Outputs	—	—	—	—	—
Interface Languages	Icon based, no language needed	Icon based, no language needed	Icon based, no language needed	Icon based, no language needed	Icon based, no language needed
Warranty	3 years	3 years	3 years	3 years	3 years
Compliance	CE.WEEE	CE.WEEE	CE.WEEE	CE.WEEE	CE.WEEE
Measurement Method	Auto stabilization, manual	Auto stabilization, manual	Auto stabilization, manual	Auto stabilization, manual	Auto stabilization, manual
PC Data Transfer Software	—	—	—	—	—
Backlight	■	■	■	■	■
Battery Requirements	3, AA	3, AA	3, AA	3, AA	3, AA
Prod. No.	LPV2500.97.0002	LPV2600.97.0002	LPV3500.97.0002	LPV4500.97.0002	LPV4000.97.0002

See pages 22-23 for sensION+ Meter & Probe Kits. See page 24 for sensION+ Accessories.

sensION+ PORTABLE DATA LOGGER METERS

Hach sensION+ Data Logger, an all-in-one system—now making testing AND DATA MANAGEMENT fast and simple.

Interval measurements, 500 data point memory and wireless data transfer to your PC. Data management as fast and simple as it can be.



Parameter	pH1 DL PORTABLE DATA LOGGER pH METER	MM110 DL PORTABLE DATA LOGGER MULTI-METER	EC5 DL PORTABLE DATA LOGGER CONDUCTIVITY METER	DO6 DL PORTABLE DATA LOGGER DISSOLVED OXYGEN METER	MM150 DL PORTABLE DATA LOGGER MULTI-METER
Temperature	■	■	■	■	■
pH	■	■			■
Conductivity			■		■
Salinity			■		■
TDS			■		■
Dissolved Oxygen				■	
ORP/Redox	■	■			■

Specifications	pH1 DL PORTABLE DATA LOGGER pH METER	MM110 DL PORTABLE DATA LOGGER MULTI-METER	EC5 DL PORTABLE DATA LOGGER CONDUCTIVITY METER	DO6 DL PORTABLE DATA LOGGER DISSOLVED OXYGEN METER	MM150 DL PORTABLE DATA LOGGER MULTI-METER
IP Rating	IP67	IP67	IP67	IP67	IP67
Internal Data Storage	500 results	500 results	500 results	500 results	500 results
Resolution	0.01 pH 0.1 mV (±199.9 mV range)	0.01 pH 1 mV	EC: 0.01 µS/cm - 1 mS/cm TDS: 1mg/L - 1g/L depending on range Salinity: 0.1 mg/L - 0.1 g/L depending on range	0.01 mg/L	pH: 0.01 ORP: 1 mV EC: 0.01 µS/cm - 1 mS/cm depending on range 1 mg/L - 1 g/L depending on range
Inputs	MP-5	MP-8	MP-5	MP-5	MP-8
Output	Wireless to USB	Wireless to USB	Wireless to USB	Wireless to USB	Wireless to USB
Interface Languages	Icon based, no language needed	Icon based, no language needed	Icon based, no language needed	Icon based, no language needed	Icon based, no language needed
Warranty	2 years	2 years	2 years	2 years	2 years
Compliance	CE; RTTE directive see NB opinion statement; FCC approval	CE; RTTE directive see NB opinion statement; FCC approval	CE; RTTE directive see NB opinion statement; FCC approval	CE; RTTE directive see NB opinion statement; FCC approval	CE; RTTE directive see NB opinion statement; FCC approval
Measurement Method	Interval, auto stabilization, manual	Interval, auto stabilization, manual	Interval, auto stabilization, manual	Interval, auto stabilization, manual	Interval, auto stabilization, manual
PC Data Transfer Software	Yes	Yes	Yes	Yes	Yes
Backlight	Included	Included	Included	Included	Included
Battery Requirements	3, AA	3, AA	3, AA	3, AA	3, AA
Prod. No.	LPV2500DL.97.02	LPV2600DL.97.02	LPV3500DL.97.02	LPV4500DL.97.02	LPV4000DL.97.02

See pages 22-23 for sensION+ Meter & Probe Kits. See page 24 for sensION+ Accessories.

sensION+ BENCHTOP METERS

Each system is designed to be used in a wide variety of applications and comes complete with everything you need to start testing.



Parameter	PH3 BASIC BENCHTOP pH METER	PH31 GLP BENCHTOP pH METER	EC7 BENCHTOP CONDUCTIVITY METER	EC71 GLP BENCHTOP CONDUCTIVITY METER	MM340 BENCHTOP MULTI- PARAMETER METER	MM374 BENCHTOP MULTI- PARAMETER METER
Temperature	■	■	■	■	■	■
pH	■	■			■	■
mV		■			■	■
Conductivity			■	■		■
Salinity			■	■		■
TDS				■		■
ORP/Redox	■	■			■	■
Ammonia					■	■
Nitrate					■	■
Fluoride					■	■
Sodium					■	■
Chloride					■	■
Ammonium					■	■

Specifications	PH3 BASIC BENCHTOP pH METER	PH31 GLP BENCHTOP pH METER	EC7 BENCHTOP CONDUCTIVITY METER	EC71 GLP BENCHTOP CONDUCTIVITY METER	MM340 BENCHTOP MULTI- PARAMETER METER	MM374 BENCHTOP MULTI- PARAMETER METER
IP Rating	IP42	IP42	IP42	IP42	IP42	IP42
Internal Data Storage	—	330	-	400	330	330
Resolution	pH: 0.01 ORP: 1 mV	pH: 0.001 ORP: 0.1 mV	EC: 0.01 µS/cm - 1 mS/cm depending on range Salinity: Dependent on range	EC: 0.01 µS/cm - 1 mS/cm depending on range TDS: 1 mg/L - 1 g/L Salinity: Dependent on range	pH: 0.001 ORP 0.1 mV	pH: 0.001 pH ORP: 0.1 mV EC: 0.01 µS/cm - 1 mS/cm depending on range TDS: 1 mg/L - 1 g/L Salinity: Dependent on range
Inputs	BNC, ref, Pt1000	BNC, ref, Pt1000	E.C. cell, Pt1000	E.C. cell, Pt1000	2 BNC, 2 ref, Pt1000	2 BNC, 2 ref, 1 E.C.
Outputs		RS232* (two-way)		RS-232* (two-way)	RS-232* (two-way)	RS-232* (two-way)
Interface Languages	6**	6**	6**	6**	6**	6**
Warranty	3 years	3 years	3 years	3 years	3 years	2 years
Compliance	CE.WEEE	CE.WEEE	CE.WEEE	CE.WEEE	CE.WEEE	CE.WEEE
GLP Features	—	■	—	■	■	■
PC Data Transfer Software	■	■	■	■	■	■
Backlight	■	■	■	■	■	■
AC and USB Operation	■	■	■	■	■	■
Prod. No.	LPV2000.97.0002	LPV2100.97.0002	LPV3010.97.0002	LPV3110.97.0002	LPV2200.97.0002	LPV4110.97.0002

