



We're the
Professionals
You Can Trust!

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In 1978, Oscar and Anna Nardo founded Hanna Instruments in Padova, Italy. Since then, Hanna Instruments has grown to be a worldwide leader in the development of electro-analytical instrumentation. Hanna's success can be attributed to the creation of innovative instruments that cater to customers who typically wouldn't have used such instruments. We strive to create testing equipment that is easy to use, accurate, and readily available.

HANNA Equipments (India) Pvt Ltd. represents Hanna Instruments in INDIA, operating from its Navi Mumbai headquarters. Our presence in India allows us to build stronger relationships with customers and provide expert local support. We are committed to offering practical and affordable solutions to meet our customers' testing needs.

We meet you where you are

Whether in the lab or out in the field, we have just what you need to test.

We're more than just a pH company!

We make a wide array of testing tools for various industries and applications.

We create our products from design to completion

At Hanna, we take pride in every single product that we build. From an original idea scribbled on a piece of paper in a notebook to a finished, final product that is boxed and ready for testing, we oversee every aspect of the manufacturing process. It is this level of attention to detail that sets us apart.

We are known for innovation

1986

World's first electronic pocket sized pH tester

2010

World's first handheld colorimeters (Checker®HC) to offer ease of use and high accuracy in a palm sized design

2013

World's most innovative pH, EC and DO handheld/portable/wall-mount meter...edge®

2014

World's first pH electrode with Bluetooth Smart technology (HALO®)

2021

World's first multiparameter meter with optical dissolved oxygen technology to have Bluetooth® connectivity

2024

World's First Multi-Channel Bench Meter with Built-In BOD Mode - Effortless Batch BOD Analysis Without Extra Software



**We've been doing
this for over 45 years and counting!**

HANNA®
instruments

HI931

Automatic Potentiometric Titration System
(pH/mV/ISE)

The HI931 Automatic Titrator is fully customizable and titrate for a variety of measurements at the push of a button including acids, bases, redox, and selective ions. It functions as a titrator, pH meter, mV/ORP meter, and ISE meter.

- Unmatched 40,000-step dosing pump for small volumes of titrant
- 50% smaller footprint to ensure more productivity in less space
- Multiple titration types
- Clip Lock™ exchangeable burette system
- Smarter stirring

Ordering information:

HI931-02 (230V) includes one analog board, overhead propeller stirrer with stand, 25 mL glass burette, dosing pump, temperature sensor, USB cable, USB flash drive, PC software & Quality Certificate.



HI932

Automatic Potentiometric Titration System
(pH/mV/ISE)

The HI932 Advanced Automatic Titrator is a compact powerhouse for direct measurements, and even handle complex samples through back titrations. For maximum efficiency, combine the HI932 with the HI922 Autosampler to achieve unparalleled accuracy effortlessly.

- Reduce downtime and increase efficiency when you perform multiple analyses linked in sequence
- Works seamlessly with the HI922 Autosampler for automation of up to 18 samples
- Multiple equivalence point

Ordering information:

HI932C1-02 (230V) includes titrator with one analog board

HI932C2-02 (230V) includes titrator with two analog boards

All models include: overhead propeller stirrer with stand, 25 mL glass burette, dosing pump, temperature sensor, USB cable, USB flash drive PC software & quality certificate.



HI933

Karl Fischer Volumetric Titrator
for Moisture Determination

The HI933 KF Titrator analyzes water content ranging from 100 ppm to 100%.

- Powerful built-in algorithms for termination criteria based on fixed mV endpoint or absolute/relative drift
- Titrant standardization and sample analysis averaging
- Minimized water vapor entry with the Sealed Solvent System
- Support for 100 titration methods

Ordering information:

HI933-02 (230V) is supplied with HI76320 dual platinum pin electrode, dosing pump, 5 mL burette assembly with tubing, air pump/stirrer assembly with tubing, beaker and bottle top assemblies and all fittings, desiccant cartridges (4) with indicating desiccant, stir bar, waste bottle, calibration key, USB cable, power cable, USB flash drive, quality certificate, ISO 8655 burette compliance report, and instruction manual binder.





