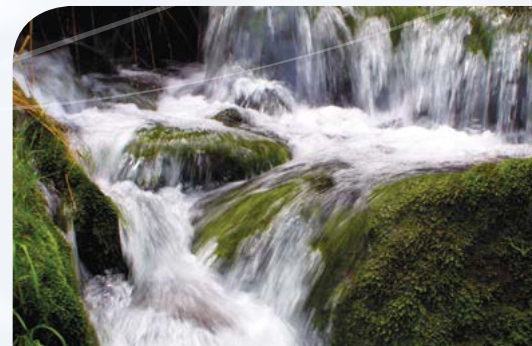




Water Analysis

Product Selection



With over 10 years of experience supplying equipment and consumables to laboratories across Australia, Pacific Laboratory Products, a former Radiometer Analytical agency, specializes in sourcing the latest technologies to facilitate processes along the broad range of water analysis applications.

This product guide showcases a comprehensive range of instruments handpicked specially for the water industry.

For detailed information and pricing, please contact a sales representative at: sales@pacificlab.com.au

Water Analysis Content Guide

◆ pH Measurement/Conductivity/DO/ORP.....	3	🔗
◆ Spectroscopy	29	🔗
◆ Colorimetry.....	36	🔗
◆ Combined pH, Conductivity and Colorimetry Measurement	40	🔗
◆ Turbidity Measurement	41	🔗
◆ Flocculation Systems (Jar Tester)	44	🔗
◆ Heavy Metals in Water Measurement	46	🔗
◆ Titration.....	48	🔗
◆ Filtration	50	🔗
◆ Buffers & Solutions	57	🔗
📄 General Index Page.....	63	🔗



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HQd Portable Meters - Single / Multi-parameter

Maximum measurement flexibility and ease of operation with interchangeable probes and automatic parameter recognition.



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HQd Applications • Drinking water • Environmental • Industrial • QC Laboratory • Wastewater

	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
Part Number:	HQ11d53000000	HQ14d53000000	HQ30d53000000	HQ40d53000000
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 (1) for IntelliCAL probes
Outputs	USB to PC / flash stick	USB to PC / flash stick	USB to PC / flash stick	USB to PC / flash stick
Interface Languages	13**	13**	13**	13**
Compliance	CE.WEEE	CE.WEEE	CE.WEEE	CE.WEEE
Benchtop	with stand	with stand	with stand	with stand
Portable	•	•	•	•
GLP Features	•	•	•	•
PC Data Transfer Software	included	included	included	included
Backlight	•	•	•	•
Battery Operation	•	•	•	•
AC Power Supply		optional		included
Parameter	HQ11d	HQ14d	HQ30d	HQ40d
Temperature	•	•	•	•
pH -Glass	•		•	•
mV	•		•	•
Conductivity		•	•	•
TDS		•	•	•
Salinity		•	•	•
Resistivity		•	•	•
DO -Luminescent (LDO) DO -BOD Probe (with LDO)			•	•
ORP/Redox	•		•	•
Ammonia			•	•
Nitrate			•	•
Fluoride			•	•
Sodium			•	•
Chloride			•	•
Ammonium			•	•



HQd IntelliCAL pH Probe Selection Chart

★ Best ✓ Good ☐ Not applicable

Specifications	Standard IntelliCAL pH Electrodes					High-Performance (Red Rod) IntelliCAL pH Electrodes					Specialty IntelliCAL pH Electrodes			
	PHC101 Rugged	PHC201	PHC301	PHC281	PHC101 Standard	PHC805	PHC705	PHC725	PHC735	PHC745	PHC705A	PHC729	PHC307	PHC108
Electrode Model	Ag/AgCl					Red Rod					Ag/AgCl			
Reference system	Stainless Steel	epoxy	Zeonor	Zeonor	epoxy	glass								
Body material	Stainless Steel	epoxy	Zeonor	Zeonor	epoxy	glass								
Electrolyte	gel	porous pin	refillable	refillable	gel	refillable								
Junction Diaphragm	open	porous pin	open	open	open	sleeve								
Glass bulb			standard	standard		standard				alkaline	flat	micro	pin + open	spear
Applications														
General Purpose														
General Use	✓	★	★	✓	✓	★	★	★	★	★	★	★	★	
High performance				★										✓
Field Measurements	★	✓	✓	✓	✓									
High Temp (≥ 100 °C)						★	★	★	★	★	★	★	★	
Low Temp (< 0 °C)						★	★	★	★	★	★	★	★	
Waters														
Drinking Water	✓	✓	✓	★	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Wastewater	★	✓	✓	★	★	✓	✓	✓	✓	✓	✓	✓	✓	
Seawater	✓	✓	★	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Boiler / Cooler					✓	✓	✓	✓	✓	✓	✓	✓	✓	
Pool / Spa					✓									
Food & Beverage														
Beer			✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	
Bottled Water			✓	★		✓	✓	✓	✓	✓	✓	✓	✓	
Milk / Dairy						✓	✓	✓	✓	✓	✓	✓	✓	
Wine			✓			✓	✓	✓	✓	✓	✓	✓	✓	
Penetration applications: cheese, meat, fruit														★
Flat surface measurement: cheese, meat, agar											★			
Challenging Applications														
Alkaline samples (pH > 12)										★				
Emulsions cosmetics, creams, paint, oil							✓	✓	✓	✓				
Low Ionic Strength (LIS) DI water, deionized water, treated effluent				★		★	★	★	✓	✓				
Non-aqueous / Semi-solid									✓	✓				
Pharma / Bio- TRIS buffer, proteins, enzymes			✓	✓		✓	✓	✓	✓	✓				
Viscous liquids, suspended solids, slurries									✓	✓				
Other Applications														
Education		★	★		✓									
Micro samples_ test tubes, small sample volume													★	
Surface measurements											★			
Soil (slurry in water)	✓	★	★		✓									★





HQd IntelliCAL Probes



	DO Luminescent Dissolved Oxygen	DO Luminescent Dissolved Oxygen	BOD Luminescent Dissolved Oxygen	Conductivity
Part Number	LDO10101*	LDO10105*	LBOD10101*	CDC40101*
Special Feature	LDO technology No membranes	LDO technology No membranes	LDO technology. Designed for BOD applications. No membranes	
Probe Type	Standard	Rugged	Standard	Standard
Range	DO: 0.1 - 20.0 mg/L % Saturation: 1 - 200%	DO: 0.1 - 20.0 mg/L % Saturation: 1 - 200%	DO: 0.1 - 20.0 mg/L % Saturation: 1 - 200%	Conductivity: 0.01 μ S/cm - 200 mS/cm TDS: 0 - 50,000 mg/L as NaCl Salinity: 0 - 42 g/kg or (‰) Resistivity: 2.5 Ω -cm - 49 M Ω -cm
Temp Range	Continuous Use: 0 to 50°C	Continuous Use: 0 to 50°C	Continuous Use: 0 to 50°C	Continuous Use: -10 to 110°C
Thermistor	• (ATC)	• (ATC)	•	• (ATC)
Dimensions	15 mm (D) x 200 mm (L)	15 mm (D) x 220 mm (L)	15.875 mm (D)**x 200 mm (L)	14 mm (D) x 200 mm (L)
Sensor Type	Lumiphore	Lumiphore	Lumiphore	4-pole graphite
Junction	—	—	—	—
Body Material	PC/Abs	PC/Abs with Stainless Steel	PC/Abs	Noryl
Filling Solution	—	—	—	—
ISA Required	—	—	—	—



	ORP/Redox Combination Gel-filled	ORP/Redox Combination Refillable	ORP/Redox Combination Gel-filled	Ammonia Combination ISE
Part Number	MTC10101*	MTC30101*	MTC10105*	ISENH3181*
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
Probe Type	Standard	Standard	Standard	Standard
Range	\pm 1200 mV	\pm 1200 mV	\pm 1200 mV	0.007 mg/L (5×10^{-7} M) to 14,000 mg/L (1 M) NH_3 -N
Temp Range	Continuous Use: 0 to 80°C	Continuous Use: 0 to 80°C	Continuous Use: 0 to 80°C	Continuous Use: 0 to 50°C
Thermistor	•	•	•	•
Dimensions	12 mm (D) x 200 mm (L)	12 mm (D) x 200 mm (L)	12 mm (D) x 220 mm (L)	12 mm (D) x 220 mm (L)
Sensor Type	Platinum disc	Platinum disc	Platinum disc	Gas sensing: glass w/ replaceable NH_3 sensitive membrane
Reference Type	—	—	—	Ag/AgCl
Junction	Open	Ceramic	Open	Annular
Body Material	Epoxy	Epoxy	Zeonor™ with Stainless Steel	Epoxy
Filling Solution	—	2841700	—	4447226
ISA Required	—	—	—	4447169

*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



Conductivity	pH Ultra Refillable Combination	pH Gel-filled Combination	pH Gel-filled Combination	pH Refillable Combination	pH Gel-filled Combination
CDC40105*	PHC28101*	PHC10101*	PHC20101*	PHC30101*	PHC10105*
	Fast response time difficult samples	Wastewater and Clean water samples	General purpose		Low mainten
Rugged	Standard	Standard	Standard	Standard	Rugged
Conductivity: 0.01 μS/cm - 200mS/cm TDS: 0 - 50,000 g/L Salinity: 0 - 42 g/kg or (‰) Resistivity: 2.5 Ω·cm - 49 MΩ·cm	0 to 14 pH	2 to 14 pH	0 to 14 pH	0 to 14 pH	2 to 14 pH
Continuous Use: -10 to 110°C	Continuous Use: 0-80°C	Continuous Use: 0-50°C	Continuous Use: 0-80°C	Continuous Use: 0-80°C	Continuous Use: 0-50°C
• (ATC)	• (ATC)	• (ATC)	• (ATC)	• (ATC)	• (ATC)
14 mm (D) x 220 mm (L)	12mm (D)x200mm (L)	12mm (D)x200mm (L)	12mm (D)x200mm (L)	12mm (D)x200mm (L)	12mm (D)x220mm (L)
4-pole graphite	Glass	Glass	Glass	Glass	Glass
—	Open	Open	Ceramic	Ceramic	Open
Noryl with Stainless Steel	Zeonor™	Zeonor™	Epoxy	Zeonor™	Zeonor™ with S/S
—	2965026	—	2841700	2841700	—
—	—	—	—	—	—



Ammonium Combination ISE	Chloride Combination ISE	Fluoride Combination ISE	Nitrate Combination ISE	Sodium Combination ISE
ISENH4181*	ISECI181*	ISEF121*	ISEN03181*	ISENa38101*
Dry storage & fast response time. No replacement membranes				Fast response time
Standard	Standard	Standard	Standard	Standard
0.07 mg/L (5x10 ⁻⁶ M) to 7,000 mg/L (0.5 M) NH ₄ ⁺ -N	0.1 mg/L (3x10 ⁻⁶ M) to 35,500 mg/L (1 M) Cl ⁻	0.02 mg/L (1x10 ⁻⁶ 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 ⁺
Continuous Use: 0 to 50°C	Continuous Use: 0 to 50°C	Continuous Use: 0 to 50°C	Continuous Use: 0 to 50°C	Continuous Use: 0 to 50°C
•	•	•	•	•
12 mm (D) x 220 mm (L)	12 mm (D) x 220 mm (L)	12 mm (D) x 220 mm (L)	12 mm (D) x 220 mm (L)	12 mm (D) x 220 mm (L)
Solid-state PVC membrane	Solid-state disc	Solid-state crystal	Solid-state PVC membrane	Glass
Ag/AgCl	Ag/AgCl	Ag/AgCl	Ag/AgCl	Ag/AgCl
Annular	Annular	Annular	Annular	Ceramic
Epoxy	Epoxy	Epoxy	Epoxy	Zeonor™
—	—	—	—	2965126
2980699	2318069	258999	2984799	4451569



HQd IntelliCAL High-Performance Red Rod Electrodes



	pH IntelliCAL PHC705 High-Performance General Purpose Laboratory pH Probe	pH IntelliCAL PHC725 High-Performance General Purpose and LIS Labo- ratory pH Probe	pH IntelliCAL PHC735 High-Performance Lab pH Probe for "Dirty" Samples	pH IntelliCAL PHC745 High-Performance Lab pH Probe for "Challenging" Samples
Part Number	PHC70501	PHC72501	PHC73501	PHC74501
Special Feature	General purpose laboratory measurements	General Purpose and LIS Laboratory pH Probe	Lab pH Probe for "Dirty" Samples	Digital combination pH electrode Lab pH Probe for "Challenging" Samples
Probe Type				
Range	0 to 14 pH	0 to 14 pH	0 to 14 pH	0 to 14 pH
Temp Range	10 to 100°C	-10 to 100°C	-10 to 100°C	-10 to 100°C
Dimensions	12 mm (D) x 200 mm (L)	12 mm (D) x 200 mm (L)	12 mm (D) x 200 mm (L)	12 mm (D) x 200 mm (L)
Sensor Type	Integrated temperature	Integrated temperature	Integrated temperature	Integrated temperature
Junction	Porous Pin	Annular ring	High-Flow Annular Ring	Sleeve
Body Material	Glass	Glass	Glass	Glass
Filling Solution	25118026	25118026	25118026	25118026



	pH IntelliCAL PHC705A High-Performance Lab pH Probe for Alkaline Samples	pH IntelliCAL PHC729 High-Performance Lab pH Probe for Surface Measurements	pH IntelliCAL PHC108 Puncture pH Probe
Part Number	PHC705A01	PHC72901	PHC10801
Special Feature	Lab pH Probe for Alkaline Samples	Lab pH Probe for Surface Measurements	Puncture pH Probe
Probe Type			
Range	0 to 14 pH	0 to 14 pH	2 to 12 pH
Temp Range	0 to 100°C	-10 to 100°C	0 to 60°C
Dimensions	12 mm (D) x 200 mm (L)	12 mm (D) x 200 mm (L)	6 mm (D) x 182 mm (L)
Sensor Type	Integrated Temperature	Integrated Temperature	Spear-shaped
Junction	Porous Pin	Annular Ring	Porous Pin + Open
Body Material	Glass	Glass	Stainless Steel
Filling Solution	25118026	25118026	LZW9502.99

Red Rod reference systems enables accurate measurements over a broader temperature range than standard electrodes.

HQd Benchtop Meters



Designed for water quality experts

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

[Learn more!](#)
Watch the video

Hit the play button!



Applications

- Drinking water • Environmental
- Industrial Plant • QC Laboratory
- Wastewater

	HQ411d DEDICATED pH/mV BENCHTOP METER	HQ430d SINGLE INPUT MULTI-PARAMETER BENCHTOP METER	HQ440d DUAL INPUT MULTI-PARAMETER BENCHTOP METER
Part Number:	HQ411d	HQ430d	HQ440d
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 (1) for IntelliCAL probes
Outputs	USB to PC / flash stick	USB to PC / flash stick	USB to PC / flash stick
Interface Languages	13**	13**	13**
Compliance	CE.WEEE	CE.WEEE	CE.WEEE
Benchtop	•	•	•
GLP Features	•	•	•
PC Data Transfer Software	included	included	included
Backlight	•	•	•
Battery Operation	•	•	•
Probe Stand	optional for all models	included	included
Parameter	HQ411d	HQ430d	HQ440d
Temperature	•	•	•
pH -Glass	•	•	•
mV	•	•	•
Conductivity		•	•
TDS		•	•
Salinity		•	•
Resistivity		•	•
DO -Luminescent (LDO) DO -BOD Probe (with LDO)		•	•
ORP/Redox	•	•	•
Ammonia		•	•
Nitrate		•	•
Fluoride		•	•
Sodium		•	•
Chloride		•	•
Ammonium		•	•

Starter Series pH, DO & Conductivity portable meters

ST300-G [↗](#)

Low-cost Portable Meters packed with productive features

- Lightweight design ideal for field testing
- Compact and ergonomic design offers a user friendly experience
- Clear, well-organized LCD screen
- Reliable calibration results in accurate measurement screen

Applications

- Academic • General Laboratory Use
- Food & Beverage
- Field Use • Water Analysis

Developed with versatility in mind, these meters can be operated in the lab with the support of the built-in stands or in the field thanks to their lightweight design. The portable Starter Series also boasts IP54 protection which shields the meter from damage by water and dust particles and it also offers an integrated labeling area which can be customized for quick identification. Each meter can store 30 sets of data memory and has the ability to quickly recall calibration data and stored information with one quick touch.

Starter 400D Dissolved Oxygen Meter

The ST400D is a practical, affordable and low-maintenance DO portable meter equipped with optical technology - ideal for applications that require simple yet accurate DO measurements.

- The optical probe requires minimal maintenance –frequent membrane replacement not needed. Also, warm up and stirring of samples when taking measurements is not required.
- Equipped with a color LCD display, the ST400D is designed to fit comfortably in the palm of your hands.

ST400D-G [↗](#)

Starter 300 pH Meter

Starter 300 marries portability with precise pH measurement. An ORP or temperature electrode can also be easily connected to provide additional functionality.

- Auto buffer recognition stores calibration data and helps to avoid errors during the calibration process.
- Automatic and manual temperature compensation helps ensure accurate readings.