*USB compatibility with optional adapter. **English, German, Spanish, French, Italian, and Portuguese

See pages 22-23 for sensION+ Meter & Probe Kits. See page 24 for sensION+ Accessories.

sensION+ PROBES FOR PORTABLE METERS



Specifications	pH Combination Gel-filled	pH Combination Solid Gel Wastewater	pH Combination Low Conductivity High Temperature	ORP / Redox Combination Gel-filled	Dissolved Oxygen Polarographic
Special Feature		With Working Protector. Solid gel for high solids content.	With Working Protector. For low ionic strength and/or high temperature.		
Range	0 to 14 pH	2 to 14 pH	0 to 14 pH	± 2000 mV	0.03 mg/L to saturation
Accuracy	0.02 pH with pH1 Meter	0.02 pH with pH1 Meter	0.02 pH with pH1 Meter	1 mV with pH1 Meter	±0.5 mg/L
Temperature Range	0 to 80 °C	0 to 80 °C	0 to 100 °C	0 to 80 °C	0 to 50 °C
Thermistor	Pt1000	Pt1000	Pt1000	-	Integrated 30kohm NTC
Dimensions (D x L)	0.47 in x 3.35 in (12 mm x 85 mm)	0.47 in x 3.35 in (12 mm x 85 mm)	0.47 in x 3.35 in (12 mm x 85 mm)	0.47 in x 3.35 in (12 mm x 85 mm)	0.47 in x 4.72 in (12 mm x 120 mm)
Sensor Type	Glass	Glass	Glass	Platinum annular ring	Replaceable PTFE membrane; Pt cathode; Ag anode
Junction	Ceramic pin	Open	Porous annular PTFE	Ceramic pin	-
Material	Sensor Body: Polycarbonate	Sensor Body: Glass	Sensor Body: Glass	Sensor Body: Polycarbonate	Probe body: ABS & Delrin (nylon)
Filling Solution	Non-refillable gel	Non-refillable solid polymer	Non-refillable gel	Non-refillable gel	2759123
Article number	LZW5050T.97.002	LZW5051T.97.002	LZW5052T.97.002	LZW5055.97.0002	LZW5130.97.0002



Specifications	Conductivity	Conductivity	Multi Combination**	Multi Combination*	Multi Combination**
Special Feature		For harsh samples	pH, Conductivity, ORP	pH, ORP	pH, Conductivity
Range	0.2 µS/cm to 200 mS/cm	5 µS/cm to 50 mS/cm	pH: 0 to 14 pH Conductivity: 20 µS/cm to 200 mS/cm ORP: ± 2000 mV	pH: 0 to 14 pH ORP: ± mV	pH: 0 to 14 pH Conductivity: 20 µS/cm to 200 mS/cm
Accuracy	0.50% with EC5 Meter	0.50% with EC5 Meter	0.02 pH with MM150 Meter 1 mV with MM150 Meter 0.50% EC with MM150 Meter	0.02 pH with MM110 Meter 1mV with MM110 Meter	0.02 pH with MM150 Meter 0.50% EC with MM150 Meter
Temperature Range	0 - 80 °C	0 to 80 °C	0 to 80 °C	0 to 80 °C	0 to 80 °C
Thermistor	Pt1000	Pt1000	Pt1000	Pt1000	Pt1000
Dimensions (D x L)	0.47 in x 3.35 in (12 mm x 85 mm)	0.47 in x 3.35 in (12 mm x 85 mm)	0.47 in x 3.35 in (12 mm x 85 mm)	0.47 in x 3.35 in (12 mm x 85 mm)	0.47 in x 3.35 in (12 mm x 85 mm)
Sensor Type	3-pole Platinum, k = 1.0 cm ⁻¹	2-pole Titanium, k = 0.3 cm ⁻¹	pH: Glass ORP: Platinum Conductivity: Platinum	pH: Glass ORP: Platinum	pH: Glass Conductivity: Platinum
Junction			Ceramic	Ceramic	Ceramic
Material	Sensor Body: Outside: Polycarbonate; Inside: Glass	Sensor Body: Titanium	Sensor Body: Polycarbonate	Sensor Body: Polycarbonate	Sensor Body: Polycarbonate
Filling Solution	-	-	Non-refillable gel	Non-refillable gel	Non-refillable gel
Prod. No.	LZW5060.97.0002	LZW5062.97.0002	LZW5048.97.0002	LZW5045.97.0002	LZW5059.97.0002

*Only for use on MM110 Meter. **Only for use with MM150 Meter.

sensION+ PROBES FOR BENCHTOP METERS



Specifications	pH Combination Gel-filled	pH Combination Refillable	pH Combination Gel-filled Wastewater	pH Combination Refillable
Special Feature		TRIS compatible	Solid gel for high solids content	Clog-free Sleeve Junction for low ionic strength.
Range	0 to 14 pH	0 to 14 pH	2 to 14 pH	0 to 14 pH
Accuracy	0.02 pH with pH3 Meter 0.002 pH with pH31 Meter 0.002 pH with MM340 Meter 0.002 pH with MM374 Meter	0.02 pH with pH3 Meter 0.002 pH with pH31 Meter 0.002 pH with MM340 Meter 0.002 pH with MM374 Meter	0.02 pH with pH3 Meter 0.002 pH with pH31 Meter 0.002 pH with MM340 Meter 0.002 pH with MM374 Meter	0.02 pH with pH3 Meter 0.002 pH with pH31 Meter 0.002 pH with MM340 Meter 0.002 pH with MM374 Meter
Temperature Range	0 to 80 °C	-10 to 100 °C	0 to 80 °C	0 to 60 °C
Thermistor	Pt1000	Pt1000	Pt1000	Pt1000
Dimensions (D x L)	0.47 in x 5.12 in (12 mm x 130 mm)	0.47 in x 5.12 in (12 mm x 130 mm)	0.47 in x 5.12 in (12 mm x 130 mm)	0.47 in x 5.12 in (12 mm x 130 mm)
Sensor Type	Glass	Glass	Glass	Glass
Junction	Ceramic pin	2 x Ceramic pin	Open	Open with sleeve
Material	Sensor Body: Polycarbonate	Sensor Body: Glass	Sensor Body: Glass	Sensor Body: Glass
Filling Solution	Non-refillable gel	LZW9500.99	Non-refillable solid polymer	LZW9500.99
Prod. No.	LZW5010T.97.002	LZW5014T.97.002	LZW5011T.97.002	LZW5021T.97.002