ST300-G [↗](#)

Starter 300C Conductivity Meter

Starter 300C is the reliable and accurate choice for measurement of the conductivity and TDS levels of liquids. With a variety of features that protect the meter from more extreme elements, Starter 300C can be used for a wide variety of applications.

- The 4-pole linear electrode offers a large conductivity range that safeguards itself from polarization and pollution effects.
- Automatic temperature compensation with an adjustable temperature coefficient.

ST300C-G [↗](#)



Starter 300D Dissolved Oxygen Meter

Starter 300D provides accurate and reliable dissolved oxygen measurement that is critical to aquatic life and water quality.

- Push-button toggling between ppm, mg/L and percentage.
- The galvanic electrode can be used immediately after being powered on without the wait time typically associated with dissolved oxygen meters.



ST300D-G

Specifications

Model	ST400D-G	ST300-G	ST300C-G	ST300D-G
Part Number	30208726	30219114	30219115	30219116
Measurement Range	0.0 to 200.0% 0.00 to 20.0 mg/L(ppm) 0 to 50 °C	0.00...14.00 pH -1999...1999 mV 0 °C...100 °C	0.0 µS/cm...199.9 mS/cm 0.1 mg/l...199.9 g/l (TDS) 0 °C...100 °C	0.0 to 199.9%; 200 to 400% 0.00 to 19.99; 20.0 to 45.0 mg/L 0.00 to 19.99; 20.0 to 45.0 ppm 0 to 50 °C
Measurement Resolution	0.1% 0.01 mg/L(ppm) 0.1 °C	0.01 pH 1 mV 0.1 °C	Automatic Range 0.1 °C	0.1%; 1% 0.1 mg/L; 1mg/L 0.01 ppm; 0.1 ppm 0.1 °C
Barometric Range	50.0 to 115.0 kPa	NA	NA	375 to 825 mmHg 500 to 1100 mbar 500 to 1100 hPa
Barometric Resolution	0.1 kPa	NA	NA	1 mmHg, 1 mbar, 1 hPa
Error Limits	± 0.2 mg/L (<8 mg/L), ± 0.3 mg/L (8 to 20 mg/L); ± 0.3 °C, ± 1.5 kPa	± 0.01 pH, ± 1 mV, ± 0.5 °C	± 0.5 % of the Measured Value ± 0.3 °C	± 1% ; ± 0.3 °C
Calibration	1 or 2 points	3 Points, 1 Predefined Buffer Group	1 Point, 3 Predefined Standards	1 or 2 Points, 100% and 0%
Memory	99 Meas. - Last Calibration Data	30 Measurements, Last Calibration Data		
Power Supply	4 x AAA (LR03) Batteries, 12 hrs	4 AAA > 500 Operating Hours	4 AAA > 250 Operating Hours	
Size/Weight	Approximately 90 W x 150 D x 35 H mm / 0.16 kg (Without Batteries)	Approximately 90 W x 150 D x 35 H mm / 0.18 kg (Without Batteries)	Approximately 90 W x 150 D x 35 H mm / 0.16 kg (Without Batteries)	Approximately 90 W x 150 D x 35 H mm / 0.18 kg (Without Batteries)
Display	Liquid Crystal			
Input	Mini-DIN	BNC, Impedance > 10e+12 Ω Cinch, NTC 30 kΩ	Mini-Din	BNC, Cinch, NTC 30 kΩ
Temperature Compensation	ATC	ATC & MTC	ATC, Linear: 0.00 %/°C...10.00 %/°C Reference Temperature: 20 & 25 °C	ATC & MTC
Salinity Compensation	0.0 to 40.0 ppt	NA	NA	0.0 to 50.0 ppt
IP Protection	IP54			
Housing	ABS			
Kit Content	ST400D-B with STDO21 Optical DO Probe, Portable Bag	ST300-B*, ST320 3-in-1 Plastic Gel pH Electrode, pH Buffer Powder Sachet (4.01, 7.00, 10.01), Portable Bag	ST300C-B*, STCON3 4-Pole Conductivity Probe (70 µS/cm - 200 mS/cm), Portable Bag	ST300D-B* with STD011 Galvanic DO Probe, STTEMP30 Temperature Probe, Portable Bag
Compatible Electrodes (see the complete range, page 26)	Optical DO Probe STDO21	ST210, ST230, ST310, ST320, STPURE, STTEMP30, STORP1, STROP2	STCON3	STTEMP30, STD011

* Meter comes with with IP54 Sets, electrode clip, wrist strap and 4 AAA batteries

sensION + Benchtop Meters



Solutions for any kind of electrochemistry measurement tasks

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

Applications • Drinking water • Environmental
• Food & beverage • QC Laboratory • Wastewater

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
Part Number	LPV2000.97.0002	LPV2100.97.0002	LPV3010.97.0002	LPV3110.97.0002	LPV2200.97.0002	LPV4110.97.0002
Temperature	•	•	•	•	•	•
pH	•	•			•	•
mV		•			•	•
Conductivity			•	•		•
Salinity			•	•		•
TDS				•		•
ORP/Redox	•	•			•	•
Ammonia					•	•
Nitrate					•	•
Fluoride					•	•
Sodium					•	•
Chloride					•	•
Ammonium					•	•

Feature	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
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	RS-232*	RS-232* (two-way)	RS-232*	RS-232*	RS-232* (two-way)	RS-232* (two-way)
Interface Language(s)	6**	6**	6**	6**	6**	6**
Compliance	CE.WEEE	CE.WEEE	CE.WEEE	CE.WEEE	CE.WEEE	CE.WEEE
GLP Features	—	•	—	•	•	•
PC Data Transfer Software (optional)	•	•	•	•	•	•
Backlight	•	•	•	•	•	•
AC Operation	•	•	•	•	•	•

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



sensION+ pH Probe Selection Chart

★ Best ✓ Good □ Not applicable

Specifications	Benchtop sensION+ Electrodes			
Electrode Model	5010T	5011T	5014T	5021T
Reference system	Ag/AgCl			
Body material	polycarbonate	glass		
Electrolyte	gel		refillable	
Junction Diaphragm	porous pin	open	two porous pins	PTFE sleeve
Glass bulb	standard			
Applications				
General Purpose				
General Use	★		★	
High performance			★	★
Field Measurements				
High Temp (≥ 100 °C)			✓	
Low Temp (< 0 °C)				
Waters				
Drinking Water			★	★
Wastewater		★	✓	✓
Seawater	✓	✓	★	✓
Boiler / Cooler				
Pool / Spa	★			
Food & Beverage				
Beer			✓	
Bottled Water	✓		★	✓
Milk / Dairy				✓
Wine			✓	★
Penetration applications: cheese, meat, fruit				
Flat surface measurement: cheese, meat, agar				
Challenging Applications				
Alkaline samples (pH > 12)			★	
Emulsions cosmetics, creams, paint, oil				★
Low Ionic Strength (LIS) DI water, deionized water, treated effluent				★
Non-aqueous / Semi-solid				✓
Pharma / Bio- TRIS buffer, proteins, enzymes			✓	✓
Viscous liquids, suspended solids, slurries		✓		★
Other Applications				
Education	★		★	
Micro samples_ test tubes, small sample volume				
Surface measurements				
Soil (slurry in water)	★	✓	★	

sensION + Probes for Benchtop Meters

Specifications	pH Combination Gel-filled	pH Combination Refillable	pH Combination Gel-filled Wastewater	pH Combination Refillable
Part Number	LZW5010T.97.002	LZW5014T.97.002	LZW5011T.97.002	LZW5021T.97.002
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
Temperature Range	0 to 80°C	-10 to 100°C	0 to 80°C	0 to 60°C
Temperature Sensor	Pt 1000	Pt 1000	Pt 1000	Pt 1000
Dimensions	12 mm (D) x 130mm (w/o handle)	12 mm (D) x 130 mm (w/o handle)	12 mm (D) x 130 mm (w/o handle)	12 mm (D) x 130 mm (w/o handle)
Sensor Type	Glass	Glass	Glass	Glass
Junction	Ceramic	Ceramic (2)	Open	Open with sleeve
Body Material	Polycarbonate	Glass	Glass	Glass
Filling Solution	—	LZW9500.99	—	LZW9500.99

Specifications	Conductivity	ORP Gel-filled Combination	ORP Refillable Combination
Part Number	LZW5070.97.0002	LZW5056.97.0002	LZW5057.97.0002
Special feature		TRIS compatible	Solid gel for high solids content
Range	0.2 µS/cm to 200 mS/cm	±2000 mV	±2000 mV
Temperature Range	0 to 80°C	0 to 80°C	0 to 80°C
Temperature Sensor	Pt 1000	—	—
Dimensions	12 mm (D) x 130 mm (w/o handle)	12 mm (D) x 130 mm (w/o handle)	12 mm (D) x 130 mm (w/o handle)
Sensor Type	Platinum	Platinum	Platinum
Junction	—	Ceramic	Ceramic
Body Material	Outside: Polycarbonate Inside: Glass	Glass	Glass
Filling Solution	—	—	LZW9500.99





sensION+ Benchtop Meter & Probe Kits




Choose from basic kits or advanced kits for your lab testing needs. All benchtop kits include: workstation with integrated stirrer, buffers, standards, storage solutions, calibration flasks, and accessories for quick start up.

- 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.
- 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.
- 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.
- LPV4160.97.0002** Advanced pH, Conductivity and Dissolved Oxygen Benchtop Kit sensION+ MM378 pH, conductivity & DO GLP meter with dual junction **5014** pH, universal **5070** conductivity cell with temperature and **5131** DO electrode.



sensION + ISE Probes

Specifications		Sodium ISE		Chloride ISE		Fluoride ISE		Nitrate ISE
Part Number		LZW9650.97.0002*		LZW9652.97.0002*		LZW9655.97.0002*		LZW9662.97.0002*
Special feature				Dry storage and fast response time. No replacement membranes.		Dry storage and fast response time. No replacement membranes.		Dry storage and fast response time. No replacement membranes.
Range		0.05 to 23,000 mg/L Na ⁺		1 to 35,000 mg/L Cl ⁻		0.02 to 20,000 mg/L F ⁻		0.4 to 62,000 mg/L NO ₃ ⁻
Temp. Range		0 to 60°C		5 to 50°C		5 to 50°C		5 to 40°C
Dimensions		12 mm (D) x 120 mm		12 mm (D) x 120 mm		12 mm (D) x 120 mm		12 mm (D) x 120 mm
Sensor Type		Sodium Selective Glass Membrane		Solid-State Chloride Selective Membrane		Solid-State Fluoride Selective Membrane		Solid-State Nitrate Selective Polymer Membrane
Junction		—		—		—		—
Body Material		Glass		ABS		ABS		ABS
Filling Solution		—		—		—		—

Specifications		Ammonium ISE		Ammonia Combination ISE		Reference Electrode
Part Number		LZW9663.97.0002*		5192700		LZW5044.97.0002
Special feature		Dry storage and fast response time. No replacement membranes.				Double junction reference electrode for ISEs, large ceramic diaphragm
Range		0.9 to 1,800 mg/L NH ₄ ⁺		0.06 to 17,000 mg/L as NH ₃		—
Temp. Range		5 to 40°C		0 to 50°C		0 to 60°C
Dimensions		12 mm (D) x 120 mm		12 mm (D) x 149 mm		12 mm (D) x 120 mm
Sensor Type		Solid-State Ammonium Selective Polymer Membrane		Gas Sensing Ammonia Selective Membrane		—
Junction		—		Annular		Ceramic
Body Material		ABS		ABS		Glass
Filling Solution		—		—		LZW9901.99

This ion selective electrode is a half cell and requires a reference electrode.

sensION + Accessories

LZW8201.99	Thermal printer, RS 232, for sensION+ benchtop	LZW5125.99	Spare membrane for D.O. electrode LZW5120
LZW9117.99	Thermal paper for printer LZW8201.99, bag with 5 rolls	LZW5126.99	Protector-calibration flask for D.O. electrode LZW5120
LZW8200.99	Dot-impact printer, RS 232, for sensION+ instruments	LZW9320.99	One-sensor holder, for sensION+ benchtop instruments
LZW9000.99	Standard paper for printer LZW8200, bag with 10 rolls.	LZW9321.99	Three-sensor holder, for sensION+ benchtop instruments
LZW9001.99	Ribbon for printer LZW8200.99, 3 units.	LZW9110.97	3x50 mL printed flasks for benchtop pH calibration, US
LZW9135.99	RS232 cable, for sensION+ benchtop instruments	LZW9111.99	3x50 mL printed flasks for benchtop conductivity calibration
LZW9135USB.99	RS232 cable for sensION+ benchtop, with USB adapter	LZW9155.99	Holder and clamp for three sensors, sensION+
LZW9319.99	Magnetic stirrer with sensor holder, for sensION MM benchtop	LZW9118.99	Pyrex glass chamber, continuous flow measurements, sensION+
LZW9267.99	Holder and clamp for one sensor, for portable sensION+	LZW9161.99	PP protector, electrode storage, sensION+
LZW9137.97	3x10 mL printed tubes, for portable pH calibration, US	LZW9162.99	PP protector, for measurement, sensION+
LZW9138.99	3x10 mL printed tubes, for portable conductivity calibration	LZW8997.99	Hach LabCom Easy Software, sensION+, GLP
		LZW8999.99	Hach LabCom Software, sensION+, GLP



Radiometer Analytical Electrodes

pH and Combined pH Electrodes

Specifications	 pHC2001	 pHC2401	 pHC2005	 pHC2085	 pHC2441
Part Number	E16M313	E16M400	E16M500	E16M501	E16M320
Special features	No	No	Robust	No	No
pH Range	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
Temperature Range	-10 - 100°C	-10 - 100°C	-10 - 100°C	-10 - 100°C	-10 - 100°C
Temperature Sensor	No	No	No	Yes	No
Minimum Sample Depth	18 mm	14 mm	14 mm	14 mm	Flat
Liquid Junction	Porous Pin	Annular Ring	Porous Pin	Porous Pin	Annular Ring
Filling Solution	Sat. KCl	Sat. KCl	Sat. KCl	Sat. KCl	Sat. KCl
Reference System	Red Rod	Red Rod	Red Rod	Red Rod	Red Rod

Specifications	 pHC2601	 pHC3001	 pHC3081	 pHC3005
Part Number	E16M322	E16M300	E16M305	E16M302
Special features	No	No	No	Robust
pH Range	0 - 12	0 - 12	0 - 12	0 - 12
Temperature Range	-10 - 100°C	0 - 80°C	0 - 80°C	0 - 80°C
Temperature Sensor	No	No	Yes	No
Minimum Sample Depth	18 mm	18 mm	18 mm	12 mm
Liquid Junction	Sleeve	Porous Pin	Porous Pin	Porous Pin
Filling Solution	Sat. KCl	3 M KCl + sat. AgCl	3 M KCl + sat. AgCl	3 M KCl + sat. AgCl
Reference System	Red Rod	Ag/AgCl	Ag/AgCl	Ag/AgCl

Specifications	 pHC3085	 pHC3359	 pHC3105
Part Number	E16M342	E16M343	E16M308
Special features	No	No	Robust
pH Range	0 - 12	0 - 12	2 - 12
Temperature Range	-5 - 80°C	0 - 80°C	0 - 60°C
Temperature Sensor	Yes	No	No
Minimum Sample Depth	14 mm	2 mm	18 mm
Liquid Junction	Porous Pin	Fibre	Opening
Filling Solution	3 M KCl + sat. AgCl	3 M KCl + sat. AgCl	Solid Gel (3 M KCl)
Reference System	Ag/AgCl	Ag/AgCl	Ag/AgCl

Radiometer Analytical Electrodes



Temperature Sensor

Specifications			
Part Number	T201	T202	T203*
Material	E51M001	E51M002	E51M008
Connection	Glass	Glass	Glass
Temperature Range	Cinch	Cinch	RJ9 telephone
Diameter	-10 - 105°C	-10 - 105°C	
	7.5 mm	7.5 mm	
			* Suitable for use with sensION + benchtop meters

Metal & Combined Metal Electrodes





Specifications				
Part Number	M231Pt	MC3051Pt	M291Ag	M291C
Sensing Element	E31M002	E31M003	E34M002	E36M003
Temperature Range	Platinum wire Ø 1 mm	Platinum Ring	Silver Rod	Glassy carbon Rod Ø 3 mm
Application	-10 - 100°C	0 - 80°C	0 - 80°C	0 - 60°C
Reference System	General Purpose	Redox Measurements	Silver Halides Titration	Voltametry Redox
Inner Solution	None	Ag/AgCl	None	-
Connection	None	3 M KCl with sat. AgCl	None	-
Lower Ø	Screw Cap	Screw Cap	Screw Cap	Screw Cap
	8 mm	12 mm	8 mm	8 mm

Red Rod Reference Electrodes

Specifications			
Part Number	REF200	REF201	REF251
Reference System	E21M008	E21M009	E21M001
Application	Red Rod	Red Rod	Red Rod
Temperature Range	Microsamples	General Purpose	General Purpose
Liquid Junction	-10 - 100°C	-10 - 100°C	-10 - 100°C
Filling Solution	Porous Pin	Porous Pin	Porous Pin / Porous Pin
Connection	Sat. KCl	Sat. KCl	Sat. KCl
Lower Stem Ø	Banana Plug	Banana Plug	Banana Plug
Special Features	4 mm	7.5 mm	12 mm
	For use with PHG200	—	Double junction

Radiometer Analytical Electrodes

Reference Electrodes

Specifications		REF321		REF361		XR300		XR820
Part Number		E21M002		E21M003		B20B300		B20C820
Reference System		Ag/AgCl		Ag/AgCl		Ag/AgCl		Ag/AgCl
Application		General Purpose		Non-Aqueous media		Voltammetry		Impedance
Temperature Range		- 5 - 80°C		- 5 - 80°C		- 5 - 80°C		- 5 - 80°C
Liquid Junction		Porous Pin		Glass Sleeve		Porous Pin		Porous Pin/fibre
Filling Solution		3 M KCL with sat. AgCl		3 M KCL with sat. AgCl		Sat. KCl + sat. AgCl		Sat. KCl + sat. AgCl upper res.
Connection		Screw Cap		BNC plug Shielded cable		Screw Cap		Screw Cap
Lower Diameter Ø		8 mm		12 mm		8 mm		8 mm

* Electrodes contain mercury, adequate disposal procedures are required according to state legislation.

Reference Electrodes Ohaus range, (please refer to page 26)

Electrode Maintenance Solutions

Part Number	Description
S91M001	<p>GK ANNEX Electrode Maintenance Kit</p> <p>The GK ANNEX Electrode Maintenance Kit contains all you need for regular maintenance of combined pH, glass and reference electrodes with saturated potassium chloride salt-bridge:</p> <ul style="list-style-type: none"> - Solutions for normal and intensive cleaning - KCl as saturated and crystals for refilling - GLP Logbook to keep note of calibration and maintenance procedures - Utensils and easy-to-follow instructions






Radiometer Analytical Electrodes

Conductivity Cells

Specifications		CDC566T		CDC745-9		CDC866T
Part Number		E61M010		E61M013		E61M015
Application		General Purpose		General Purpose		General Purpose
Max. Temperature		80°C		100°C		80°C
Number of poles		4		2		4
Platinised		NO		YES		YES
Temperature Sensor		YES		NO		YES
Body Material		Epoxy		Epoxy		Epoxy
Connection		MAB6 Plug		Screw Cap		MAB6 Plug
Diameter Ø		12 mm		12 mm		12 mm

Specifications		CDC641T		CDC241-9		CDC511T		CDC267-9
Part Number		B15B001		E61M008		E61M009		E61M011
Application		General Purpose		Viscous Titration		Pure Water		Resistant Media
Max. Temperature		100°C		100°C		80°C		100°C
Number of poles		2		2		2		2
Platinised		YES		NO		NO		NO
Temperature Sensor		YES		NO		YES		NO
Body Material		Glass		Glass		TPX		Glass
Connection		MAB6 Plug		Screw Cap		MAB6 Plug		Screw Cap
Diameter Ø		12 mm		12 mm		12 mm		12mm

Specifications		CDC741T		CDC749		CDC861T
Part Number		E61M012		E61M014		E61M016
Application		Sample Changer		Micro Samples		Strong Acids, Bases
Max. Temperature		100°C		100°C		100°C
Number of poles		2		2		4
Platinised		YES		YES		YES
Temperature Sensor		YES		NO		YES
Body Material		Glass		Glass		Glass
Connection		MAB6 Plug		MAB6 Plug		MAB6 Plug
Diameter Ø		12 mm		4 mm		12 mm





Ion-Selective Electrodes


Specifications		ISE25Br		ISE25Ca		ISE25Cl		ISE/HS25Cl
Part Number		E41M001		E41M002		E41M003		E41M004
Ion Species		Br ⁻		CA ⁺⁺		Cl ⁻		Cl ⁻
Concentration Range (M)		10 ⁻⁶ - 10 ⁰		2 x 10 ⁻⁶ - 10 ⁰		5 x 10 ⁻⁵ - 10 ⁰		10 ⁻⁶ - 10 ⁰
Concentration Range (ppm)		0.08 - 80000		0.1 - 40000		1.8 - 35000		0.04 - 35000
Temperature Range		0 - 60°C		0 - 50°C		0 - 60°C		0 - 60°C
pH Range		2 - 14		4 - 12		2 - 14		2 - 4
Sensor Type		Solid - State		PVC Membran		Solid - State		Solid - State
Interfering Ions		I ⁻ , S ²⁻ , CN ⁻ , SCN ⁻		Zn ⁺⁺ , Pb ⁺⁺		I ⁻ , CN ⁻ , Br ⁻ , SCN ⁻		I ⁻ , CN ⁻ , Br ⁻ , SCN ⁻
Diameter		12 mm		12 mm		12 mm		12 mm









Radiometer Analytical Electrodes

Ion-Selective Electrodes

Specifications			
Part Number	ISE25CN 	ISE25Cu 	ISE25F 
Part Number	E41M005	E41M006	E41M007
Ion Species	CN ⁻	Cu ⁺⁺	F ⁻
Concentration Range (M)	$5 \times 10^{-7} - 10^{-3}$	$10^{-6} - 10^0$	$5 \times 10^{-7} - 10^0$
Concentration Range (ppm)	0.013 - 25	0.06 - 60000	0.01 - 20000
Temperature Range	0 - 60°C	0 - 60°C	0 - 60°C
pH Range	9 - 14	0 - 14 (3-7 direct m.)	5 - 11 (10^{-1} M F ⁻) 5 - 7 (10^{-6} M F ⁻)
Sensor Type	Solid - State	Solid - State	Solid - State
Interfering Ions	I ⁻ , Br ⁻ , S ²⁻	HgS, Ag ⁺ , Cl ⁻	OH ⁻
Diameter	12 mm	12 mm	7 mm

Specifications				
Part Number	ISE25I 	ISE21Na 	ISE25NO3 	Screw Cap
Part Number	E41M008	E41M010	E41M014	
Ion Species	I ⁺	Na ⁺	NO ₃ ⁻	
Concentration Range (M)	$10^{-6} - 10^1$	$2 \times 10^{-6} - 10^0$	$3 \times 10^{-6} - 10^0$	
Concentration Range (ppm)	0.13 - 13000	0.04 - 20000	0.2 - 60000	
Temperature Range	0 - 60°C	0 - 70°C	0 - 50°C	
pH Range	2 - 12	5 - 12	3 - 10	
Sensor Type	Solid - State	Glass	PVC Membrane	
Interfering Ions	CN ⁻ , Hg ⁺⁺ , Br ⁻ , SCN ⁻	Li ⁺ , NH ₄ ⁺ , Rb ⁺ , Ag ⁺	Cl ⁻ , Br ⁻ , NO ₂ ⁻	
Diameter	12 mm	12 mm	12 mm	

* Equally sensitive to Ag⁺

Specifications			
Part Number	ISE25Pb 	ISE25S 	ISEC301F 
Part Number	E41M015	E41M016	E41M017
Ion Species	Pb ⁺⁺	S ⁻ (Ag ⁺) *	F ⁻
Concentration Range (M)	$10^{-6} - 10^0$	$5 \times 10^{-7} - 10^0$	$5 \times 10^{-7} - 10^0$
Concentration Range (ppm)	0.2 - 200000	0.02 - 30000	0.01 - 20000
Temperature Range	0 - 60°C	0 - 60°C	0 - 50°C
pH Range	3 - 7 (direct meas.)	11 - 4 (direct meas.)	5 - 7 (10^{-6} M F ⁻)
Sensor Type	Solid-State	Solid-State	Solid-State
Interfering Ions	Hg ⁺⁺ , Cu ⁺⁺ , Ag ⁺	Precipitated cations forming complexes with sulphides	OH ⁻
Diameter	12 mm	12 mm	12 mm

Radiometer Analytical Accessories

Connection Cables for Screw Cap Electrodes

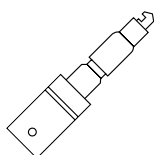


Part Number	Type	Instrument Socket
A94L111	CL11	Banana



Part Number	Type	Instrument Socket
A94L114	CL114	BNC

Plug Adaptors



Part Number	Type	Instrument Socket
A94P800	Type 7	BNC



Part Number	Type	Instrument Socket
A94P802	BNC	Type 7

Service and Support

Our team of factory trained service engineers and product specialists is committed to customer satisfaction, working actively in the field to support our complete range of scientific instrumentation. Additionally, Pacific Laboratory Products offers service and maintenance for the equipment supplied.



Our product specialists, with years of practical experience in their respective fields and comprehensive product knowledge, are able to provide detailed application support and training required to ensure that you can realise the full potential of the instrumentation. In addition to breakdown service support, Pacific Laboratory Products offers a range of service agreement options that enable you to tailor a package to suit your needs.

Starter Series pH / Conductivity / ORP Benchtop Meters

Whether it is a basic or advanced model that you are looking for, you can rely on Starter Series bench meters to meet your water analysis needs.

Applications • Academic • General Laboratory Use • Food & Beverage • Water Analysis

Starter 2100 pH

Cost-effective and reliable pH Meter for Laboratory Applications

- With the attached quick guide, five clearly marked keys and user-friendly software, novices can operate the meter with minimal training.
- The built-in electrode holder provides uncomplicated and convenient all-in-one operation while the large LCD display screen clearly displays results.
- Auto buffer recognition, electrode condition icon, automatic temperature compensation and reference input, all work together to ensure accurate results.



ST2100-F [↗](#)



ST3100-F [↗](#)

Starter 3100 pH/ORP

Starter 3100 offers premium features at a cost-effective price point for reliable and convenient pH and ORP measurements

- Starter 3100's intuitive software includes three point calibration, three buffer groups, automatic and manual endpoint functions, as well as a 99 item library.
- Adjustable stand-alone electrode holder + large backlit LCD display.
- Simple documenting measurement data thanks to the RS232 which can be used to connect peripheral devices such as printers or computers to the meter.

Starter 3100C Conductivity

With plenty of advanced intuitive features, Starter 3100C is the ideal meter for standard testing of conductivity, total dissolved solids (TDS) and salinity.

- Starter 3100C's intuitive software includes 1 point calibration, 4 pre-defined standards, automatic and manual endpoint functions, and one touch conversion between measurement modes.
- Among Starter 3100C's user-friendly features that support ease-of-use are an adjustable stand-alone electrode holder and large backlit LCD display.
- Documenting measurement data is made simple through the RS232 which can be used to connect peripheral devices such as printers or computers to the meter.



ST3100C-F [↗](#)

Starter Series pH / Conductivity / ORP Benchtop Meters



Specifications

Model	ST2100		ST3100	ST3100C
Package	ST2100-E	ST2100-F	ST3100-F	ST3100C-F
Part Number	30057495	3005496	30058489	30058731
Measurement Range	0.00...14.00 pH -1999...1999 mV 0 °C...100 °C		-2.00...16.00 pH -1999...1999 mV -5 °C...110 °C	00.0 µS/cm...199.9 mS/cm 0.1 mg/l...199.9 g/l (TDS) 0.00 ... 19.99 psu (Salinity) 0 °C...100 °C
Resolution	0.01 pH 1 mV 0.1 °C			Automatic Range 0.1 °C
Error Limits	± 0.01 pH ± 1 mV ± 0.5 °C			± 0.5 % of the Measured Value ± 0.3 °C
Calibration	1 or 2 Points 1 Predefined Buffer Group (1.68, 4.01, 7.00, 10.01)		Up to 3 Points 3 Predefined Buffer Groups	1 Point 4 Predefined Standards
Memory	Last Calibration Data		99 Measurements Last Calibration Data	
Power Supply	110-240V/50Hz, DC 12V			
Size/Weight	Approximately 220 W × 175 D × 78 H mm / 0.75 kg			
Display	Liquid Crystal		Liquid Crystal Backlight	
Input	BNC, impedance > 10e+12 Ω Cinch, NTC 30 kΩ 2 mm			Mini-DIN
Temperature Compensation	ATC & MTC			Linear: 0.00 %/°C...10.00 %/°C Reference Temperature: 20 & 25 °C
Housing	ABS			
ST2100-E Kit	ST2100-B (2100 Meter With Built-In Electrode Holder) + ST210 Electrode, pH Buffer Powder Set (4.01, 7.00, 10.01)			
ST2100-F Kit	ST2100-B (2100 Meter With Built-In Electrode Holder) + ST210 Electrode, STTEMP30 Temperature Probe, pH Buffer Powder Set (4.01, 7.00, 10.01)			
ST3100-F Kit	ST3100-B (3100 Meter With Stand-alone Electrode Holder) + ST310 Electrode, pH Buffer Powder Set (4.01, 7.00, 10.01), In-use Cover			
ST3100C-F Kit	ST3100C-B (3100C Meter, Stand-Alone Electrode Holder, Conductivity Standards 1413 µS/cm and 12.88 mS/cm (20 mL Bottles) + STCON3 Conductivity Probe (Range 70 µS/cm – 200 mS/cm), In-use Cover			
Compatible Electrodes (Find the complete range on page 26)	ST210, ST230, ST310, ST320, ST350, STMICRO5, STPURE, STORP1, STORP2, STREF1, STREF2, STTEMP30			



ST3100



Starter Series pH / ORP Benchtop Meters

Starter ST5000 pH / ORP Bench Meter

Cost-effective High Performance Bench Meter for universal applications

Applications

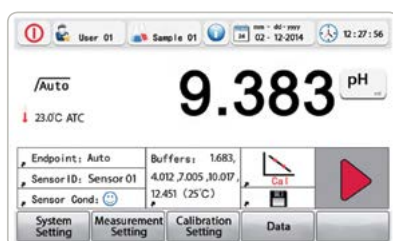
- Academic
- General Laboratory Use
- Pharmacy
- Water Analysis



ST5000-F

The Starter 5000 provides accurate pH and ORP measurement for high-level experiments and research. Enhanced features, advanced technology, and high performance have been combined to support complex laboratory tasks requiring pH measurement.

- The Starter 5000's performance is propelled by a 1000 item library, 10 sensors for calibration storage, 8 predefined and 1 self-defined buffer groups, 3 endpoint modes and GLP mode.
- Advanced Software and Technology Support Complex Applications and Intuitive Operation. Starter 5000 has a user-friendly interface, similar to other smart devices used daily. With a large LCD touchscreen display, users will find themselves intuitively navigating through all applications.
- Enhanced Features Offer Protection & Simple Use of this Advanced Meter — Starter 5000 also has many features that promote ease of use, convenience, as well as protection, including a standalone electrode arm, IP54 housing and in-use cover.



- High resolution: 0.001/0.01/0.1pH as well as 0.01/0.1/1 mV



- IP54 housing protects the meter from damage by water and dust particles
- Built-in USB host port to export data or RS232 to connect a printer



- 4.3" high-resolution color touchscreen has large digits and well-arranged icons to facilitate simple operation



Starter Series pH / ORP Benchtop Meters



Specifications

Model	ST5000
Package	ST5000-F
Part Number	30129896
Measurement Range	-2.000...20.000 pH, -2000.00...+2000.00 mV, -30°C...130 °C
Resolution	0.1/0.01/0.001pH, 1/0.1/0.01mV, 0.1 °C
Error Limits	± 0.002 pH, ± 0.03% FS mV, ± 0.1 °C
Calibration	1 Point, 4 Predefined Standards
Buffer Group	8 predefined groups, 1 self define group
pH Calibration	1-9 points
Memory	1000 sets, with 10*10 calibration data
Power Supply	110-240V/50-60Hz, 9 V DC
Size/Weight	220 W × 175 D × 78 H mm / 0.55 kg
Display	Color Touch-Screen LCD
Input	BNC, impedance >3*10e+12 Ω, Cinch, NTC 30 kΩ
Output	USB & RS232
Temperature Compensation	ATC and MTC
Housing	ABS
ST5000-F Kit	ST5000 Meter, stand alone electrode holder, ST5000 in-use-cover, 4G USB-driver + ST350, pH buffer powder sachet
Compatible Electrodes (Find the complete range on page 26)	ST210, ST230, ST310, ST320, ST350, STMICRO5, STPURE, STORP1, STORP2, STREF1, STREF2, STTEMP30





















pH Electrodes, Ohaus Starter Series

The Starter Series of electrodes includes pH, reference, oxidation-reduction potential (ORP), conductivity, dissolved oxygen (DO) and temperature electrodes that can be used in conjunction with our bench and portable meters. This catalog contains background information on each electrochemistry substance, information about our electrodes that measure these substances, as well as buffers and solutions.

pH Electrodes

Model	 ST270 	 ST210 	 ST230 	 STPURE 
Part Number	30240974	83033966	83033968	83033969
PH Range	0 to 14pH	0 to 14 pH	0 to 14 pH	0 to 13 pH
Temp. Range	0 to 100 °C	0 to 80 °C	0 to 100 °C	0 to 100 °C
Shaft Material	Glass	Plastic	Glass	Glass
Internal Reference Type	Ag/AgCl	Ag/AgCl	Ag/AgCl	Ag/AgCl
Gel/Refillable	Non-refillable, Gel	Refillable	Refillable	Refillable
Reference Junction Type	Annular ceramic	Ceramic pin	Annular ceramic	Ground glass
Refilling Reference Sol.	3M KCl gel	3M KCl solution	3M KCl solution	3M KCl solution
Dimensions (Shaft)	120 x 12 mm	120 x 12 mm	110 x 12 mm	120 x 12 mm
Cable Length	1 m	1 m	1 m	1 m
Temperature Sensor	NO	NO	NO	NO
Connector	BNC	BNC	BNC, Cinch	BNC
Description	Puncture electrode for semisolid samples such as fruits, meat or cheese.	General purpose 2-in1 plastic gel refillable pH electrode. Suitable for normal samples	General purpose glass-body refillable pH electrode suitable for muddy samples such as juice, milk etc.	Glass-body refillable pH electrode for pure water (distilled water, rain water, tap water etc.)
Used With	OHAUS pH meters with BNC input connector	All pH meters with BNC input connector	OHAUS pH meters with BNC input connector and Cinch temperature connector	All pH meters with BNC input connector