Specifications	Conductivity	ORP Gel-filled Combination	ORP Refillable Combination
Special Feature			
Range	0.2 µS/cm to 200 mS/cm	± 2000 mV	± 2000 mV
Accuracy	0.50% EC & TDS	1mV with pH3 Meter 0.2mV with pH31 Meter 0.2mV with MM340 Meter 0.2mV with MM374 Meter	1mV with pH3 Meter 0.2mV with pH31 Meter 0.2mV with MM340 Meter 0.2mV with MM374 Meter
Temperature Range	0 to 80 °C	0 to 80 °C	0 to 80 °C
Thermistor	Pt1000	—	—
Dimensions (D x L)	0.47 in x 5.12 in (12 mm x 130 mm)	0.47 in x 5.12 in (12 mm x 130 mm)	0.47 in x 5.12 in (12 mm x 130 mm)
Sensor Type	3-pole Platinum, k = 0.7 cm ⁻¹	Platinum	Platinum
Junction	—	Ceramic pin	Ceramic pin
Material	Sensor Body: Outside: Polycarbonate; Inside: Glass	Sensor Body: Glass	Sensor Body: Glass
Filling Solution	—	Non-refillable gel	LZW9500.99
Prod. No.	LZW5070.97.0002	LZW5056.97.0002	LZW5057.97.0002



Specifications

	Sodium ISE	Chloride Combination ISE	Fluoride Combination ISE	Nitrate Combination ISE
Special Feature		Combination electrode Maintenance free: No electrolyte or spare membranes needed	Combination electrode Maintenance free: No electrolyte or spare membranes needed	Combination electrode Maintenance free: No electrolyte or spare membranes needed
Ranges	0.05 - 23,000 mg/L Na ⁺	0.1 mg/L to 35,500 mg/L Cl ⁻	0.01 mg/L to 19,000 mg/L F ⁻	0.1 mg/L to 14,000 mg/L NO ₃ ⁻
Accuracy	±0.02 mV or 0.05%, whichever is greater (application dependent)	±0.02 mV or 0.05%, whichever is greater (application dependent)	±0.02 mV or 0.05%, whichever is greater (application dependent)	±0.02 mV or 0.05%, whichever is greater (application dependent)
Temperature Range	0 to 60 °C	5 to 50 °C	5 to 50 °C	0 to 50 °C
Dimensions (D x L)	0.47 in x 4.72 in (12 mm x 120 mm)	0.47 in x 4.72 in (12 mm x 120 mm)	0.47 in x 4.72 in (12 mm x 120 mm)	0.47 in x 4.72 in (12 mm x 120 mm)
Sensor Type	Sodium Selective Glass Membrane	Solid-state crystal membrane	Solid-state crystal membrane	Solid-state PVC membrane
Junction	—	Porous Teflon Annular Ring	Porous Teflon Annular Ring	Porous Teflon Annular Ring
Material	Sensor Body: Glass	Sensor Body: Epoxy	Sensor Body: Epoxy	Sensor Body: Epoxy
Filling Solution	—	Non-refillable driTEK gel	Non-refillable driTEK gel	Non-refillable driTEK gel
ISA Required	4451569	2318069	258999	2984799
Prod. No.	LZW9650.97.0002*	LZW9652C.97.002	LZW9655C.97.002	LZW9662C.97.002



Specifications

	Ammonium Combination ISE	Ammonia Combination ISE	Reference Electrode
Special Feature	Combination electrode Maintenance free: No electrolyte or spare membranes needed	Gas Sensing Electrode	Double junction reference electrode for ISEs, large ceramic diaphragm
Ranges	0.018 mg/L to 9,000 mg/L NH ₄ ⁺	0.06 mg/L to 17,000 mg/L NH ₃	—
Accuracy	±0.02 mV or 0.05%, whichever is greater (application dependent)	—	—
Temperature Range	5 to 50 °C	0 to 50 °C	0 to 60 °C
Dimensions (D x L)	0.47 in x 4.72 in (12 mm x 120 mm)	0.47 in x 5.87 in (12 mm x 149 mm)	0.47 in x 4.72 in (12 mm x 120 mm)
Sensor Type	Solid-state PVC membrane	Gas sensing: glass w/ replaceable NH ₃ sensitive membrane	—
Junction	Porous Teflon Annular Ring	Porous Teflon Annular Ring	Ceramic
Material	Sensor Body: Epoxy	Sensor Body: ABS	Sensor Body: Glass
Filling Solution	Non-refillable driTEK gel	4447226	LZW9901.00
ISA Required	2980699	4447169	—
Prod. No.	LZW9663C.97.002*	5192700	LZW5044.97.0002

*The ISE electrodes are indicator and require a reference electrode.

sensION+ BENCHTOP METER & PROBE KITS

- sensION+ Benchtop meters are available in popular packaged configurations
- Choose from basic kits or advanced kits for your lab testing needs
- Unique design developed as a complete workstation including integrated stirrer, probe stand, calibration flasks, and compartments for essential lab work
- All benchtop kits include: workstation with integrated stirrer, buffers, standards, storage solutions, calibration flasks, and accessories for quick start up



Prod. No.	Description
LPV2010T.97.002	Basic pH (general) Benchtop Kit sensION+ PH3 meter with universal 5010T pH and temperature electrode. For general aqueous applications.
LPV2011T.97.002	Advanced pH (dirty samples) Benchtop Kit sensION+ PH3 meter with open junction 5011T pH and temperature electrode. For high solid content and/or viscous media samples.
LPV2014T.97.002	Advanced pH (high performance) Benchtop Kit sensION+ PH3 meter with dual junction 5014T pH and temperature electrode. For sulfurs, reducing sugars or media that reacts with Ag+ ions.
LPV2021T.97.002	Advanced pH (difficult samples) Benchtop Kit sensION+ PH3 meter with clog-free 5021T pH and temperature electrode. For low ionic strength, colloidal, emulsions and cream samples.
LPV2110T.97.002	Basic pH (general) Benchtop Kit sensION+ PH31 GLP meter with universal 5010T pH and temperature electrode. For general aqueous applications.
LPV2111T.97.002	Advanced pH (general) Benchtop Kit sensION+ PH31 GLP meter with open junction 5011T pH and temperature electrode. For high solid content and/or viscous media samples
LPV2114T.97.002	Advanced pH (high performance) Benchtop Kit sensION+ PH31 GLP meter with dual junction 5014T pH and temperature electrode. For sulfurs, reducing sugars or media that reacts with Ag+ ions.
LPV2121T.97.002	Advanced pH (difficult samples) Benchtop Kit sensION+ PH31 GLP meter with clog-free 5021T pH and temperature electrode. For low ionic strength, colloidal, emulsions and cream samples.
LPV2210T.97.002	Basic pH (general) Benchtop Kit sensION+ MM340 pH & ISE GLP meter with universal 5010T pH and temperature electrode. For general aqueous applications.
LPV2211T.97.002	Advanced pH (dirty samples) Benchtop Kit sensION+ MM340 pH & ISE meter with open junction 5011T pH and temperature electrode. For high solid content and/or viscous media samples.
LPV2214T.97.002	Advanced pH (high performance) Benchtop Kit sensION+ MM340 pH & ISE GLP meter with dual junction 5014T pH and temperature electrode. For sulfurs, reducing sugars or media that reacts with Ag+ ions.
LPV2221T.97.002	Advanced pH (difficult samples) Benchtop Kit sensION+ MM340 pH & ISE GLP meter with clog-free 5021T pH and temperature electrode. For low ionic strength, colloidal, emulsions and cream samples.
LPV3070.97.0002	Basic Conductivity Benchtop Kit sensION+ EC7 meter with universal 5070 conductivity and temperature cell. For general aqueous applications.
LPV3170.97.0002	Advanced Conductivity Benchtop Kit sensION+ EC71 GLP meter with universal 5070 conductivity and temperature cell. For general aqueous applications.
LPV4140.97.0002	Advanced pH (high performance) & Conductivity Benchtop Kit sensION+ MM374 pH, conductivity & ISE GLP meter with dual junction 5014 pH and universal 5070 conductivity with temperature cell. For sulfurs, reducing sugars or media that reacts with Ag+ ions.

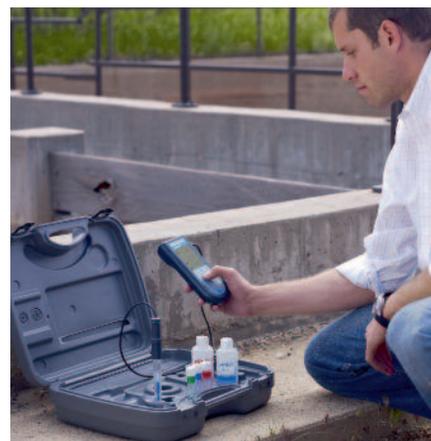
Visit: hach.com/meterselect for more kits.

- sensION+ meters are available in popular packaged configurations
- Choose from basic, advanced, or multi-sensor kits for your field testing needs
- Specialized field carrying case acts as a portable laboratory
- All field kits include: meter, sensor, field carrying case, buffers, standards, storage solutions, calibration tubes with screw caps, and accessories for quick start up

Prod. No.	Description
LPV2550T.97.002	Basic pH (general) Field Kit sensION+ PH1 meter with universal 5050T pH and temperature electrode. For general aqueous applications.
LPV2551T.97.002	Advanced pH (dirty samples) Field Kit sensION+ PH1 meter with open junction 5051T pH and temperature electrode. For high solid content and/or viscous media samples.
LPV2552T.97.002	Advanced pH (difficult samples) Field Kit sensION+ PH1 meter with high contact 5052T pH and temperature electrode. For low ionic strength, colloidal, emulsions and cream samples.
LPV2555.97.0002	Basic ORP Field Kit sensION+ PH1 meter with 5055 ORP electrode. For chemical waste treatment, galvanic baths and general aqueous applications.
LPV3560.97.0002	Basic Conductivity Field Kit sensION+ EC5 meter with universal 5060 conductivity and temperature cell. For general aqueous applications.
LPV3562.97.0002	Advanced Conductivity Field Kit sensION+ EC5 meter with robust, Titanium 5062 conductivity and temperature cell. For difficult media applications.
LPV4551.97.0002	Basic Dissolved Oxygen Field Kit sensION+ DO6 meter with robust, polarographic 5120 DO and temperature probe. For general aqueous applications.
LPV2645.97.0002	Advanced pH & ORP Multi-sensor Field Kit sensION+ MM110 meter with 5045 pH, ORP and temperature multi-sensor. For general aqueous applications.
LPV4059.97.0002	Advanced pH and Conductivity Multi-sensor Field Kit sensION+ MM150 meter with 5059PT pH, conductivity and temperature multi-sensor. For agriculture and general aqueous applications.
LPV4048.97.0002	Advanced pH, Conductivity & ORP Multi-sensor Field Kit sensION+ MM150 meter with 5048 pH, conductivity, ORP and temperature multi-sensor. For waste treatment and general aqueous applications.



Visit: hach.com/metersselect for more kits.



sensION+ ACCESSORIES

Prod. No.	Description
LZW8201.99	Thermal printer, RS 232, for sensION+ benchtop
LZW9117.99	Thermal paper for printer LZW8201.99, bag with 5 rolls
LZW8200.99	Dot-impact printer, RS 232, for sensION+ instruments
LZW9000.99	Standard paper for printer LZW8200, bag with 10 rolls
LZW9001.99	Ribbon for printer LZW8200.99, 3 units.
LZW9135.99	RS232 cable, for sensION+ benchtop instruments
LZW9135USB.99	RS232 cable for sensION+ benchtop, with USB adapter
LZW9319.99	Magnetic stirrer with sensor holder, for sensION MM benchtop
LZW9267.99	Holder and clamp for one sensor, for portable sensION+
LZW9137.97	3x10 mL printed tubes, for portable pH calibration
LZW9138.99	3x10 mL printed tubes, for portable conductivity calibration
LZW5125.99	Spare membrane for D.O. electrode LZW5120
5197300	Spare membranes for 5130 DO electrode, 2/pk
LZW5123.99	Protector-calibration flask for D.O. electrode LZW5120, light version

Prod. No.	Description
LZW9325.99	Radiometer sensor holder for sensION+ benchtop instruments, for three sensors
LZW9325.99.T031	Radiometer sensor holder for sensION+ benchtop instruments, for three sensors, includes X31T031 sockets
LZW9325.99.T014	Radiometer sensor holder for sensION+ benchtop instruments, for three sensors, includes X31T014 sockets
LZW9321.99	Three-sensor holder, for sensION+ benchtop instruments
LZW9110.97	3x50 mL printed flasks for benchtop pH calibration
LZW9111.99	3x50 mL printed flasks for benchtop conductivity calibration
LZW9155.99	Holder and clamp for three sensors, sensION+
LZW9118.99	Pyrex glass chamber, continuous flow measurements, sensION+
LZW9161.99	PP protector, electrode storage, sensION+
LZW9162.99	PP protector, for measurement, sensION+
LZW8997.99	Hach LabCom Easy Software, sensION+, GLP
LZW8999.99	Hach LabCom Software, sensION+, GLP
5192711	Ammonia Membrane Replacement Kit, 5/pk



Thermal printer, RS 232, for sensION+ benchtop



Hach LabCom Easy Software, sensION+, GLP

H-SERIES PORTABLE METERS

Dual-technology meters take readings from non-glass pH and traditional probes across multiple parameters. Available with optional data management, Bluetooth®, and ISE capabilities.



Parameter	H160 WATERPROOF PORTABLE METER	H160G WATERPROOF PORTABLE METER	H170 WATERPROOF PORTABLE METER	H170G WATERPROOF PORTABLE METER
Temperature	■	■	■	■
Dual pH technology				
Glass	■	■	■	■
Non-glass (ISFET)	■	■	■	■
mV	■	■	■	■
Conductivity			■	■
TDS			■	■
Salinity			■	■
Resistivity				
Dissolved Oxygen (Galvanic)				
ORP/Redox	■	■	■	■
Ammonia		■		■
Nitrate		■		■
Fluoride		■		■
Sodium		■		■

Feature	H160 WATERPROOF PORTABLE METER	H160G WATERPROOF PORTABLE METER	H170 WATERPROOF PORTABLE METER	H170G WATERPROOF PORTABLE METER
IP Rating	IP67	IP67	IP67	IP67
Internal data storage	—	999	—	999
Inputs	BNC (1), 3.5 mm phone (1), 8-pin Waterproof ISFET pH (1)	BNC (1), 3.5 mm phone (1), 8-pin Waterproof ISFET pH (1)	BNC (1), 3.5 mm phone (1), 8-pin Waterproof ISFET pH (1), 12-pin Waterproof conductivity (1)	BNC (1), 3.5 mm phone (1), 8-pin Waterproof ISFET pH (1), 12-pin Waterproof conductivity (1)
Outputs	—	Bluetooth	—	Bluetooth
Interface languages	English	English	English	English
Warranty	3 years	3 years	3 years	3 years
Compliance	CE.WEEE	CE.WEEE.IC.FCC	CE.WEEE	CE.WEEE.IC.FCC
GLP features	—	■	—	■
PC Data Transfer Software	—	included	—	included
Backlight	■	■	■	■
Battery Operation	■	■	■	■
AC and USB operation	—	—	—	—
Prod. No.	H160NP	H160GNP	H170NP	H170GNP

See page 29 for H-Series Bundles & Accessories.