Model	 ST310 	 ST320 	 ST350 	 STMICRO5 
Part Number	83033965	83033967	30129354	30087566
PH Range	0 to 14pH	0 to 14pH	0 to 14pH	0 to 14pH
Temp. Range	0 to 80 °C	0 to 80 °C	0-100 °C	0 to 100 °C
Shaft Material	Plastic	Plastic	Glass	Glass
Internal Reference Type	Ag/AgCl	Ag/AgCl	Ag/AgCl	Ag/AgCl
Gel/Refillable	Refillable	Non-refillable, Gel	Refillable	Refillable
Reference Junction Type	Ceramic pin	Fiber pin	Annular ceramic	Annular ceramic
Refilling Reference Sol.	3M KCl solution	3M KCl solution	3M KCl solution	3M KCl solution
Dimensions (Shaft)	120 x 12 mm	120 x 12 mm	120 x 12 mm	80 x 5 mm
Cable Length	1 m	1 m	1 m	1 m
Temperature Sensor	Yes	Yes	Yes	NO
Connector	BNC, Cinch	BNC	BNC, Cinch	BNC
Description	General purpose 3-in1 plastic refillable pH electrode suitable for normal samples	General purpose 3-in1 plastic Gel pH electrode suitable for normal samples	3-in-1 refillable pH electrode, with integrated temperature probe. Suitable for normal samples	2-in-1 80mm length and 5mm diameter refillable pH electrode. Suitable for small samples, tubes, and narrow containers.
Used With	OHAUS pH meters with BNC input connector and Cinch temperature connector	OHAUS pH meters with BNC input connector and Cinch temperature connector		

Reference Electrodes

Model	STREF2	STREF1
Part Number	30059254	30059253
Description	Saturated Calomel (SCE)	Silver/Silver Chloride (Ag/AgCl)
E vs. SHE (Standard Hydrogen Electrode) (V)	0.241	0.198
Connector	2mm Banana	2mm Banana
Dimensions (Shaft)	120 x 12 mm	110 x 12 mm
Cable Length	1m	1m
Description	STREF2 is saturated calomel electrode (SCE)(Hg/Hg ₂ Cl ₂ in saturated KCl) which traditionally is the most widely used electrode.	STREF1 is Silver/Silver Chloride (Ag/AgCl in Saturated KCl) which has become the most widely used reference electrode since SCE became less popular.

DO Electrodes

Model	STD021
Part Number	30219117
Connection	Min-Din
Cable Length	1m
Shaft Length	125mm
Shaft Diameter	13mm
Temperature Range	0-60 °C
Shaft Material	ABS
Measurement Range	0.02~20 mg/L
Accuracy	0.02mg/L

ORP Electrodes

Model	STORP2	STORP1
Part Number	30038553	30038555
Shaft Material	Glass	Plastic
Temperature Range	0-100 °C	0-80 °C
Internal Reference Type	Ag/AgCl	Ag/AgCl
Refillable/Non-refillable	Refillable	Non-refillable, Gel
Reference Junction Type	Annular Ceramic	Ceramic Pin
Refilling Reference Electrolyte	3M KCl Solution	3M KCl Gel
Dimensions (Shaft)	120 x 12 mm	120 x 12 mm
Cable Length	1 m	1 m
Temperature Sensor	No	No
Connector	BNC	BNC
Zero Potential Value	86mV±15mV	86mV±15mV
Grade Difference	≥ 165mV	≥ 165mV

Model	STD011
Part Number	30031639
Connection	BNC
Cable Length	1.1 m
Shaft Length	120mm
Shaft Diameter	12mm
Temperature Range	0-50 °C
Shaft Material	Plastic
Measurement Range	0-200%
Storage Solution	10% NaCl

Conductivity Electrodes

Model	STCON3	STCON7
Part Number	83033972	30080693
Connection	Mini-Din	Mini-Din
Cable Length	1 m	1 m
Shaft Length	130mm	95mm
Shaft Diameter	14mm	12mm
Temperature Range	0-50 °C	0-60 °C
Measurement Range	70 µS/cm - 200mS/cm (0.5% accuracy) 2 µS/cm - 70µS/cm (1% to 5% accuracy)	0.02 µS/cm - 200µS/cm (accuracy: 0.02µS/cm)

Temperature Electrode

Model	STTEMP30
Part Number	83033970
Shaft Material	Stainless Steel
Shaft Length	120mm
Temperature Range	0-100 °C
Cable Length	1 m
Connection	Cinch



Pen Meters, Water Analysis

Ohaus Starter Series

Applications

- Field Use
- Collection
- Beverages
- Wastewater

- Convenient **pH** and **Conductivity** Measurement
- Pen meters can be completely operated with one hand, freeing up the other hand for sample handling
- Accurate results anywhere and anytime you need them



pH Meters

Model	ST20
Part Number	30073971 ↗
Range	0.00-14.00
Resolution	0.01pH
Accuracy	0.05pH
Temperature Range	0.0-99.0 °C
Temperature Compensation	Yes
Display	Dual
Calibration	3 Point
Buffer Group	4.01, 7.00, 10.01
Automatic Shutdown	6 Minutes of Non-Use
Battery	4 AG13 1.5V Micro Alkaline Batteries
Size / Weight	185 x 45 x 38 mm / 110g

Conductivity Meters

Model	ST20C-C	ST20C-B	ST20C-A
Part Number	30073977 ↗	30073976 ↗	30073975 ↗
Range	0.00-19.99 ms/cm	0-1999 µS/cm	0.0-199.9 µS/cm
Resolution	10 µS/cm	1 µS/cm	0.1 µS/cm
Accuracy	±1.5% FS	±1.5% FS	±1.5% FS
Temperature Range	ATC - With Temperature Display		
Temperature Compensation	-	-	-
Display	Dual		
Calibration	-	-	-
Buffer Group	-	-	-
Automatic Shutdown	6 Minutes of Non-Use		
Battery	4 AG13 1.5V Micro Alkaline Batteries		
Size / Weight	185 x 45 x 38 mm / 110g		

The Ohaus Pen Meters Starter Series also includes **ORP**, **Salinity** and **TDS Meters**

DR 1900™ Portable Spectrophotometer



The DR 1900 combines the ruggedness and portability of a field instrument with over 220 of the most commonly tested water methods.

Applications:

- Drinking Water
- Wastewater
- Field Use
- Industrial Water
- Power

The DR1900 excels in the field because it is the lightest and most compact portable spectrophotometer.

Carry Anywhere

The lightest, most compact portable spectrophotometer available easily goes where you need to go.

Test What You Need

Analyze your water with more preprogrammed methods than any other portable spectrophotometer, or easily create your own methods to suit your unique needs.

Ensure Accuracy in the Field

Wavelength range of 340 to 800 nm. provides accuracy typically seen only in laboratory instruments.



Portable device

Rugged construction keeps the elements out, which means you can perform your tests even in the most demanding conditions.



Easier Testing

Simple, easy-to-use interface plus the widest range of vial sizes makes testing flexible.

DR 1900™ Portable Spectrophotometer

Specifications*

Operating Mode	Transmittance (%), Absorbance and Concentration
Source Lamp	Xenon Flash
Wavelength Range	340 to 800 nm
Wavelength Accuracy	± 2 nm (range 340 - 800nm)
Wavelength Selection	Automatic
Wavelength Reproducibility	± 0.1 nm
Spectral bandwidth	5 nm
Photometric Measuring Range	0 to 3 Abs (wavelength range 340 – 800 nm)
Photometric Accuracy	± 0.003 Abs @ 0.0 - 0.5 Abs
Photometric Linearity	< 0.5 % (0.5 - 2.0 Abs)
Stray Light	< 0.1 %T at 340 nm with NaNO ₂
Display	Graphical display 240 x 160 pixel (LCD, b/w, backlit)
Data Logger	500 measured values (Result, Date, Time, Sample ID, User ID acc. to GLP)
Preprogrammed Methods	> 220
User Programs	50
Sample Cell Compatibility	13 / 16 mm and 1 inch round adapter, 1 inch square and 10x10mm
Dimensions (H x W x D)	3.9 in x 7 in x 10.5 in (98 mm x 178 mm x 267 mm)
Weight	3.31 lbs. (1.5 kg)
Operating Conditions	10 to 40 °C (50 - 104 °F), max. 80 % relative humidity (non-condensing)
Storage Conditions	-30 to 60 °C (-22 to 140 °F), max. 80 % relative humidity (non-condensing)
Enclosure Rating	IP67



Ordering Information

DR1900 Portable Spectrophotometer includes basic printed instrument manual, dust cover, 1-in. square glass sample cells, AA batteries and adapter set.

 DR1900-01H	DR 1900 Portable Spectrophotometer
 9624700	DR 1900 Portable Spectrophotometer with USB+Power Module

Accessories

LZV804	Power Module Includes module, universal power supply, and manual
LZV813	USB+Power Module Includes module, universal power supply, standard USB cable, special USB cable adapter, and manual
LZV949	USB Module includes module, standard USB cable, special USB cable adapter, and manual
2960100	Citizen PD-24 Printer Package
2763900	DR/Check Absorbance Standard Kit (Set of 4)
LZV537	Test Filter Set
2990700	Small Backpack with Cases, for portable equipment

*Subject to change without no.

DR 3900™ Spectrophotometer



✔ Built with the future of water analysis in mind, the DR 3900 will give consistently accurate results in a simpler testing format.

Applications

- Beverage
- Drinking Water
- Wastewater
- Food QC Lab
- Power

 [Learn more!](#) 
[Watch the video](#)

Hit the play button!



Guided Procedure

The DR 3900 guides you step-by-step through the testing procedure like a GPS, so you can get the accurate results you need every time.

Elimination of False Readings

Scratched, flawed, or dirty glassware becomes a non-issue when your machine takes 10 readings and eliminates outliers.

Hands Free Updates*

RFID technology automatically updates the program calibration factors when you place a TNTplus box near the machine.

Flexible Connectivity

Built with 1 ethernet and 3 USB ports, the DR 3900 easily connects to your computer and is programmed to easily interface with Hach WIMS™ or any LIMS system.

Sample Tracking*

Sample bottles with smart tags can easily be tracked with the optional Hach RFID sample-ID system, eliminating sample mix-ups and providing better sample traceability.



DR 3900™ Spectrophotometer

Specifications*

Operating Mode	Transmittance (%), Absorbance and Concentration, Scanning
Light Source	Gas-filled Tungsten (visible)
Optical System	Reference beam, spectral
Wavelength Range	320 to 1100 nm
Wavelength Accuracy	± 1.5 nm (wavelength range 340 to 900 nm)
Wavelength Reproducibility	± 0.1 nm
Wavelength Resolution	1 nm
Wavelength Calibration	Automatic
Wavelength Selection	Automatic, based on method selection
Spectral Bandwidth	5 nm
Photometric	± 3.0 Abs
Measuring Range	(wavelength range 340 to 900 nm)
Photometric Accuracy	5 mAbs at 0.0 to 0.5 Abs 1 % at 0.50 to 2.0 Abs
Photometric Linearity	< 0.5 % to 2 Abs ≤ 0.01 % at >2 Abs with neutral glass at 546 nm
Stray Light	< 0.1 % T at 340 nm with NaNO ₂
Display	7 TFT WVGA (800 pix x 480 pix)
Data Logger	2000 measured values (Result, Date, Time, Sample ID, User ID)
Preprogrammed Methods	> 240
User Programs	100
Sample Cell Compatibility	13 mm round, 16 mm round, 1 cm & 5 cm rectangular, 1 round, 1 square
Dimensions (H x W x D)	5.9 in x 13.8 in x 10 in (151 mm x 350 mm x 255 mm)
Weight	9.26 lbs. (4.2 kg)
Operating Conditions	10 to 40 °C
Storage Conditions	-30 to 60 °C
Enclosure Rating	IP30
Power Supply	Benchtop Power Supply
Power Requirements (Voltage)	110 - 240 V AC
Power Requirements	50/60 Hz
Interfaces	USB type A (2), USB type B, Ethernet, RFID module





All purpose benchtop with expanded feature set.



Hach's TNTplus chemistries and spectrophotometers are made to work seamlessly with each other.

Ordering Information

DR 3900 Benchtop Spectrophotometer; includes adapter A for 1 round + AccuVac/1 cm rectangular cuvettes, manual, CD with manual and procedure manual in .pdf format. Power Supply. RFID version available in Australia. For complete information, please contact a sales representative at Pacific Laboratory Products.

-  LPV440.99.00012
-  LPV440.99.00002

DR 3900 Spectrophotometer with RFID Technology, 110 - 240V
DR 3900 Spectrophotometer without RFID Technology, 110 - 240V

*Subject to change without notice.

DR 6000™ UV-VIS Spectrophotometer



The industry's most advanced laboratory spectrophotometer

Applications

- Beverage
- Drinking Water
- Industrial Water
- Pharmaceutical
- Power
- Wastewater

 [Learn more!](#)
Watch the video

Hit the play button!



With UV and Visible Spectrum capabilities, over 250 pre-programmed methods including the most common testing methods used, guided procedures, and integrated quality assurance software, the DR 6000 ensures you are ready to handle your comprehensive water testing needs.

Your Water Testing Needs, All in One Spectrophotometer

The DR 6000 has the most pre-programmed testing methods, including high-speed wavelength scanning across the UV and Visible Spectrum.

Accessories for High Volume and High Accuracy Testing Needs

A carousel sample changer allows up to seven sequential measurements. The Sipper Module, an instrument-controlled sample delivery system, increases precision by constant optical characteristics.

Advanced Quality Assurance at Your Fingertips

The DR 6000 comes with integrated QA software for scheduling, documenting and interpreting all of your needed quality measurements.

Guided Procedures and Elimination of False Readings

The DR 6000, when used with TNTplus® reagent vials, provides the accurate results you need by guiding you step-by-step through your testing procedures. With TNTplus, the instrument averages 10 readings and eliminates outliers, making scratched, flawed or dirty glassware a non-issue.

Automatically Avoids Errors

RFID* technology automatically updates the program calibration factors when you place a TNTplus reagent box near the DR 6000. The instrument identifies chemistry expiration dates via a barcode on the vials, and detects chemistry coefficient factors to avoid errors that can occur in lot-to-lot variations in the chemistry.

DR 6000™ UV-VIS Spectrophotometer



Specifications*

Operating Mode	Transmittance (%), absorbance and concentration (wavelength, time)	Display	TFT 7 inch WVGA color touch
Source Lamp	Tungsten (visible range), deuterium (UV range)	Data Logger	5000 data points (result, date, time, sample-ID, user-ID)
Wavelength Range	190 - 1100 nm	Preprogrammed Methods	> 250
Wavelength Accuracy	± 1 nm	User Programs	200
Wavelength Reproducibility	< 0.1 nm nm	Sample Cell Compatibility	Rectangular: 10, 20, 30, 50 mm, 1 inch; round: 13 mm, 16 mm, 1 inch
Wavelength Resolution	0.1 nm		Optional 100 mm rectangular cell with additional adapter
Wavelength Selection	Automatic, based on method selection	Dimensions (H x W x D)	8.5 in x 19.7 in x 18.1 in (215 mm x 500 mm x 460 mm)
Spectral Bandwidth	2 nm	Weight	24.25 lbs. (11 kg)
Scanning Speed Photometric	900 nm/min (in 1 nm steps)	Operating Conditions	10 at 40 °C, max. 80% relative humidity (non-condensing)
Measuring Range	± 3 Abs	Storage Conditions	-25 to 60 °C max. 80% relative humidity (non-condensing)
Photometric Accuracy	5 mAbs at 0.0-0.5 Abs <1% at 0.5-2.0 Abs at 546 nm	Enclosure Rating	IP20 with closed lid
Photometric Linearity	0.005 - 2 Abs ≤ 0.01 at > 2 Abs with neutral glass at 546 nm	Interfaces	USB type A (2), USB type B, Ethernet, RFID module
Stray Light	KI-solution at 220 nm < 3.3 Abs/ < 0.05%		

*Subject to change without notice

Ordering Information

DR 6000 UV VIS Spectrophotometer includes a multi adapter for round and rectangular vials, basic user manual, CD with manual and procedure manual in PDF format. Power cords for US and EU. RFID version available in Australia and New Zealand. For detailed information, contact your sales representative at sales@pacificlab.com.au.