H-SERIES BENCHTOP METERS



Benchtop models include GLP-related features and optional Bluetooth® communication.



Parameter	H260G BENCHTOP METER	H260GB BENCHTOP METER	H270G BENCHTOP METER	H270GB BENCHTOP METER	H280G BENCHTOP METER	H280GB BENCHTOP METER
Temperature	■	■	■	■	■	■
Dual pH technology						
Glass	■	■	■	■	■	■
Non-glass (ISFET)	■	■	■	■	■	■
mV	■	■	■	■	■	■
Conductivity			■	■	■	■
TDS			■	■	■	■
Salinity			■	■	■	■
Resistivity						
Dissolved Oxygen (Galvanic)					■	■
ORP/Redox	■	■	■	■	■	■
Ammonia	■	■	■	■	■	■
Nitrate	■	■	■	■	■	■
Fluoride	■	■	■	■	■	■
Sodium	■	■	■	■	■	■

Feature	H260G BENCHTOP METER	H260GB BENCHTOP METER	H270G BENCHTOP METER	H270GB BENCHTOP METER	H280G BENCHTOP METER	H280GB BENCHTOP METER
IP Rating	IP42	IP42	IP42	IP42	IP42	IP42
Internal data storage	999	999	999	999	999	999
Inputs	BNC (1), 3.5 mm phone (1), 4 mm reference (1), 8-pin RJ-45 ISFET pH (1)	BNC (1), 3.5 mm phone (1), 4 mm reference (1), 8-pin RJ-45 ISFET pH (1)	BNC (1), 3.5 mm phone (1), 4 mm reference (1), 8-pin RJ-45 ISFET pH (1), 12-pin waterproof Conductivity (1)	BNC (1), 3.5 mm phone (1), 4 mm reference (1), 8-pin RJ-45 ISFET pH (1), 12-pin Waterproof Conductivity (1)	BNC (1), 3.5 mm phone (1), 4 mm reference (1), 8-pin RJ-45 ISFET pH (1), 12-pin Waterproof Conductivity (1)	BNC (1), 3.5 mm phone (1), 4 mm reference (1), 8-pin RJ-45 ISFET pH (1), 12-pin Waterproof Conductivity (1)
Outputs	USB to PC	USB to PC Bluetooth	USB to PC	USB to PC Bluetooth	USB to PC	USB to PC Bluetooth
Interface languages	English	English	English	English	English	English
Warranty	3 years	3 years	3 years	3 years	3 years	3 years
Compliance	CE.WEEE	CE.WEEE.IC.FCC	CE.WEEE	CE.WEEE.IC.FCC	CE.WEEE	CE.WEEE.IC.FCC
GLP features	■	■	■	■	■	■
PC Data Transfer Software	included	included	included	included	included	included
Backlight	■	■	■	■	■	■
Battery Operation	■	■	■	■	■	■
AC and USB operation	included	included	included	included	included	included
Prod. No.	H260GNP	H260GBNP	H270GNP	H270GBNP	H280GNP	H280GBNP

See page 29 for H-Series Bundles & Accessories.

Non-glass pH probes:

- Virtually indestructible
- Store dry
- Extended shelf life
- Easy maintenance and cleaning



Specifications	pH General Purpose Round Tip Combination	pH Micro Probe Combination	pH Piercing Tip Micro Probe Combination
Special Feature	Virtually indestructible for general applications.	Great for small sample sizes, flasks and test tubes.	Great for light-duty piercing applications.
Ranges	0 to 14 pH	0 to 14 pH	0 to 14 pH
Temperature Range	0 - 60 °C	0 - 60 °C	0 - 60 °C
Thermistor	■ (ATC)	■ (ATC)	■ (ATC)
Dimensions (D x L)	0.33 in x 5.51 in (8.3 mm x 140 mm)	0.19 in x 5.12 in (4.8 mm x 130 mm)	0.19 in x 3.54 in (4.8 mm x 90 mm)
Sensor Type	ISFET	ISFET	ISFET
Junction	Fiber	Fiber	Fiber
Material	Sensor Body: Stainless Steel	Sensor Body: Stainless Steel	Sensor Body: Stainless Steel
Filling Solution	—	—	—
Waterproof Connector (for portable meters)	PHW77-SS	PHW17-SS	PHW37-SS
Prod. No.	PH77-SS	PH17-SS	PH37-SS



Specifications	pH NMR Tube Micro Probe Combination	pH Piercing Tip Micro Probe Combination (Heavy-Duty Handle)
Special Feature	Ideal for 5 mm NMR tubes or long-reach applications.	Great for heavy-duty piercing applications.
Ranges	0 to 14 pH	0 to 14 pH
Temperature Range	0 - 60 °C	0 - 60 °C
Thermistor	■ (ATC)	■ (ATC)
Dimensions (D x L)	0.15 in x 8.66 in (3.8 mm x 220 mm)	0.19 in x 3.54 in (4.8 mm x 90 mm)
Sensor Type	ISFET	ISFET
Junction	Fiber	Fiber
Material	Sensor Body: Stainless Steel	Sensor Body: Stainless Steel
Filling Solution	—	—
Waterproof Connector (for portable meters)	PHW47-SS	PHW57-SS
Prod. No.	PH47-SS	PH57-SS

Continued on next page.