- LPV441.99.00012** DR 6000™ UV VIS Spectrophotometer with RFID Technology
- LPV441.99.00002** DR 6000™ UV VIS Spectrophotometer without RFID

Accessories

- LQV157.99.20002** SIP 10, sipper set for Pour-Thru methods, 1 inch vial
- LQV156.99.10012** LOC 100: Kit for Radio Frequency ID (RFID) based sample tracking
- LZV902.99.00002** Carousel Holder 7x1 cm
- LZV902.99.00012** Carousel Holder 5x1 inch
- LZV943** Application Software Enzymatic Food Analysis
- LZV942** Application Software Brewery Analysis
- LZV941** Application Software Drinking Water Analysis

Service Options

For service options and more details please contact one of our sales representatives at Pacific Laboratory Products at sales@pacificlab.com.au



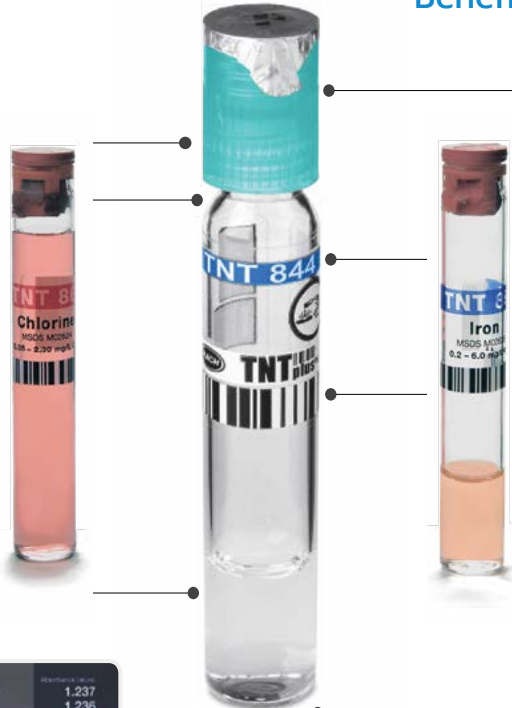
Hach's TNTplus chemistries and spectrophotometers are made to work seamlessly with each other.

TNTplus® Vial Chemistries

Easy and safe Dosi-Cap Zip-freeze-dried reagent integrated into sealed cap

Narrow neck minimizes chance for reagent spills

Optically superior glassware



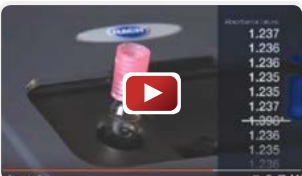
Benefits of TNTplus

Vials are color-coded by parameter and range for easy recognition and error elimination

Barcode makes testing hands-free and fast-instrument automatically detects and runs the correct method

Flat bottom improves handling vial stands on its own

[Learn more!](#)
Watch the video



Hit the play button!

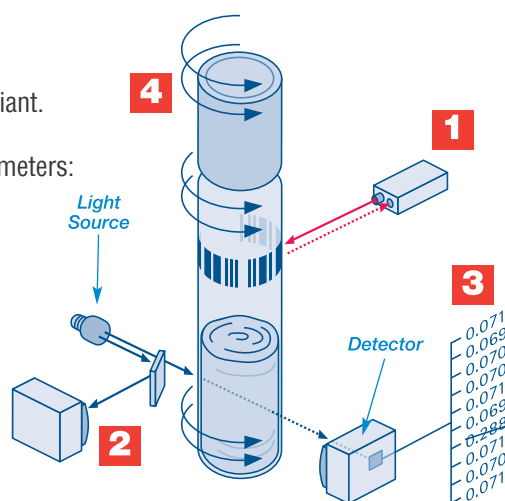
TNTplus vials work exclusively with the DR 6000, DR 3900, and DR 1900 Spectrophotometers.

Principle of Operation

Hach's TNTplus chemistries and spectrophotometers are made to work seamlessly with each other.

- Many of the tests are EPA compliant.
- Over 35 tests available including these popular EPA Approved Parameters:

- Ammonia
- COD
- Chlorine
- Chromium
- Iron
- Nitrate
- Nitrite
- Nitrogen
- Phosphorus
- Sulfate



How TNTplus works

1. Barcode recognition

Simply drop in the vial and get results immediately with automatic method detection.

2. Reference detector

Monitors and compensates for optical fluctuations.

3. 10X Measurement and Outlier elimination

Dirty, scratched. Or flawed glassware, including fingerprints, is no longer an issue-instrument averages 10 readings and rejects outliers.

4. Self-Contained Packaging-Reagents Inside Sealed Cap

Reduces exposure to chemicals-no need to open pillows or clean glassware.

* Find a selected range of Vials on page 58, 59 

Pocket Colorimeter™ II



Small in size,
big on precision
and easy operation

Measure one or two parameters
quickly and easily

Applications

- Drinking Water
- Wastewater
- Power
- Industrial Water
- Field Use
- Beverage
- Food QC Lab



The Pocket Colorimeter II offers accuracy and reproducibility comparable to other more expensive laboratory instruments, it was designed for a long working life in harsh conditions. A long-lasting LED is used as the light source, and low power requirements assure long battery life.

Measures One or Two Parameters

The Pocket Colorimeter II is factory programmed for one or two of more than 30 possible parameters. Many are based on EPA approved methods. No manual calibration is ever required. Simply zero the instrument with a blank, insert the reacted sample, and read the result. Wavelength-specific models without factory calibration are also available for programming custom methods.

Waterproof, Rugged, and IP67 Rated

The IP67 rating means the Pocket Colorimeter II will resist the elements and still function properly. A tough, impact-resistant shell protects the electronics and optics, while a lanyard keeps the cap attached to the colorimeter. Weighing only 0.2 kg—about a half pound—the colorimeter easily travels anywhere you do.

Logs Last Ten Data Points with Measurement Time

The Range Indicator icon on the colorimeter's display indicates either the instrument range or the parameter being tested. For many parameters, the instrument can measure in two different ranges. The instrument logs the ten most recent data points and the time the measurements were made—no need to record results manually.

Simple to Use

Just four buttons on the Hach Pocket Colorimeter II allow easy operation. The Read/Enter key is used when measuring sample concentrations or to confirm menu choices. The Menu key provides quick menu navigation and selection. Use the Zero/Scroll key to zero the instrument or to scroll through menu options. The Power/Backlight key turns the instrument on and toggles the display backlight for low light conditions.



Find the right
Pocket Colorimeter
according to your
applications.



Pocket Colorimeter™ II



Specifications*

Lamp	Light Emitting Diode (LED)	Display	LCD, backlit
Detector	Silicon	Power Supply	4 AAA batteries; approximate life of 2000 tests (use of backlight reduces this number)
Enclosure	IP67, waterproof at 1 m for 30 minutes (battery compartment excluded)	Compliance	European CE mark
Wavelength	Fixed wavelength ± 2 nm, varies with model	Warranty	2 years
Filter Bandwidth	15 nm	Dimensions	6.1 x 15.5 x 3.5 cm (2.5 x 6.2 x 1.4 in.)
Absorbance Range	0 to 2.5 Abs	Weight	0.23 kg (0.5 lbs.)
Sample Cell Pathlength	1 cm and 1-in. (25 mm)		
Operating Conditions	0 to 50°C (32 to 122°F) 0 to 90% relative humidity		

*Subject to change without notice.

Ordering Information

The Hach Pocket Colorimeter II includes manual, pre-measured unit dose reagents, sample cells, and a carrying case. Reagents can be refilled by contacting Hach or your Hach distributor

5870025	Aluminum Pocket Colorimeter II; includes reagents for 100 tests	5870021	Lead, LeadTrak Pocket Colorimeter II; includes reagents for 20 tests
5870040	Ammonia Pocket Colorimeter II; includes reagents for 100 tests	5870018	Manganese, Low Range, Pocket Colorimeter II; includes reagents for 50 tests
5870026	Ammonia, Free and Monochloramine Pocket Colorimeter II; includes reagents for 50 Free Ammonia tests, 100 Monochloramine tests	5870015	Manganese, High Range, Pocket Colorimeter II; includes reagents for 100 tests
2763500	Atrazine Pocket Colorimeter II; includes reagents for 18 tests	5870010	Molybdate Pocket Colorimeter II; includes reagents for 100 tests
5870001	Bromine Pocket Colorimeter II; includes reagents for 50 to 100 tests	5870020	Nickel and Cobalt Pocket Colorimeter II; includes reagents for 100 tests
5870000*	Chlorine, Free and Total Pocket Colorimeter II; includes reagents for 50 to 100 tests	5870002	Nitrate Pocket Colorimeter II; includes reagents for 100 tests
5870062*	Chlorine, Free and Total Pocket Colorimeter II, MR/HR; includes reagents for 100 tests	5870003	Oxygen, Dissolved Pocket Colorimeter II; includes reagents for 25 tests
5870012*	Chlorine, Free, Total, and pH Pocket Colorimeter II; includes reagents for 100 tests	5870004	Ozone Pocket Colorimeter II; includes reagents for up to 50 tests
5870023*	Chlorine, Free, SwifTest Dispenser Pocket Colorimeter II; includes reagents for 125 to 250 tests	2773400	PCB in Soil Pocket Colorimeter II; includes reagents for 18 tests
5870024*	Chlorine, Total SwifTest Dispenser Pocket Colorimeter II; includes reagents for 125 to 250 tests	5870006	Phosphate Pocket Colorimeter II; includes reagents for 100 tests
5870051	Chlorine Dioxide Pocket Colorimeter II; includes reagents for 100 tests	5870007	Phosphonate Pocket Colorimeter II; includes reagents for 100 tests
5870017	Chromium, Hexavalent Pocket Colorimeter II; includes reagents for 100 tests	5870034	Silica Pocket Colorimeter II; includes reagents for 100 tests
5870019	Copper Pocket Colorimeter II; includes reagents for 100 tests	5870029	Sulfate Pocket Colorimeter II; includes reagents for 100 tests
5870005	Fluoride Pocket Colorimeter II (SPADNS); includes reagents for up to 50 tests	2775000	TPH in Soil Pocket Colorimeter II; includes reagents for 18 tests
2513100	Fluoride Pocket Colorimeter II (SPADNS 2-Arsenic-Free); includes reagents for up to 50 tests	2774200	TPH in Water Pocket Colorimeter II; includes reagents for 18 tests
5870022	Iron, FerroVer Pocket Colorimeter II; includes reagents for 100 tests	5870009	Zinc Pocket Colorimeter II; includes reagents for 100 tests
5870016	Iron, TPTZ Pocket Colorimeter II; includes reagents for 100 tests		

*These products are not cleared for use in testing chlorine or chloramines in dialysis applications.



DR 900 Handheld Colorimeter



Fastest and simplest water testing for the most demanding field environments

Applications

- Drinking Water
- Wastewater
- Industrial Water

[Learn more!](#)  Watch the video

Hit the play button!



The hand-held DR 900 allows quick and easy access to your most-used testing methods. This colorimeter is waterproof, dustproof and field durable, with an intuitive user interface, easy data transfer abilities, and the ability to test up to 90 of the most commonly tested water methods, the DR 900 makes water testing in harsh field environments a little less challenging.

Your Favorites at Your Fingertips

Save time by storing your most standard methods for quick access in less than 4 clicks.

Field Ready in EveryWay Possible

This hand-held, rugged colorimeter is waterproof and dustproof. Drop tested and shock resistant for greater quality assurance.

Intuitive User Interface

Improved user interface allows quick selections and easier testing.

Simple Data Communication

Stores data for up to 500 tests, and comes with a USB port for easily downloading or transferring information.

Satisfies Your Core Testing Needs

A single handheld instrument provides access to 90 of the most common parameters.



DR 900 Handheld Colorimeter



Specifications*

Source Lamp	Light Emitting Diode (LED)
Wavelength Range	420 nm, 520 nm, 560 nm, 610 nm
Wavelength Selection	Automatic
Operating Mode	Transmittance (%), Absorbance and Concentration
Sample Cell	1 inch round or 16 mm round
Compatibility	(with adapter)
Data Logger	500 measured values (Result, Date, Time, Sample ID, User ID)
Enclosure Rating	IP67 (vial cover closed)
Battery Requirements	4, AA size alkali cells
Battery Life	6 months (typical) @ 5 readings a day / 5 days / week without backlight** ** Backlight usage will decrease battery life.
Display	Graphical display 240 x 160 pixel (Backlit)
User Interface Language	English
Interface	USB type Mini IP67
Dimensions (H x W x D)	9.1 in x 3.8 in x 1.9 in (231 mm x 96 mm x 48 mm)
Weight	1.32 lbs. (0.6 kg) with battery
Includes	DR 900 Colorimeter, two 1-inch glass sample cells marked at 10, 20 and 25 mL, two 1 cm plastic sample cells, 1 x 16-mm COD/Test 'N Tube™ adapter, 4 AA alkaline batteries, printed multilingual instrument manual, instrument and procedure manuals on CD, USB Mini to USB Cable, European CE mark.



Ordering Information

 **9385100** DR 900 Handheld Colorimeter

Accessories

2722000	Instrument Carrying Case, soft-sided, with shoulder strap
4942500	Instrument Carrying Case, hard-sided, style G
4943000	CEL Portable Laboratory Carrying Case
2763900	DR/Check Absorbance Standard Kit (Set of 4)
2635300	SpecCheck Secondary Gel Standards Set, DPD Chlorine - LR
2980500	SpecCheck Secondary Gel Standards Set, DPD Chlorine - MR
2893300	SpecCheck Secondary Gel Standards Set, DPD Chlorine - HR
2712500	SpecCheck Gel Secondary Standard Set, Fluoride
2708000	SpecCheck Gel Secondary Standard Set, Ozone, MR
2507500	SpecCheck Secondary Gel Standards Set, Monochloramine & Free Ammonia.

*Subject to change without notice.



SL1000 Portable Parallel Analyzer™ (PPA)



Water Quality Testing dramatically streamlined



Applications • Drinking Water



Hit the play button!



The new Hach SL1000 Portable Parallel Analyzer (PPA) performs the same tests with less than half the manual steps. Get highly accurate results with less opportunity for errors in a fraction of the time. Up to six parameters tested simultaneously.

Faster Testing

Perform up to four colorimetric and two probe-based measurements in parallel, and complete the entire test suite in 25% of the time. Complete more tests on site, get the results you need faster, and visit more sites in each shift.

Less Hassle

A single instrument combines colorimetric and probe testing in a field kit that requires fewer bulky accessories. There are no powder pillows or glass vials to handle. All chemicals and processes are entirely contained inside the Chemkey.

Less Variability

Avoid manual steps that can introduce variability, even when performed by experienced testers. Automation and internal temperature control make the entire process consistent and repeatable, while applying the same processes and reagents as current Hach methods.

Patented Chemkey™ Technology

Chemkey reagents contain the same chemicals and execute the same process steps that you have trusted for decades - now delivered in a simple, self-contained package. EPA-approved for reporting of Free and Total Chlorine.

9430000

SL1000 Portable Parallel Analyzer (PPA)

Includes: SL1000 meter, carrying case, 1 instrument sample cup, 2 probe sample cups, rechargeable battery, battery charger, hand strap, instrument manual, and USB cable.

8499000

Full SL1000 Portable Parallel Analyzer (PPA) Kit

Full kit includes basic instrument package plus: 1 pH probe, 1 conductivity probe and 1 box each of Free Cl, Total Cl, Monochloramine, Nitrite and Free Ammonia Chemkeys.



TU5 Series Turbidimeters



Applications

- Drinking Water
- Power
- Beverage
- Pharmaceutical

[Learn more!](#)
Watch the video



for full Specs
simply
[Click here](#)

TU5 Series Lab & Process Turbidimeters with 360° x 90° Detection™ deliver unprecedented confidence that a change in your reading is a change in your water.

Groundbreaking 360° x 90° Detection™ Technology

The TU5 Series employs a patented optical design that sees more of your sample than any other turbidimeter, delivering the best low level precision and sensitivity while minimizing variability from test to test.

Faster devices

The TU5 Series dramatically reduces the time needed to get a turbidity measurement you can rely on, with 98% less online sample surface area to clean, sealed vials for calibration, and the elimination of the need for indexing and silicone oil in the lab. Not to mention, a smaller online sample volume means you will detect events almost immediately.

TL23 Series Benchtop Turbidimeters



Applications

- Food and Beverage
- Pharmaceutical
- Chemical
- Power
- Metal and Mining
- Wastewater

The TL23 Series laboratory turbidimeters blend trusted technology and improved features to simplify testing in the most demanding industrial and wastewater applications.

- Improved and intuitive design
- Easy to use. Easy to Be Right
- A smart device for more reliable measurements

LPV444.99.00210
LPV444.99.00120
LPV444.99.00310
LPV444.99.00320

TL2300 Tungsten Lamp Turbidimeter, EPA, 0 - 4000 NTU
TL2310 LED Turbidimeter, ISO, 0 - 1000 NTU
TL2350 Tungsten Lamp Turbidimeter, EPA, 0 - 10000 NTU
TL2360 LED Turbidimeter, ISO, 0 - 10000 NTU

[Learn more!](#)
Watch the video



for full Specs
simply
[Click here](#)



2100Q & 2100Qis Portable Turbidimeter



Easiest calibration and verification with accurate results every time

Applications

- Drinking Water
- Wastewater
- Beverage
- Field Use
- Food QC Lab
- Industrial Water
- Power



Hit the play button!



The Hach 2100Q and 2100Qis Portable Turbidimeters offer unsurpassed ease of use and accuracy in turbidity measurement. Only Hach offers this combination of advanced features including assisted calibration, simplified data transfer, and innovative measurement techniques that give you accurate results every time.

Easy On-Screen Assisted Calibration

The 2100Q Portable Turbidimeter provides confidence your measurements are right every time. On-screen assisted calibration and verification save you time and ensure accuracy. With an easy-to-follow interface, complicated manuals are not needed to perform routine calibrations. Single-standard RapidCal™ calibration offers a simplified solution for low level measurements.

Simple Data Transfer

Customizable power and connectivity modules provide smooth data transfer and flexibility. Optional USB+Power Module allows data download to any computer via USB port, providing superior data integrity and availability.

Accuracy for Rapidly Settling Samples

The innovative Rapidly Settling Turbidity™ mode provides accurate, repeatable measurements for difficult to measure, rapidly settling samples. An exclusive algorithm that calculates turbidity based on a series of automatic readings eliminates redundant measurements and estimating.

Convenient Data Logging

Up to 500 measurements are automatically stored in the instrument for easy access and backup. Stored information includes: date and time, operator ID, reading mode, sample ID, sample number, units, calibration time, calibration status, error messages and the result.

Optical System for Precision in the Field

The two-detector optical system compensates for color in the sample, light fluctuation, and stray light, allowing you to achieve laboratory-grade performance on a wide range of samples, even under difficult site conditions.

Two Models for Specific USEPA Requirements

The 2100Q Turbidimeter is compliant with EPA Method 180.1 design criteria. The 2100Qis Turbidimeter is compliant with ISO 7027 design criteria.



2100Q & 2100Qis Portable Turbidimeter



Specifications*

Measurement Method	Ratio turbidimetric determination using a primary nephelometric light scatter signal (90°) to the transmitted light scatter signal.	Operating Conditions	Temperature: 0 to 50°C (32 to 122°F) Relative Humidity: 0 to 90% @ 30°C, 0 to 80% @ 40°C, 0 to 70% @ 50°C, noncondensing
Regulatory	2100Q: Meets EPA Method 180.1 2100Qis: Meets ISO 7027	Storage Conditions	-40 to 60°C (-40 to 140°F), instrument only
Light Source	2100Q: Tungsten filament lamp 2100Qis: Light-emitting diode (LED) @ 860 nm	Interface	Optional USB
Range	0 to 1000 NTU (FNU)	Instrument Enclosure	IP67 (closed lid, battery Rating compartment excluded)
Accuracy	±2% of reading plus stray light from 0 to 1000 NTU	Protection Class Certification	Power Supply: Class II CE certified
Repeatability	±1% of reading, or 0.01 NTU (FNU), whichever is greater	Sample Required	15 mL (0.3 oz.)
Resolution	0.01 NTU on lowest range	Sample Cells	60 x 25 mm (2.36 x 1 in.) borosilicate glass with screw cap
Stray Light	<0.02 NTU (FNU)	Dimensions	22.9 x 10.7 x 7.7 cm (9.0 x 4.2 x 3.0 in.)
Signal Averaging	Selectable on/off	Weight	527 g (1.16 lb) without batteries 618 g (1.36 lb) with four AA alkaline batteries
Detector	Silicon photovoltaic		
Reading Modes (user selectable)	Normal (Push to Read) Signal Averaging Rapidly Settling Turbidity		
Data Logger	500 records		
Power Requirement	110-230 Vac, 50/60 Hz (with Power or USB+Power Module) 4 AA alkaline batteries Rechargeable NiMH (for use with USB+Power Module)		

*Subject to change without notice.

Ordering Information

Hach portable turbidimeters are supplied with four AA alkaline batteries, a carrying case with insert, StablCal primary calibration standards in 1" sealed vials (20, 100, 800 NTU), 10 NTU primary verification standard, 6 sample cells with screw-tops, instrument manual (printed and on CD-ROM), quick start guide, silicone oil and oiling cloth.

- ☑ **2100Q-01** 2100Q Portable Turbidimeter (meets EPA method 180.1)
- ☑ **2100QIS-01** 2100Qis Portable Turbidimeter (meets ISO 7027)

Optional Accessories

- LZV813** USB+Power Module (includes: universal power supply, USB cables, instruction sheet)
- LZV804** Power Module (includes: universal power supply, instruction sheet)
- 2960100** Citizen PD-24 Printer Package
- 2971304** Battery, NiMH AA, pk/4
- 4397500** Degassing Kit
- 4397510** Sample Filtration and Degassing Kit
- 2971210** StablCal 100 mL calibration kit, 2100Q
- 2971200** StablCal 500 mL calibration kit, 2100Q
- 2464105** Gelex Secondary Standard Set



Platypus Jar Tester

Test up to four samples simultaneously!



4GJT2LT

Digital programmable settings for each three flocculation stages at each of the four stations

The Platypus Jar tester allows to emulate full scale plant flocculation to confidently optimize physical and chemical treatment including: coagulants, polymers and alkalinity, settling rates, reaction kinetics, mixing and flocculation energy requirements, aluminium ion residuals.

Microprocessors

Four independent stations with separate / sequential speed / time settings for three (3) mix / flocculation stages. Last RPM and TIME memory. Actual paddle speed controlled by P+I controllers tied-back to Hall Effect speed sensors.



Digital Control

Each station includes a 14mm 3 digit numeric LED display for RPM set / actual speed readout and a 14 mm 4-digit clock LED display for stage time set/time elapsed.

Tactile Control Panel

Keypad control at each Jar Station allows to set mix / flocculation speed, duration and control mode for each stage. Status, mode selection and error LED indicators.

Square Jars

- 1L² or 2L² capacity options. Square Jar geometry for emulation of plant conditions.
- Durable, clear polycarbonate material - easy to clean wall and floor corners fillets.
- Anti-slip top lips for safe handling on wet environments.

Back-lighting

Ice white back-lighting to monitor floc development, settling rates and supernatant clarity.

Unique paddles

Clip-On/Off, easy-to-clean radial and axial flow types offer a wide range of mix/ flocculation velocity gradients.

Quiet and Safe

The unit is safe to run in wet environments due to its low voltage internal power and also quiet due to the low noise power transmission belts.

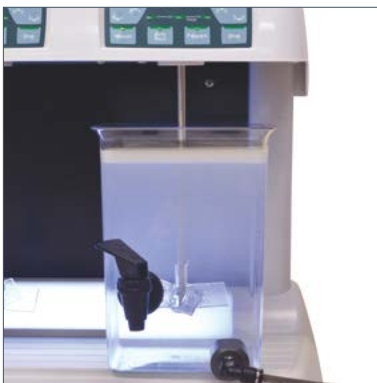
Dissolved Air Flotation (DAF - Jar Tester accessories)



Platypus Dissolved Air Flotation Test Accessories provide pilot-scale hardware to assess and identify best practice DAF treatment

Dissolved Air Flotation Test Accessories are used in conjunction with the standard Jar testing - to assess and determine appropriate DAF process parameters including air saturation pressure, recycle rates, DAF treatability, float cohesion, appropriate polymers and appropriate flotation surface loading rates.

The 4GSAT includes: 2L Capacity DAF Saturator, distribution Manifold, 4 x 2L DAF Jars and hoseware. (4GJT instrument is sold by separate)



The Process

Dissolved air flotation (DAF) is an alternative water clarification process using micro air bubbles to attach and float flocculated particles and suspended matter, including slow settling colloids, algae, hydroxides, finely divided particulate matter and hydrocarbons to a basin's water surface.



The Accessories

DAF is achieved by dissolving air within an air "Saturator" under pressure (400–800 kPa), then reducing the air saturated solution's pressure to near atmospheric levels - releasing air from the solution at the lower reaches of (typically) a flotation tank or basin. Released air as micro-bubbles adhere to the suspended matter causing it to float to the water's surface.



Isolating Valves

The 4 port "recycle" air saturated water distribution manifold with quarter turn station isolators as well as the static saturator (pressure vessel) assembly are both heavy duty and solid.





ANDalyze Fluorimeter



Heavy Metal Testing in Water Obtain results in less than one minute!

Ideal for testing Lead, Uranium, Copper, Mercury, Cadmium, Zinc and More...

- Tests drinking water, environmental water and industrial water for soluble concentrations
- No special knowledge of chemical testing required
- Highly sensitive and selective (low ppb ranges)
- One instrument tests for multiple contaminants

Applications

- Drinking water
- Environmental water
- Food safety
- Ground water
- Industrial
- Mining
- Sewage
- Surface water
- Wastewater

Simple, One Minute Test

Quick, simple menu navigation and one button push for sample analysis.

Fluorescence Based Sensing

DNAzyme reaction produces quantitative fluorescence based results.

Data Capture & Reporting

Time and date stamped and site labeled results. Data downloadable and recharging through a USB cable.

Safe and Maintenance Free

CE Marked and water and dust resistant with IP54 enclosure rating. Free software upgrades via USB connection over the Internet.

Video Training On-board

Embedded instructional video trains users without documentation.



Environmentally Friendly

No harmful reagents and minimal waste. No test materials need special disposal.

Supports Multiple Languages

Selectable display languages including English, Chinese, Spanish, Portuguese, and German.

Sensor Kit

Each disposable color-coded sensor is designed for a specific heavy metal test target. Kits provide everything needed to test.



Hit the play button!



ANDalyze Fluorimeter

EPA Award winning technology

ANDalyze was developed as a hand-held fluorimeter and DNAzyme sensors for field testing of soluble heavy metal content in water supplies. It provides highly accurate readings in seconds.

The unique ANDalyze Fluorimeter is a breakthrough in efficiency, testing accuracy and ease-of use for field applications. It requires no special skill or knowledge of chemistry to operate. Furthermore, no hazardous materials or harmful reagents are required. In addition, the ANDalyze's technology reduces overall testing costs by reducing testing time and complexity.

[Learn more! ANDalyze successful case study](#)

DNAZYME Technology

ANDalyze's proprietary Catalytic DNA sensors use a DNAzyme reaction that fluoresces in the presence of a target contaminant substance such as lead. The fluorescence of the reaction is measured to determine the soluble concentration of the target heavy metal and is reported in parts per billion (ppb).

The test is performed by taking a 1 milliliter water sample, injecting it through the sensor, and into the fluorimeter. This sample is then automatically analyzed and reports results in less than one minute.

Specifications

Dimensions	
Width	3.6 inches/9.14 cm
Depth	8.0 inches/ 20.3 cm
Height	2.25 inches/ 5.72 cm
Weight	1.25 lb/565 g
IP Rating	IP54 (water resistant)
Certifications	CE

Metal	Colour	* Range	Analyte
Lead	Green	2 - 400 ppb	Pb 2+
Copper (High)	Blue	0.6 - 3 ppm	Cu+/Cu2+
Copper (Low)	Blue	40 - 400 ppb	Cu+/Cu2+
Uranium	Orange	2 - 120 ppb	Uranium VI, UO2 2+
Mercury	Silver	2 ppb (over/under) 50 ppb limit	Hg2+
Zinc	White	1 - 30 ppm	Zn2+
Cadmium	Yellow	0.1 - 2 ppm	Cd2+

Sensors for chromium, arsenic and other trace metals are currently in development stage.

Ordering Information

- AND002** AND110 Handheld Flourimeter
- AND010** Lead Sensor kit for AND110 Flourimeter
- AND011** Uranium Sensor kit for AND110 Flourimeter
- AND012** Copper (low) Sensor kit for AND110 Flourimeter
- AND013** Copper (high) Sensor kit for AND110 Flourimeter
- AND014** Mercury Sensor kit for AND110 Flourimeter
- AND015** Zinc Sensor kit for AND110 Flourimeter
- AND016** Cadmium Sensor kit for AND110 Flourimeter
-
- AND901** Dilution Kit (Set of Equipment for 25 Dilutions)
- AND903** pH Adjustment Kit (Kit for multiple adjustments of pH, depends on water characteristics)
- AND919** Dilution Refill Kit (Tips and Sample tubes, no pipette)



Kit Includes:
AND1100 Fluorimeter
USB to MINI-B Cable
100µL Fixed Volume Pipette
and Tips
pH Test Strips
User Manual
Carrying Case

TitraLab® AT1000 Series Automatic Titrators

12
Months
Warranty

AT1102.97

Titration has never been this simple!

- Quick setup and titration
- Practical USB based applications
- Obtain reliable titration results
- Low cost and simple maintenance
- Customize the device to your routine and pay just for what you need!

Applications

- Food and Beverage
- Drinking Water
- Wastewater
- QC Laboratory
- Petrochemical Industry

AT1222.97 TitraLab® AT1000 Series
Potentiometric Titrator,
2 Burettes and 2 Pumps

A revolutionary device capable of analyzing and delivering accurate results in just a few steps.

Titration can be simple! The TitraLab AT1000 from Hach uses pre-set functions that eliminate complex programming and provide accurate results.

Customize the device based on your most used applications and avoid unwanted device add-ons, to find out more simply contact one of our product experts at sales@pacificlab.com.au

Simple Setup and Titration

Application-specific functions to eliminate complex titration setup and analysis.

Reliable Titration Results

Eliminates operator interpretation and manual processes with automatic titration to quickly deliver accurate and repeatable results.

Pre-programmed titration methods detect end points and eliminate manual calculations to make results easier to achieve without advanced programming.

Small Footprint

The new Titration Series will occupy a relatively small space on your laboratory bench, ideal for the labs with reduced space.



Unique USB upload of application - specific titrations makes it quick for anyone to set up and operate a test.



Ease to use, large graphic color display. Hit the start button and let the device do the work for you.



Hach's unique application kits make it quick for anyone to set up and operate a test.

AP0014.KF1121

TitraLab® AT1000 Series Automatic Titrators

Specifications

Titrator Models	AT1102	AT1112	AT1122	AT1222	KF1121
Burette for Titrant	1	1	1	2	1
Integrated Peristaltic Pump	0	1	2	2	2
Maximum Number of Applications	5	5	5	10	5

Water Applications

AP0001.AT1102	pH/Alkalinity in Water	•	•	•	•	—
AP0002.AT1102	pH/Alkalinity & Conductivity in Water	•	•	•	•	—
AP0003.AT1112	Ca & Mg Hardness (ISE) in Water	—	•	•	•	—
AP0004.AT1112	Total Hardness (Color) in Water	—	•	•	•	—
AP0005.AT1222	pH/Alkalinity & Hardness (ISE) in Water	—	—	—	•	—
AP0009.AT1112	Chlorides in Water	—	•	•	•	—

Food and Beverage Applications

AP0008.AT1102	pH, Total Acidity in Food & Beverage	•	•	•	•	—
AP0010.AT1112	Salt in Food Products	—	•	•	•	—
AP0011.AT1222	pH, Total Acidity & Chlorides in Food & Beverage	—	—	—	•	—
AP0012.AT1122	Free & Total SO ₂ in Wine	—	—	•	•	—
AP0013.AT1222	pH, Total Acidity, Free & Total SO ₂ in Wine	—	—	—	•	—

Petrochemical Applications

AP0015.AT1102	TAN (Total Acid Number) in Petrochem	•	•	•	•	—
AP0016.AT1102	TBN (Total Base Number) in Petrochem	•	•	•	•	—

Environmental Applications

AP0007.AT1122	Free & Total Chlorine, Chlorine Dioxide, Sulphite (AutoCAT)	—	—	•	•	—
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Moisture Content Application (Karl Fischer)

AP0014.KF1121	Moisture Content (Karl Fischer)	—	—	—	—	•
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TitraLab® AS1000 Series Sample Changer

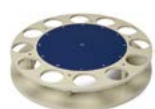
Used in connection with AT1000 Series Titrators and TM1000 PC Software to automatically perform sample series analysis

Applications

- Drinking Water
- Industrial Water
- Wastewater
- Food and Beverage

- ☑ **AS1000.97.12150** AS1000, 12 positions, 50 mL & 150 mL, for two probes
- ☑ **AS1000.97.20090** AS1000, 20 positions, 90 mL beakers, for one probe
- ☑ **AS1000.97.30050** AS1000, 30 positions, 50 mL beakers, for one probe

- Run sample analyses in total autonomy, without user intervention.
- Complete automation to free up your time.
- Single-radius sample trays for up to 30 samples.
- Available in four configurations of different tray capacity that holds the sample beakers.



LZE203
12 positions tray



LZE201
20 positions tray



LZE202
30 positions tray

Vacuum Pumps **ROCKER**

100 Hours test!
Watch the video

Hit the play button!



Applications

- Filtration for microbiology
- Air sampling
- Suspended solid test
- Vacuum Filtration



Rocker 400



Rocker 300



Rocker 410

No air pollution, maintenance free

The Rocker 300 Pump is piston-driven, does not require lubricants, oil changes or costly maintenance

Prote™ overflow protection

Rocker series pumps are equipped with Prote™ lter cartridge which can prevent a large amount of liquid from being sucked into the pump by negligence. It can also lter particle and moisture to prolong the service life of pump.

Thermal protection device

Each motor of Rocker series pumps has a built-in thermal protection device to shut o the pump automatically when overheated and then resume working when the temperature cools down.