H-SERIES PROBES



Specifications	Conductivity Bull's-Eye	Conductivity Drinking water applications	Conductivity High salinity applications.	Dissolved Oxygen
Special Feature				
Range	5 μ S/cm - 1 mS/cm	10 μ S/cm - 2 mS/cm	1000 μ S/cm - 200 mS/cm	0 - 20 mg/L
Temperature Range	-10 - 110 °C	-10 - 110 °C	-10 - 110 °C	0 - 50 °C
Thermistor	■ (ATC)	■ (ATC)	■ (ATC)	■ (ATC)
Dimensions (D x L)	0.63 in x 4.33 in (16 mm x 110 mm)	0.47 in x 4.33 in (12 mm x 110 mm)	0.47 in x 4.33 in (12 mm x 110 mm)	0.47 in x 4.33 in (12 mm x 110 mm)
Sensor Type	4-pole graphite	4-pole platinum	4-pole platinum	Membrane
Junction	—	—	—	—
Material	Sensor Body: Epoxy	Sensor Body: Glass	Sensor Body: Epoxy	Sensor Body: Polycarbonate / Abs
Filling Solution	—	—	—	—
Waterproof Connector (for portable meters)	■	■	■	■
Prod. No.	CDW97-KP5	CDW97-K1	CDW97-K10	DO50-GS



Specifications	ORP/Redox Combination Standard Gel-Filled	pH Combination	pH Combination Platinum Series	pH Combination Refillable
Special Feature				
Range	\pm 1999 mV	0 - 14 pH	0 - 14 pH	0 - 14 pH
Temperature Range	-10 - 110 °C	0 - 45 °C	0 - 45 °C	0 - 45 °C
Thermistor	—	—	—	—
Dimensions (D x L)	0.47 in x 4.33 in (12 mm x 110 mm)	0.48 in x 6 in (12.1 mm x 152.5 mm)	0.5 in x 9.49 in (12.7 mm x 241 mm)	0.48 in x 6 in (12.1 mm x 152.5 mm)
Sensor Type	Platinum annular ring	Glass	Glass	Glass
Junction	Ceramic pin	Glass frit	Open	Glass frit
Material	Sensor Body: Epoxy	Sensor Body: Epoxy	Sensor Body: Epoxy	Sensor Body: Epoxy
Filling Solution	Non-refillable gel	Non-refillable gel	2546902	5194100
Waterproof Connector (for portable meters)	—	—	—	—
Prod. No.	ORP110-GS	5193511	5191011	5194011

For ISE probes, visit: hach.com/ISFET

H-SERIES BUNDLES



Prod. No.	Description
H260G-BNDL	H260G meter with PH77-SS ISFET pH Probe, USB Cord, AC Adapter, and SmartLogger II Software, PLUS consumables.
H260GB-BNDL	H260G Bluetooth meter with PH77-SS ISFET pH Probe, Calibrating Buffer Kit, USB Cord, AC Adapter, and SmartLogger II Software, PLUS consumables.
H270G-BNDL	H270G meter with PH77-SS ISFET pH Probe, CDW97-KP5 Conductivity Probe, USB Cord, AC Adapter, and SmartLogger II Software, PLUS consumables.
H270GB-BNDL	H270G Bluetooth meter with PH77-SS ISFET pH Probe, CDW97-KP5 Conductivity Probe, Calibrating Buffer Kit, USB Cord, AC Adapter, and SmartLogger II Software, PLUS consumables.

Prod. No.	Description
H280G-BNDL	H280G meter with PH77-SS ISFET pH Probe, CDW97-KP5 Conductivity Probe, DO50-GS Dissolved Oxygen Probe, USB Cord, AC Adapter, and SmartLogger II Software, PLUS consumables.
H280GB-BNDL	H280G Bluetooth meter with PH77-SS ISFET pH Probe, CDW97-KP5 Conductivity Probe, DO50-GS Dissolved Oxygen, USB Cord, AC Adapter, SmartLogger II Software, PLUS consumables.
H160-BNDL	H160-77 meter & PHW77-SS pH Probe; Field Case & Calibration Kit; Rubber Holste, PLUS consumables.
H160G-BNDL	H160G Bluetooth Meter, PHW77-SS ISFET Probe, Field Carrying Case & Calibration Kit, Rubber Holster, and SmartLogger II Software, PLUS consumables.
H170-BNDL	H170 Meter, PHW77-SS pH Probe & CDW97-KP5 Conductivity Probe; Field Case & Calibration/Standards Kit, and Rubber Holster, PLUS consumables.
H170G-BNDL	H170G Bluetooth Meter, PHW77-SS pH Probe, CDW97-KP5 Conductivity, Field Case & Calibration/Standards Kit, Rubber Holster, and SmartLogger II Software, PLUS consumables.

Visit: hach.com/meterselect for more bundles.

H-SERIES ACCESSORIES



Universal Probe Stand

Prod. No.	Description
00130QQ	Black Carrying Case Hand Held
DO50-CAP	Easy-to-thread-on cap with a pre-installed membrane
DO50-KIT	Includes the DO50-CAP plus a small bottle of electrolyte and a syringe to add the electrolyte to the sensor. There is enough electrolyte to refill 3 caps.
DOC082.98.80062	SmartLogger II Software CD
8508850	Universal Probe Stand for Standard Electrode Sizes Also supports Hach IntelliCAL and sensION+ probes.
9316900	Replacement Reference Electrode for the H130, H135 & H138
RF01-01	Replacement Reference Electrode for miniLab Models

MP METERS



Multi-parameter probeless meters allow rapid spot checks of clean water applications and tap sampling.



Parameter	MP-4 PORTABLE METER WITH INTERNAL SENSORS	MP-6p PORTABLE METER WITH INTERNAL SENSORS	MP-6 PORTABLE METER WITH INTERNAL SENSORS
Temperature	■	■	■
pH		■	■
mV			
Conductivity	■	■	■
TDS	■	■	■
Salinity			
Resistivity	■		■
Mineral/Salt		■	
Dissolved Oxygen			
ORP/Redox		■	■
Ammonia			
Nitrate			
Fluoride			
Sodium			

Specifications	MP-4 PORTABLE METER WITH INTERNAL SENSORS	MP-6p PORTABLE METER WITH INTERNAL SENSORS	MP-6 PORTABLE METER WITH INTERNAL SENSORS
Special Feature			
Ranges	pH: — ORP: — Cond.: 0.01 µS/cm to 200 mS/cm Resist.: 10 kΩ cm to 30 MΩ cm TDS: 0.01 ppm to 200 ppt Mineral/Salt: —	pH: 0 to 14 pH ORP: ±999 mV Cond.: 0.01 µS/cm to 200 mS/cm Resist.: — TDS: 0.01 ppm to 200 ppt Mineral/Salt: 0.01 ppm to 200 ppt	pH: 0 to 14 pH ORP: ±999 mV Cond.: 0.01 µS/cm to 200 mS/cm Resist.: 10 kΩ cm to 30 MΩ cm TDS: 0.01 ppm to 200 ppt Mineral/Salt: —
Temperature Range	0 to 71 °C (32 to 160°F)	0 to 71 °C (32 to 160°F)	0 to 71 °C (32 to 160°F)
Dimensions (H x W x D)	2.5 in x 2.7 in x 7.7 in (64 mm x 69 mm x 196 mm)	2.5 in x 2.7 in x 7.7 in (64 mm x 69 mm x 196 mm)	2.5 in x 2.7 in x 7.7 in (64 mm x 69 mm x 196 mm)
Sensor Type	pH: — ORP: — Cond.: 4-cell (316 Stainless Steel)	pH: Glass ORP: Pt Cond.: 4-cell (316 Stainless Steel)	pH: Glass ORP: Pt Cond.: 4-cell (316 Stainless Steel)
Material	Housing: VALOX*	Housing: VALOX*	Housing: VALOX*
Prod. No.	HMP4	HMP6P	HMP6

*Trademark of SABIC Innovative Plastics IP BV

See next page for MP Meter Packages & Accessories.

MP METERS PACKAGES

Prod. No.	Description
HMP6EP	MP-6 Essentials Package MP-6 portable meter with hardsided case and 50 mL NaCl, KCl, 442™*, and pH buffer standard solutions.
HMP6EPD	MP-6 Essentials Package with MP-Dock MP-6 portable meter with MP-Dock computer interface, hardsided case and 50 mL NaCl, KCl, 442, and pH buffer standard solutions.
HMP4EP	MP-4 Essentials Package MP-4 portable meter with hardsided case and 50 mL NaCl, KCl, and 442 standard solutions.
HMP4EPD	MP-4 Essentials Package with MP-Dock MP-4 portable meter with MP-Dock computer interface, hardsided case and 50 mL NaCl, KCl, and 442 standard solutions.
HMP6PEP	MP-6p Essentials Package MP-6p portable meter with hardsided case and 50 mL NaCl, KCl, 442, and pH buffer standard solutions.
HMP6PEPD	MP-6p Essentials Package with MP-Dock MP-6p portable meter with MP-Dock computer interface, hardsided case and 50 mL NaCl, KCl, 442, and pH buffer standard solutions.



Visit: hach.com/metersselect for more packages.

*Trademark of Myron L. Company

MP METERS ACCESSORIES

Prod. No.	Description
HMPCASE	Hardsided Instrument Case
DO50-KIT	Hardsided case with insert for MP meter, six 50 mL standard solutions, and MP-Dock.
HMPDOCK	MP-Dock Computer Interface For use with all MP meters. This USB powered device allows data transfer from the meter to a computer. Includes MP DataLink software application.
HMPSENS	Replacement pH/ORP Sensor Replacement pH/ORP sensor for MP-6 and MP-6p meters



*MP-Dock
Computer Interface
Prod. No. HMPDOCK
(meter not included)*

miniLAB® POCKET PH METERS



When you don't want the hassle of a probe but still need a non-glass pH meter.



Specifications	H130 miniLAB POCKET pH METER	H135 miniLAB POCKET pH METER	H138 miniLAB POCKET pH METER
Temperature	■ (ATC)	■ (ATC)	■ (ATC)
Sensor	ISFET silicon chip pH sensor		
Calibration	1-Point	1-, 2-, or 3-point	
Buffer Recognition	pH 7.00 pH 6.86	pH 4.01, 7.00, and 10.01 pH 4.01, 6.86, and 9.18	
Reference	Replaceable KCl gel filled (9316900)		
pH Range	Suggested range: 5.0 to 9.0 pH 2.0 to 12.0 pH	2.0 to 12.0 pH	
Resolution	0.1 pH		0.01 pH
Input Accuracy	≤0.1 pH		≤0.01 pH
Repeatability	± 0.1 pH		± 0.03 pH
Display	LCD		LCD with Temperature
Operation Temp. Range	Range: 5 to 40°C; Automatic		
Battery Operation	Two 3v lithium batteries (CR2032) included		
Battery Life	Up to 200 hours continuous warning with 10 hour advance low battery and automatic power off		
Dimensions	155 x 33 x 20 mm (6 1/8" L x 1 1/4" W x 3/4" H)		
Weight	77 g (0.17 lbs.) -meter only		

Feature	H130 miniLAB POCKET pH METER	H135 miniLAB POCKET pH METER	H138 miniLAB POCKET pH METER
IP Rating	IP67	IP67	IP67
Internal data storage	—	—	—
Inputs	—	—	—
Outputs	—	—	—
Interface languages	English	English	English
Warranty	1 year	1 year	1 year
Compliance	CE.WEEE	CE.WEEE	CE.WEEE
GLP features	—	—	—
PC Data Transfer Software	—	—	—
Backlight	—	—	—
Battery Operation	2, 3V (CR2032)	2, 3V (CR2032)	2, 3V (CR2032)
AC and USB operation	—	—	—
Prod. No.	H130	H135	H138

POCKET PRO TESTERS

Take the guesswork out of your measurements. The large LCD display, intuitive user interface, and standard AAA batteries make Pocket Pro the easiest to use tester for your application.



Specifications	Pocket Pro pH	Pocket Pro ORP	Pocket Pro TDS_{LR}	Pocket Pro TDS_{HR}
Parameter	pH, Temp	ORP, Temp	TDS, Temp	TDS, Temp
Operating Temperature Range	0 to 50°C	0 to 50°C	0 to 50°C	0 to 50°C
Range	0.0 to 14.0 pH	-999 to +999 mV	0 to 1999 ppm	0 to 10.00 ppt
Accuracy	0.1 pH	± 2 mV	1% FS	2% FS
Resolution	0.1 pH	1 mV	1 ppm	0.01 ppt
TDS Factor	—	—	adjustable; 0.71 default	adjustable; 0.71 default
Battery Requirements	4 AAA	4 AAA	4 AAA	4 AAA
IP Rating	IP67	IP67	IP67	IP67
Backlight	—	—	—	—
Prod. No.	9531000	9531100	9531200	9531300

Specifications	Pocket Pro Conductivity_{LR}	Pocket Pro Conductivity_{HR}	Pocket Pro Salt	Pocket Pro Temperature
Parameter	Conductivity, Temp	Conductivity, Temp	Salinity, Temp	Temperature
Operating Temperature Range	0 to 50°C	0 to 50°C	0 to 50°C	0 to 50°C
Range	0 to 1990 µS/cm	0.0 to 19.99 mS/cm	0 to 10.00 ppt	-15 to 170°C
Accuracy	1% FS	2% FS	1% FS	1°C
Resolution	1 µS/cm	0.01 mS/cm	0.01 ppt	0.1°C
TDS Factor	—	—	—	—
Battery Requirements	4 AAA	4 AAA	4 AAA	4 AAA
IP Rating	IP67	IP67	IP67	IP67
Backlight	—	—	—	—
Prod. No.	9531400	9531500	9531600	9531700
				9531701 is replacement sensor for Pocket Pro Temp

POCKET PRO+ TESTERS



The Pocket Pro+ series offers all the benefits of the Pocket Pro standard testers, plus convenient backlight and replaceable sensors. Have confidence in your results with superior probe and calibration diagnostics.