Specifications	Rocker 300	Rocker 400	Rocker 410
Part Number	PV4132	PV4071	PV4072
Voltage	220V/50Hz		
Max. power (W)	60	80	
Max. current (A)	0.3	0.4	
Max. vacuum	- 670 mmHg		730 mmHg
Max. flow rate	18 L/min	34 L/min	20 L/min
Moisture Trap / Vacuum Regulator	Yes		
Overflow protection	Yes		
Motor rotation	1450 RPM		
Horse power	1/8 HP	1/6 HP	
Noise level	50 dB	52 dB	
Port thread	5/16 inch (8 mm)		
Net weight	4.1 Kg	5.2 Kg	
Dimension (L x W x H)	27.2 x 12.1 x 16.5 cm	29.8 x 14.3 x 17.2 cm	
PS: 1 mmHg \approx 0.1333 kPa \approx 1.333 mbar , 1 l/min \approx 0.035CFM			
Order Code	R30022	R40022	R41022

Filtration Systems

47 mm Filtration Sets

PES (Polyethersulfone) / Autoclavable



Hit the play button!



- Spin-lock connection facilitates fast and stable installation without clamp.
- Built-in overflow protection to keep the filtrate from overflowing when waste bottle is full.
- Excellent smash, high temperature resistance and autoclavable (LF30-LF31)
- Funnel graduated in 50ml, receiver in 100ml increments for measurement (LF30-LF31)
- Stainless steel funnels offers excellent chemical resistance and can be fastly sterilized by flame (LF32-LF33).

PES Filtration Sets



S/S Filtration Sets



Specifications	LF 30	LF 31	LF 32	LF 33
Filter funnel material	PES		SUS316	
Funnel support base material	PC		SUS316	
Membrane support material	PP		SUS316	
Syringe filter material	PTFE		-	
Receiver flask material	PC	Borosilicate Glass	-	
Waste bottle	-		PC	
Funnel capacity	300 ml		100 ml	300 ml
Flask capacity	1200 ml	1000 ml	1200 ml	
Filter diameter	47 mm / 50 mm			
Effective filtration area	12.5 cm ²		9.6 cm ²	
Port thread (I.D. tubing)	5/16 inch (8 mm)			
Syringe filter	25 mm, 0.2 m		-	
Drain device	-	Yes	-	-
Overflow protection	Yes	-	-	-
Funnel graduation	-	-	50 ml	100 ml
Order Code	197010-30	197010-31	197010-32	197010-33

Vacuum Filtration Systems



Rocker 300 - LF 30 Ideal for General Laboratory Filtration



Rocker 300 - LF 31 Ideal for General Laboratory Filtration



Rocker 300 - LF 30 - SS Ideal for suspended solid test



Rocker 300 - LF 32 Ideal for filtration requiring the sterilization such as microbiology test.

No air pollution, maintenance free Rocker series pumps are piston-driven, no need of lubricant, regular oil changes or maintenance; with no oil pollution.

Patented Rocker Spin-Lock Design The filter holder can be connected with waste bottle by patented Spin-Lock connection giving a fast and stable installation without clamp.

Overflow protection Plastic waste bottle comes with a built-in overflow protection to keep the filtrate from overflowing when waste bottle is full.

Specifications	Rocker 300 - LF 30	Rocker 300 - LF 30 - SS	Rocker 300 - LF 31	Rocker 300 - LF 32
Max. Flow rate	18 L/min			
Max. vacuum	- 670 mmHg			
Capacity (Funnel / Waste bottle)	300 ml / 1200 ml		300 ml / 1000 ml	100 ml / 1200 ml
Filter diameter	47 mm / 50 mm			
Effective Filtration area	12.5 cm ²			
Port thread	5/16 inch (8 mm)			
Material				
Filter funnel	PES			SUS316
Waste bottle	PC		Borosilicate glass (with drain)	PC
Funnel support base	PP			SUS316
Funnel lid	PP			-
Overflow protection	PP		-	PP
Filter	-	Glass Fiber (1m, Ø47mm)	-	MCE
Order Code	167305-22	167307-22	167308-22	167306-22

Vacuum Filtration Systems



BioVac 321B



BioVac 330B



BioVac 321C




BioVac 630B

Special design for large number samples The BioVac 321B and 321C are economical models for large sample filtration. Each system includes vacuum pump, manifold, waste bottle and filter holders.

Light and handy aluminum design Manifolds are made of anodized aluminum which is autoclavable, light and cost-effective.

Suitable for different filter holders Manifolds can accommodate different types of filter holders through the supplied No. 8 silicone stoppers.

4 Litre PP waste bottle with drain The large capacity of 4000ml waste bottle with drain offers convenience of collecting and draining waste solution.

Specifications	BioVac 321B	BioVac 321C 	BioVac 330B	BioVac 630B
Max. Flow rate		34 L/min		62 L/min
Max. vacuum		- 670 mmHg		- 650 mmHg
Waste bottle	4000 ml, made of PP with drain			
Number of branches		3		6
Filter diameter	47 mm / 50 mm			
Funnel capacity	100 ml	300 ml	100 ml	100 ml
Effective filtration area	9.6 cm ²			
Port thread	5/16 inch (8 mm)			
Manifold Part Material				
Body	Anodized aluminum			SUS316
Control valve	Plated Copper			SUS316
Filter funnel	SUS316	PES		SUS316
Funnel support base	SUS316	PP		SUS316
Connector	Plated Copper			SUS316
Order Code	167402-22	167404-22	167403-22	167601-22

Multi-Branch Manifolds

Applications

- Microbiology testing
- Chemical experimentation
- General laboratory filtration



BioVac 320



BioVac 321



BioVac 330



BioVac 620



BioVac 630

Made of SUS316 The parts of BioVac 320 and BioVac 620 manifolds are made of SUS316, which offers excellent chemical resistance and can be fast sterilized by flame, steam and oven.

Light aluminum design The BioVac 321 is made of anodized aluminum and plated copper, making it light, cost-effective and autoclavable.

Patented Spin-Lock Design facilitates fast and stable installation without clamp.

Individual control valve Each branch permits individual control.

Compatible with different sizes of filter holders BioVac 320, 321 and 62 manifold include no.8 silicone stoppers which are available to fit various types of filter holders at option. BioVac 330 and 630 manifolds are available to fit 100, 300, 500ml funnel at option.

Specifications	BioVac 320	BioVac 321	BioVac 330	BioVac 620	BioVac 630
Number of branch	3			6	
Filter diameter	Optional		47 mm / 50 mm	Optional	47 mm / 50 mm
Funnel capacity	Optional		100 ml / 300 ml / 500 ml	Optional	100 ml / 300 ml / 500 ml
Effective Filtration area	Optional		9.6 cm ²	Optional	9.6 cm ²
Port thread	5/16 inch (8 mm)				
Dimensions (L x W x H)	44.5 x 12.9 x 15 cm	39.5 x 15 x 13.7 cm	44.5 x 12.9 x 12.5 cm	68.5 x 12.9 x 15 cm	68.5 x 12.9 x 12.5 cm
Part Material					
Body	SUS316	Anodized aluminum		SUS316	
Control valve	SUS316	Plated copper		SUS316	
Filter funnel	-	-	SUS3-16	-	SUS316
Funnel support base	-	-	SUS316	-	SUS316
Handle	SUS316	Anodized aluminum		SUS316	
Connector	-	-	SUS316	-	SUS316
Hose barb	SUS316	Plated copper	-	SUS316	-
Order Code	167110-23	167200-43	167103-23	167110-26	167103-26

Filtration Accessories



1200 ml PES Waste Bottle (197000-11)

Specifications		Material	
Port thread (I.D. tubing)	5/16 in.(8 mm)	Container	PES
Graduated increment	100 ml	Cover	PES
Overow protection	Yes	Overow protection	PP
Cap with suction fitting	Yes		



1200 ml PC Waste Bottle (197000-11-PC)

Specifications		Material	
Port thread (I.D. tubing)	5/16 in.(8 mm)	Container	PC
Graduated increment	100 ml	Cover	PC
Overow protection	Yes	Overow protection	PC
Cap with suction fitting	Yes		



Disposable Filtration Set

Specifications	250ml filtration set	500ml filtration set	1000ml filtration set
Part Number	ROU-1101-RLS	ROU-1102-RLS	ROU-1103-RLS
Filter diameter	66 mm	90 mm	
Pore size	0.22µm		
Filter Material	PES		
Shell Material	PE		



Disposable Funnel

Specifications	250ml funnel	500ml funnel	1000ml funnel
Part Number	ROU-1151-RLS	ROU-1152-RLS	ROU-1153-RLS
Filter diameter	66 mm	90 mm	
Pore size	0.22µm		
Filter Material	PES		
Shell Material	PE		



4000 ml PP Waste Bottle (167200-47)

Specifications		Material	
Port thread (I.D. tubing)	1/4 in. (6.5 mm)	Container	PP
Graduated increment	500 ml	Cover	PP
Overflow protection	Yes	Overow protection	PP

Membrane Filters

Filter Material	Glass Fiber	MCE Membrane
Part Number	167100-20	167100-52
Brand	Pall	
Filter diameter	47mm	
Pore size	1µm	0.45µm
Package	100/PK	200/PK



Consumables



SWB250G



Bottle, Water

Code No	Product Information	Unit	Pack
SWB250G	Bottle Water 250ml, Dosed Sodium thio, Gamma, White Cap	Pack	250
SWB500G	Bottle Water 500ml, Dosed Sodium thio, Gamma	Pack	100



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Radiometer Analytical, Hach & Chem Supply Buffers and Solutions

Pacific Laboratory Products can to assist you to identify the appropriate solution for your tests.

For more information please contact one of our product specialists at sales@pacifclab.com.au.

pH Standards, Radiometer Analytical IUPAC Series Certified

Each bottle of certified pH or conductivity standard manufactured by Radiometer Analytical is supplied with two certificates: a Certificate of Conformity and Traceability drawn up according to ISO Guide 31(4) and a DKD Calibration Certificate. The back of the first certificate contains information about the composition and preparation of the standard as well as recommendations for storage and use to ensure optimum performance.

Safe storage
thanks to the airtight can.

A guaranteed value
the nominal value of the standard is guaranteed until first opening, even after several years' storage'.

A useful reference
a pH or conductivity temperature dependence table is printed on the bottle.

GLP - every day
the number of uses can be marked directly on the bottle in line with Good Laboratory Practice.









GLP - right from the start
the date of opening can be marked directly on the bottle.

Recommended shelf life
the observed typical shelf life after opening is printed on the bottle, ensuring timely use (2-3 months depending on the standards).

Accurate values
the nominal value and the tolerance of pH standards are given with a resolution of 3 significant decimals.

Foolproof calibration
each bottle of pH standard is supplied with 25 colour-coded beakers.



Catalogue Number	Product Information	Pack
 S11M001	Buffer Solution, pH 1.679 clear at 25°C, IUPAC with Certificate	500mL
 S11M002	Buffer Solution, pH 4.005 clear at 25°C IUPAC with Certificate	500mL
 S11M003	Buffer Solution, pH 6.865 clear at 25°C IUPAC with Certificate	500mL
 S11M004	Buffer Solution, pH 7.00 clear at 25°C IUPAC with Certificate	500mL
 S11M005	Buffer Solution, pH 7.413 clear at 25°C IUPAC with Certificate	500mL
 S11M006	Buffer Solution, pH 9.180 clear at 25°C IUPAC with Certificate	500mL
 S11M007	Buffer Solution, pH 10.012 clear at 25°C IUPAC with Certificate	500mL
 S11M008	Buffer Solution, pH 12.450 clear at 25°C IUPAC with Certificate	500mL

Buffers & Standard Solutions

Buffers General

Code No	Product Information	Pack
1490932	Acetate Buffer Solution, 100 Tests MDB	Pk/100 mL
2311149	Al Brine Buffer, Reagent	100 mL
2307242	Alkali 3.0 N Buffer Solution	100mL
1470953	Borate Buffer Solution, APHA, Nitrogen-Ammonia distillation	1000mL
2081599	Buffer Powder Pillows for Iron, Citrate Type	Pk/100
2493120	Chlorine ULR Buffer Solution, 1.5mL Ampule	Pk/20
2107669	Citrate Buffer Powder pillows for Manganese, 10mL	Pk/100
98399	Citrate Powder Pillows Buffer	Pk/100
1420299	Citrate Powder Pillows Buffer	Pk/100
2143166	Dilution Water Pillows Buffer	Pk/25
1430598	Dilution Water, 99mL, Buffer	Pk/25
258901	Fluoride Adj, Buffer	454g / Jar
2229653	Masking Solution, Buffer	1L
2335549	Phosphate Buffer Solution	500mL
2155332	Phosphate, Buffer Solution MDB	100mL
2375866	Phosphate, Buffer Solution Pillows	Pk/50



2307242



2493120

Buffers Hardness 1

Code No	Product Information	Pack
42453	Hardness 1 Buffer Solution	1000mL
42449	Hardness 1 Buffer Solution	500mL
42432	Hardness 1 Buffer Solution, MDB	100mL
42426	Buffer Solution, HDNS 1, SCDB	50mL



42432

COD Vials - Chemical Oxygen Demand

COD Digestion Vials - 16mm

Code No	Product Information	Pack
2415825	COD Digestion Vials, Ultra Low Range, 0.7 - 40.0 mg/L	25/pk
2415815	COD Digestion Vials, Ultra Low Range, 0.7 - 40.0 mg/L	150/pk
2125825	COD Digestion Vials, Low Range, 3 - 150 mg/L LR	25/pk
2125815	COD Digestion Vials, Low Range, 3 - 150 mg/L LR	150/pk
2125925	COD Digestion Vials, High Range, 20 - 1,500 mg/L	25/pk
2125915	COD Digestion Vials, High Range, 20 - 1,500 mg/L	150/pk
2415925	COD Digestion Vials, High Range Plus, 200 - 15,000 mg/L	25/pk
2415915	COD Digestion Vials, High Range Plus, 200 - 15,000 mg/L	150/pk



2125825

COD2 Digestion Vials - 16mm

Code No	Product Information	Pack
2565025	COD2 Digestion Vials, LR, Mercury-free, 3 - 150 mg/L	25/pk
2565125	COD2 Digestion Vials, HR, Mercury-free, 20 - 1,500 mg/L	25/pk
2565115	COD2 Digestion Vials, HR, Mercury-free, 20 - 1,500 mg/L	150/pk
2834325	COD2 Digestion Vials, UHR, Mercury-free, 200 - 15,000 mg/L	25/pk



2565115

Buffers & Standard Solutions

COD TNTPLUS™ - 13mm

Code No	Product Information	Pack
<input checked="" type="checkbox"/> TNT820	Chemical Oxygen Demand (COD) Reagent, TNTplus, ULR, 1.0 - 60.0 mg/L	24 tests
<input checked="" type="checkbox"/> TNT82006	Chemical Oxygen Demand (COD) Reagent, TNTplus, ULR, 1.0 - 60.0 mg/L	150 tests
<input checked="" type="checkbox"/> TNT821	Chemical Oxygen Demand (COD) Reagent, TNTplus, LR, 3 - 150 mg/L LR	25 tests
<input checked="" type="checkbox"/> TNT82106	Chemical Oxygen Demand (COD) Reagent, TNTplus, LR, 3 - 150 mg/L LR	150 tests
<input checked="" type="checkbox"/> TNT822	Chemical Oxygen Demand (COD) Reagent, TNTplus, HR, 20 - 1,500 mg/L	25 tests
<input checked="" type="checkbox"/> TNT82206	Chemical Oxygen Demand (COD) Reagent, TNTplus, HR, 20 - 1,500 mg/L	150 tests
<input checked="" type="checkbox"/> TNT825	Chemical Oxygen Demand (COD), Mercury-Free, TNTplus, 25 - 1,000 mg/L	25 tests
<input checked="" type="checkbox"/> TNT82506	Chemical Oxygen Demand (COD), Mercury-Free, TNTplus, 25 - 1,000 mg/L	150 tests
<input checked="" type="checkbox"/> TNT823	COD Reagent, TNTplus, UHR, 250 - 15,000 mg/L	25 tests
<input checked="" type="checkbox"/> TNT82306	COD Reagent, TNTplus, UHR, 250 - 15,000 mg/L	150 tests



TNT820



TNT821

Standards

Code No	Product Information	Pack
<input checked="" type="checkbox"/> 2833149	Wastewater Influent Inorganics Quality Control Standard	500 mL
<input checked="" type="checkbox"/> 2833249	Wastewater Effluent Inorganics Quality Control Standard	500 mL
<input checked="" type="checkbox"/> 2833510	Oxygen Demand Quality Control Standard, 16/pk - 10 mL Voluette® Ampule BOD - 396 mg/L BOD	
<input checked="" type="checkbox"/> 1218629	COD Standard Solution, 300 mg/L as COD (NIST)	200 mL
<input checked="" type="checkbox"/> 1218649	COD Standard Solution, 300 mg/L as COD (NIST)	500 mL
<input checked="" type="checkbox"/> 2253929	COD Standard Solution, 1,000 mg/L as COD (NIST)	200 mL
<input checked="" type="checkbox"/> 2672629	COD Standard Solution, 800 mg/L as COD (NIST)	200 mL