Specifications	Pocket Pro+ pH	Pocket Pro+ ORP	Pocket Pro+ Multi 1	Pocket Pro+ Multi 2
Parameter	pH, Temp	ORP, Temp	Conductivity, TDS, Salinity, Temp	pH, Conductivity, TDS, Salinity, Temp
Operating Temperature Range	0 to 50°C	0 to 50°C	0 to 50°C	0 to 50°C
Range	0.00 to 14.00 pH	-999 to +999 mV	Cond: Auto-ranging (0.0 to 199.9 μ S/cm; 200 to 1999 μ S/cm; 2.00 to 19.99 mS/cm) TDS: Auto-ranging (0.0 to 99.9 ppm; 100 to 999 ppm; 1.00 to 10.00 ppt) Sal: Auto-ranging (0.00 to 1.00 ppt; 0.00 to 1.00%) Temp: 0.0 to 50°C	pH: 0.00 to 14.00 Cond: Auto-ranging (0.0 to 199.9 μ S/cm; 200 to 1999 μ S/cm) TDS: Auto-ranging (0.0 to 99.9 ppm; 100 to 999 ppm; 1.00 to 10.00 ppt) Sal: Auto-ranging (0.00 to 10.00 ppt; 0.00 to 1.00%) Temp: 0.0 to 50°C
Accuracy	\pm 0.01 pH	2 mV	Cond: \pm 1% TDS: \pm 1% Sal: \pm 1% Temp: \pm 0.5°C	pH: \pm 0.01 pH Cond: \pm 1% TDS: \pm 1% Sal: \pm 1% Temp: \pm 0.5 °C
Resolution	0.01 pH	1 mV	Cond: 0.1 μ S/cm from 0.0 to 199.9 μ S/cm; 1 μ S/cm from 200 to 1999 μ S/cm; 0.01 mS/cm from 2.00 to 19.99 mS/cm TDS: 0.1 ppm from 0.0 to 99.9 ppm; 1 ppm from 100 to 999 ppm; 0.01 ppt from 0.00 to 10.00 ppt Sal: 0.01 ppt from 0.00 to 10.00 ppt; 0.01% from 0.00 to 1% Temp: 0.1°C	pH: 0.01 pH Cond: 0.1 μ S/cm from 0.0 to 199.9 μ S/cm; 1 μ S/cm from 200 to 1999 μ S/cm; 0.01 mS/cm from 2.00 to 19.99 mS/cm TDS: 0.1 ppm from 0.0 to 99.9 ppm; 1 ppm from 100 to 999 ppm; 0.01 ppt from 0.00 to 10.00 ppt Sal: 0.01 ppt from 0.00 to 10.00 ppt; 0.01% from 0.00 to 1% Temp: 0.1°C
TDS Factor	—	—	adjustable; 0.71 default	adjustable; 0.71 default
Battery Requirements	4 AAA	4 AAA	4 AAA	4 AAA
IP Rating	IP67	IP67	IP67	IP67
Backlight	Yes	Yes	Yes	Yes
Prod. No.	9532000	9532100	9532700	9532800
	9532001 is replacement sensor for Pocket Pro+ pH Tester	9532101 is replacement sensor for Pocket Pro+ ORP Tester	9532701 is replacement sensor for Pocket Pro+ Multi 1 Tester	9532801 is replacement sensor for Pocket Pro+ Multi 2 Tester

pH 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. 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 (± 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. pH is ± 0.02 at 25°C.

Description	Quantity	Prod. No.
Color-Coded		
4.01 (Red)	15	2226995
	50	2226966
	250	2226964
7.00 (Yellow)	15	2227095
	50	2227066
	250	2227064
10.01 (Blue)	15	2227195
	50	2227166
	250	2227164
4.01 (Red) 7.00 (Yellow)	10 of each	2299264
Colorless		
6.00	50	1405566
6.86	15	1409895
8.00	15	1407995
9.00	50	1410766
pH Storage Solution Pillows	20	2657364

pH Buffer Solutions

pH is ± 0.02 at 25°C.

Item	Unit	Prod. No.
pH 4.01 Color-Coded Red (NIST)		
	15 mL	2283436
	50 mL	2283426
	500 mL	2283449
	4 L	2283456
	20 L	2283461
pH 7.00 Color-Coded Yellow (NIST)		
	15 mL	2283536
	50 mL	2283526
	500 mL	2283549
	4 L	2283556
	20 L	2283561
pH 10.01 Color-Coded Blue (NIST)		
	15 mL	2283636
	50 mL	2283626
	500 mL	2283649
	4 L	2283656
	20 L	2283661
pH 4.01 Colorless (NIST)		
	15 mL	1222336
	500 mL	1222349
	4 L	1222356
pH 7.00 Colorless (NIST)		
	500 mL	1222249
	4 L	1222256
pH 10.01 Colorless (NIST)		
	500 mL	1222149
	4 L	1222156

Save when you purchase pH buffer 3-packs!

Prod. No.	Description
20 L SIZE 3-PACK	
2507300	Includes: 2283661 10.01 (blue) NIST 2283561 7.00 (yellow) NIST 2283461 4.01 (red) NIST

Prod. No.	Description
4 L SIZE 3-PACK	
2507200	Includes: 2283656 10.01 (blue) NIST 2283556 7.00 (yellow) NIST 2283456 4.01 (red) NIST

Prod. No.	Description
500 mL SIZE 3-PACK	
2947600	Includes: 2283649 10.01 (blue) NIST 2283549 7.00 (yellow) NIST 2283449 4.01 (red) NIST

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.

Description	Quantity	Prod. No.
pH 7.00 and pH 10.01 Buffer Solution	pk/10 of ea.	2769820
pH 4.01 and pH 7.00 Buffer Solution	pk/10 of ea.	2769920
pH 4.01 Buffer Solution	pk/20	2770020
pH 7.00 Buffer Solution	pk/20	2770120
pH 10.01 Buffer Solution	pk/20	2770220



Visit: hach.com/standardsguide
for additional standards

Smart

HQd Meters & IntelliCAL Probes



Simple

sensION+ Meters & Probes



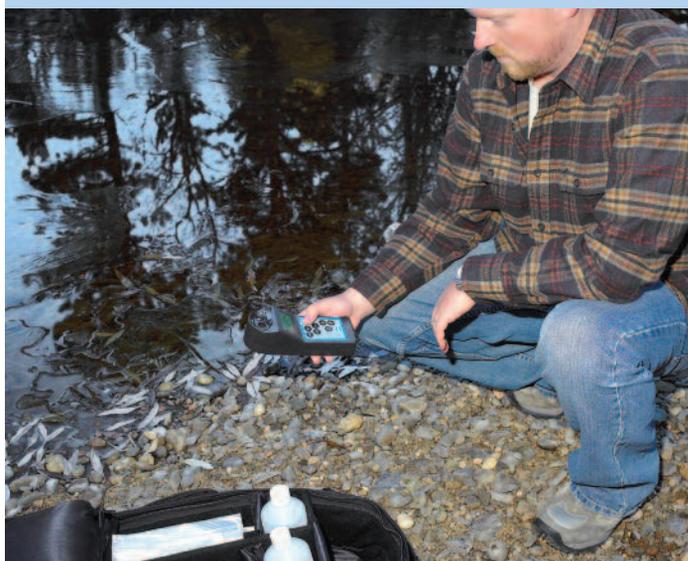
Non-glass

H-Series Meters & Probes



Probeless

MP Meters



hachflow.com/meterguide | 800-227-4224

Specifications are subject to change without notice. Zeonor is a trademark of Nippon Zeon Co., Ltd. Corporation.

LIT2692 Rev 5
F13 Printed in U.S.A.
©Hach Company, 2013. All rights reserved.



Be Right™