1218629

Hach Test Kits

Code No	Product Information	Pack
<input checked="" type="checkbox"/> 2107469	Acid Reagent Silica High Rng	Pk/100
<input checked="" type="checkbox"/> 2122332	Alkaline Cyanide Reagent MDB	100mL
<input checked="" type="checkbox"/> 2824349	Ammonia ISA Solution	500mL
<input checked="" type="checkbox"/> 2484600	Ampule Breaker, Pourite	Pk/25
<input checked="" type="checkbox"/> 1429449	Bleaching 3 Reagent Powder Pillows	Pk/100
<input checked="" type="checkbox"/> 105766	Chloride 2 Ind PP	100mL
<input checked="" type="checkbox"/> 2106269	Citric Acid, For Silica	Pk/100
<input checked="" type="checkbox"/> 1404169	Cyaniver 5 Reagent PP 25mL	Pk/100
<input checked="" type="checkbox"/> 230166	Ferrozine Reagent Solution Plws	Pk/50
<input checked="" type="checkbox"/> 2767345	TNT Kit, Reactive Phosphate HR, inc. Reagent/Vials for up to 50 tests	Each



2484600

ISE Calibration Standards, Hach







Code No	Product Information	Pack
<input checked="" type="checkbox"/> 2406549	Nitrogen, Ammonia 100mg/L 500mL	500 mL
<input checked="" type="checkbox"/> 4457649	Calcium Standard Solution, 100mg/L 500mL	500 mL
<input checked="" type="checkbox"/> 2240349	Calcium Standard Solution, 1000mg/L 500mL	500 mL
<input checked="" type="checkbox"/> 2370853	Chloride Standard Solution, 0.00282N 1L	1L
<input checked="" type="checkbox"/> 18349	Chloride Standard Solution 1000mg/L 500mL	500 mL



2767345






Buffers & Standard Solutions

	29149	Fluoride Standard Solution 1.0mg/L 500mL	500 mL
	35949	Fluoride Standard Solution 10mg/L 500mL	500 mL
	204649	Nitrogen, Nitrate 1.0mg/L 500mL	500 mL
	30749	Nitrogen, Nitrate 10mg/L 500mL	500 mL
	194749	Nitrogen, Nitrate 100mg/L 500mL	500 mL
	2351749	Potassium Standard, 100mg/L 500mL	500 mL



2370853

Molar KCl solutions



Code No	Product Information	Pack	
	C20C250	Solution 0.1M KCl (12.88mS/cm at 25C) KS910	500mL
	C20C270	Solution 0.01M KCl (1.413 mS/cm at 25C) KS920	500mL
	C20C280	Solution 0.001M KCl (146.9us/cm at 25C) KS930	500mL



C20C250

pH and Conductivity Measurement

Buffer Set for MiniLab Meters







Code No	Product Information	Pack	
	CB40	Buffer Kit, pH 7 Solutions in Dropper Bottles	3 x 15ml
	CB45	Buffer Kit, pH 4, 7, 10 Solutions in Dropper Bottle	3 x 15ml



CB45

* Find MiniLab Meters on page 28 





Calibration Singlet™

Code No	Product Information	Pack	
	2770020	Calibration Singlet™, Single-Use pH Buffer, pH 4.01 (NIST)	20pk
	2770120	Calibration Singlet™, Single-Use pH Buffer, pH 7.00 (NIST)	20pk
	2770220	Calibration Singlet™, Single-Use pH Buffer, pH 10.01 (NIST)	20pk
	2771320	Calibration Singlet™, Single-Use Conductivity Standard, 147 µS/cm	20pk
	2771420	Calibration Singlet™, Single-Use Conductivity Standard, 1413 µS/cm	20pk
	2771520	Calibration Singlet™, Single-Use Cond. Standard, 12.88 mS/cm	20pk



2769820

Conductivity Standards - Radiometer Analytical Certified

Code No	Product Information	Pack	
	S51M001	Conductivity standard 111.3mS/cm +/- 0.010 at 25C KCl Solution	500mL
	S51M002	Conductivity standard 12.85mS/cm +/- 0.010 at 25C KCl Solution	500mL
	S51M003	Conductivity standard 1408uS/cm +/- 0.010 at 25C KCl Solution	500mL
	S51M013	Conductivity standard 25.0uS/cm +/- 0.010 at 25C NaCl Solution	250mL



S51M013

pH Buffer Pillows

Code No	Product Information	Pack	
	2226995	Buffer Solution, pH 4.01, Powder Pillows R	Pk/15
	2226966	Buffer Solution, pH 4.01, Powder Pillows R	Pk/50
	2226964	Buffer Powder Pillows, pH 4.01 (NIST), Color - Coded Red	Pk/250
	2227095	Buffer Powder Pillows, pH 7.00 (NIST), Color - Coded Yellow	Pk/15
	2227066	Buffer Powder Pillows, pH 7.00 (NIST), Color - Coded Yellow	Pk/50
	2227064	Buffer Powder Pillows, pH 7.00 (NIST), Color - Coded Yellow	Pk/250



2226966

Buffers & Standard Solutions

<input checked="" type="checkbox"/>	2227195	Buffer Solution, pH 10.01, Powder Pillows Blue	Pk/15
<input checked="" type="checkbox"/>	2227166	Buffer Solution, pH 10.01, Powder Pillows Blue	Pk/50
<input checked="" type="checkbox"/>	2227164	Buffer Solution, pH 10.01, Powder Pillows Blue	Pk/250
<input checked="" type="checkbox"/>	2299264	Buffer Solution, pH 4.01, Red and pH7.00	10 Pillows x 2

Colourless

Code No	Product Information	Pack	
<input checked="" type="checkbox"/>	1405566	Buffer, pH 6.00, Powder Pillows	Pk/50
<input checked="" type="checkbox"/>	1409895	Buffer, pH 6.86, Powder Pillows	Pk/15
<input checked="" type="checkbox"/>	1407995	Buffer, pH 8.00, Powder Pillows	Pk/15
<input checked="" type="checkbox"/>	1410766	Buffer, pH 9.00, PP 50mL	Pk/50

Color-Coded

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



2227064

pH Buffer Solutions - Chem-Supply / Scharlau Range

Code No	Product Information	Pack	
<input checked="" type="checkbox"/>	BL047-500M	Buffer Solution, pH 4.0 (20°C) Colour - Coded Red	500mL
<input checked="" type="checkbox"/>	SO20040500	Buffer Solution, pH 4.0 (20°C) Red - Coloured	500mL
<input checked="" type="checkbox"/>	BL076-500M	Buffer Solution, pH 4.0 (20°C) Colourless	500mL
<input checked="" type="checkbox"/>	BL047-1L	Buffer Solution, pH 4.0 (20°C) Colour - Coded Red	1L
<input checked="" type="checkbox"/>	SO20070500	Buffer Solution, pH 7.00 (20°C) Yellow - Coloured	500mL
<input checked="" type="checkbox"/>	BL048-500M	Buffer Solution, pH 7.00 (20°C) Colour - Coded Green	500mL
<input checked="" type="checkbox"/>	BL048-1L	Buffer Solution, pH 7.00 (20°C) Colour - Coded Green	1L
<input checked="" type="checkbox"/>	BL077-500M	Buffer Solution, pH 7.00 (20°C) Colourless	500mL
<input checked="" type="checkbox"/>	BL019-500M	Buffer Solution, pH 10.0 (20°C) Colour-Coded Blue	500mL
<input checked="" type="checkbox"/>	SO20100500	Buffer Solution, pH 10.00 (20 °C), Blue-Coloured	500mL
<input checked="" type="checkbox"/>	BL078-500M	Buffer Solution, pH 10.0 (20°C) Colourless	500mL
<input checked="" type="checkbox"/>	BL019-1L	Buffer Solution, pH 10.0 (20°C) Colour-Coded Blue	1L



Precise, accurate, and reliable buffer solutions.



pH Buffer Solutions - Hach Range

Code No	Product Information	Pack	
<input checked="" type="checkbox"/>	2283449	Buffer Solution, Red pH4.01	500mL
<input checked="" type="checkbox"/>	2283549	Buffer Solution, Yellow pH7.00	500mL
<input checked="" type="checkbox"/>	2283649	Buffer Solution, Blue pH10.01	500mL



2283449

pH Buffer Solutions / Colourless - Hach Range

Code No	Product Information	Pack	
<input checked="" type="checkbox"/>	1222349	Buffer Solution, pH4.01, Colorless	500mL
<input checked="" type="checkbox"/>	1222249	Buffer Solution, pH7.00, Colorless	500mL
<input checked="" type="checkbox"/>	1222149	Buffer Solution, pH10.01, Colorless	500mL



1222349

pH Buffer Solutions - Technical Grade - Radiometer Analytical

Code No	Product Information	Pack	
<input checked="" type="checkbox"/>	S11M009	Buffer Solution, pH 1.09 clear at 25°C Technical Grade	500mL
<input checked="" type="checkbox"/>	S11M010	Buffer Solution, pH 4.65 clear at 25°C Technical grade	500mL
<input checked="" type="checkbox"/>	S11M011	Buffer Solution, pH 9.23 clear at 25°C Technical Grade	500mL



S11M010



Buffers & Standard Solutions

PH Maintenance, Filling Storage Solutions Cleaning

Code No	Product Information	Pack
<input checked="" type="checkbox"/> S16M001	Cleaning Solution Renovo N Normal Overnight Soak	250ml
<input checked="" type="checkbox"/> S16M002	Cleaning Solution Renovo X Strong Quick Soak	250ml
<input checked="" type="checkbox"/> C20C380	Cleaning Solution Thiourea for Electrode AgCl Pin Maintenance	250ml



S16M001 - S16M002 - C20C380

Maintenance

Code No	Product Information
<input checked="" type="checkbox"/> S91M001	GK ANNEX Electrode Maintenance Kit. The GK ANNEX Electrode Maintenance Kit contains all you need for regular maintenance of combined pH, glass and reference electrodes with saturated potassium chloride salt-bridge: - Solutions for normal and intensive cleaning - KCl as saturated and crystals for refilling - GLP Logbook to keep note of calibration and maintenance procedures - Utensils and easy-to-follow instructions



GK ANNEX Kit

Storage & Filling for Combined and Reference Electrodes

Code No	Product Information	Pack
<input checked="" type="checkbox"/> S21M001	(KCl-C) Crystals KCl	15g
<input checked="" type="checkbox"/> S21M002	(KCl-L) Saturated Solution of KCl	100ml
<input checked="" type="checkbox"/> S21M004	(KCl-Ag) 3M KCl Solution Saturated with AgCl	100ml
<input checked="" type="checkbox"/> S21M007	(KS160-30) Saturated K2SO4 Solution	30ml
<input checked="" type="checkbox"/> S21M008	(LiCl-30) 1 M LiCl Solution	30ml
<input checked="" type="checkbox"/> S21M009	(KS120-30) Saturated KCl + AgCl Solution	30ml
<input checked="" type="checkbox"/> S21M010	(KCl-L-30) Saturated Solution of KCl	30ml
<input checked="" type="checkbox"/> S21M011	(KCl-Ag-30) 3M KCl Solution Saturated with AgCl	30ml
<input checked="" type="checkbox"/> C20C300	(KS100) Saturated KCl Solution	500ml
<input checked="" type="checkbox"/> C20C310	(KS120) Saturated KCl + AgCl Solution	500ml
<input checked="" type="checkbox"/> C20C320	(KS100) KCl Solution 3M	500ml
<input checked="" type="checkbox"/> C20C500	(KS160) Saturated K2SO4 Solution	500ml



S21M001



S21M002



S21M010



C20C300

Reagents

Reagents BOD

Code No	Product Information	Pack
<input checked="" type="checkbox"/> 1416066	BOD Nutrient Buffer Pillows, prepares 300mL	Pk/50
<input checked="" type="checkbox"/> 1486166	BOD Nutrient Buffer Pillows, prepares 3L	Pk/50
<input checked="" type="checkbox"/> 1486266	BOD Nutrient Buffer Pillows, prepares 6L	Pk/50
<input checked="" type="checkbox"/> 1486398	BOD Nutrient Buffer Pillows, prepares 19L	Pk/25
<input checked="" type="checkbox"/> 2436466	Nutrient Buffer Pillows, 4mL size for 4L	4mL - Pk/50



1486266

Replacement for application test Kits

Code No	Product Information	Pack
<input checked="" type="checkbox"/> 1222220	Buffer Solution, pH 7.00 (NIST) Colourless	25mL



1222220

💧 pH Measurement/Conductivity/DO/ORP	3	🔗
💧 Spectroscopy	29	🔗
💧 Colorimetry	36	🔗
🔴 Combined pH, Conductivity and Colorimetry Measurement	40	🔗
🟢 Turbidity Measurement	41	🔗
🟡 Flocculation Systems (Jar Tester)	44	🔗
🟡 Heavy Metals in Water Measurement	46	🔗
🔴 Titration	48	🔗
💧 Filtration	50	🔗
💧 Buffers & Solutions	57	🔗

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General Index

A	
Accessories, Radiometer Analytical	21
B	
BOD, Reagents	58
Bottle, Waste, Filtration, Rocker	55
Bottle, Water, Consumables	56
Buffers, General	58
Buffers, Hardness 1	58
Buffers, IUPAC Series, Hach	57
Buffers, Set for MiniLab Meters, Hach	61
Buffers, Solutions, Technical Grade, Radiometer Analytical	61
C	
Calibration Singlets	60
Cleaning Solutions, Radiometer Analytical	62
Colorimeter, Handheld, DR900, Hach	38 - 39
Colorimeter, Pocket, Hach	36 - 37
Conductivity Standards, Radiometer Analytical	60
Connection Cables for Screw Cap Electrodes, Radiometer Analytical	21
COD Vials, Hach	59
E	
Electrodes, Conductivity, Starter Series, Ohaus	27
Electrodes, Conductivity Cells, Radiometer Analytical	19
Electrodes, DO, Starter Series, Ohaus	27
Electrodes, Ion-Selective, Radiometer Analytical	19 - 20
Electrodes, Metal & Combined, Radiometer Analytical	17
Electrodes, ORP, Starter Series, Ohaus	27
Electrodes, pH, Starter Series, Ohaus	26
Electrodes, pH & Combined, Radiometer Analytical	16
Electrodes, Radiometer Analytical	15 - 21
Electrodes, Red Rod Reference, Radiometer Analytical	17
Electrodes, Reference, Radiometer Analytical	18
Electrodes, Reference, Starter Series, Ohaus	27
Electrodes, Temperature, Starter Series, Ohaus	27
Electrodes, Temperature Sensor, Radiometer Analytical	17
F	
Filling Solutions	62
Filter, Membrane	55
Filter, Syringe	56
Filtration Sets, Disposable, Rocker	55
Filtration Systems, Rocker	51 - 53
Fluorimeter, ANDalyze	46 - 47
Funnel, Disposable, Rocker	55
H	
Hach Test Kits	59
I	
ISE Calibration Standards, Hach	59

M	
Maintenance Solutions, Hach	62
Manifolds, Multi-Branch Filtration, Rocker	54
Membrane Filters, Glass, Rocker	55
Membrane Filters, MCE Membrane, Rocker	55
Meter Pen, pH, Conductivity, Starter Series Ohaus	28
Meter, pH, Benchtop, HQd Dedicated, Hach	8
Meter, pH, Benchtop, HQd Multiparameter, Hach	8
Meter, pH, Benchtop, SensION+, Hach	11
Meter, pH, Benchtop, Starter Series, Ohaus	22 - 25
Meter, pH, Portable, HQd Multiparameter, Hach	3
Meter, pH, Portable, HQd Single, Hach	3
Meter, pH, Portable, Starter Series, Ohaus	9 - 10
Molar, KCl Solutions, Radiometer Analytical	60
P	
pH, Buffers, IUPAC Series, Hach	57
pH, Buffer Pillows	60, 61
pH, Buffers, Set for MiniLab Meters, Hach	60
pH, Buffer Solutions, Chem-Supply / Scharlau range	61
pH, Buffer Solutions, Colourless, Chem-Supply	61
pH, Buffer Solutions, Hach Range	61
pH, Buffer Solutions, Colourless, Hach range	61
pH, Buffer Solutions, Technical Grade, Radiometer Analytical	61
Plug Adaptor BNC Type, Radiometer Analytical	21
Plug Adaptor Type7, Radiometer Analytical	21
Portable Parallel Analyzer (PPA), Hach	40
Probes, HQd IntellICAL, Hach	4 - 7
Probes, SensION+, Hach	12 - 14
Pumps, Vacuum, Rocker	50
R	
Reagents, BOD	62
Reagents, Replacements for application test kits	62
S	
Sample Changer, Hach	49
SensION+ Benchtop Meters, Hach	11
SensION+ Probes, Hach	12 - 14
Spectrophotometer, DR1900, Portable, Hach	29 - 30
Spectrophotometer, DR3900, Hach	31 - 32
Spectrophotometer, DR6000, Hach	33 - 34
Storage Solutions	62
T	
Test Kits, Hach	59
Titrator, Titralab, AT1000 Series, Hach	48 - 49
TNT Plus Vials Chemistries	35
Turbidimeter, 2100 Series, Laboratory, Hach	41
Turbidimeter, 2100Q & 2100Qis, Portable, Hach	42 - 43
V	
Vacuum Filtration Systems, Rocker	50 - 55
Vacuum Pumps, Rocker	50





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