HI934 Karl Fischer Coulometric Titrator

The HI934 is a Karl Fischer analyzer that analyzes water content ranging from 1 ppm to 5%.

- Powerful built-in algorithms for termination criteria based on fixed mV endpoint or absolute/relative drift
- Minimized water vapor entry with the Sealed Solvent System
- Support for 100 titration methods

Ordering information:

HI934D-02 (230V) is supplied with diaphragm, generator electrode
HI934-02 (230V) is supplied without diaphragm

All Models Include: dual platinum pin electrode, air pump/stirrer assembly, titration vessel assembly (glass vessel, accessory port stopper, sample port cap and septum, stir bar, desiccant, desiccant cartridge, fittings), vessel support with adapter, pump locking screw with plastic head, reagent bottle assembly (bottle cap, desiccant, desiccant cartridge, fittings, tubing (silicone and PTFE)), water bottle assembly (waste bottle, bottle cap, desiccant, desiccant cartridge, fittings, tubing (silicone and PTFE)), calibration key, reagent exchange adapter, accessory holder assembly, joint grease, Karl Fischer generator electrode (removable generator electrode cable), USB cable, USB storage device, HI900 PC application software, power adapter, quality certificate and instruction manual binder.

HI922 Autosampler

The HI922 Autosampler is an automated titration sample handling system designed for use with the HI932 Automatic Titration System, making multiple sample titrations quick and easy. With the Autosampler, up to 18 samples can be run consecutively. The HI922 Autosampler interfaces directly with the HI932 to access titration methods. Once a titration method is established, the user can fully customize the automation sequence of their samples for this method. Sample names and size can be customized or auto-filled with preset values. One beaker can be designated for storage

- Automate up to 18 samples
- 16 or 18 Sample Tray
- Built-in Magnetic Stirrer
- Built-in RFID

Ordering information:

Choose your Autosampler configuration:

x= **1** 16 sample tray; **2** 18 sample tray

y= **0** no peristaltic pump; **1** one peristaltic pump;

2 two peristaltic pumps; **3** three peristaltic pumps

z= **0** no membrane pump



HI84500 - HI84502 - HI84529 - HI84530
HI84531 - HI84532 - HI84533 - HI84534

Mini titrators

- Piston driven pump with dynamic dosing
- CAL Check™
- Log-on-demand
- Graphic mode/exportable data
- Automatic stirrer speed control
- GLP features
- Easy-to-use interface
- Help features
- pH/mV meter



TITRATORS



HI84500
Sulfur Dioxide Mini Titrator
for **Wine Analysis**



HI84502
Total Acidity Mini Titrator
and pH Meter for **Wine Analysis**



HI84529
Titratable Acidity Mini Titrator
and pH Meter for the **Dairy Industry**



HI84530
Total Titratable Acidity Titrator
and pH Meter for **Water Analysis**



HI84531
Titratable Alkalinity Titrator
and pH Meter for **Water Analysis**



HI84532
Titratable Acidity Mini Titrator
and pH Meter for **Fruit Juice**



HI84533
Formol Number Mini Titrator
and pH Meter for **Wines
and Fruit Juices**



HI84534
Titratable Acidity Mini Titrator
and pH Meter for **Vinegar**





Ordering information:
HI801-02 (230V) is supplied with sample cuvette and cap, 22 mm (4 pcs.), cuvette adapters (3 pcs.), cloth for wiping cuvettes, scissors, USB cable, 15 VDC power adapter, USB flash drive, instrument quality certificate and instruction manual.

- Accessories**
HI7408011 replacement 16mm vial adapter
HI7408012 replacement 10mm vial adapter
HI7408013 replacement 13mm vial adapter
HI7408014 replacement Tungsten-Halogen lamp
HI7408015 replacement battery

HI802
Visible Spectrophotometer
with Method Identification via Barcode Reader

HI802 iris visible spectrophotometer quickly identifies Hanna Instruments vial methods by reading the barcode on reagent vials across multiple methods that support the use of a single-zero measurement. The barcode reader for method identification is removable to allow other methods and cuvette adapters (included) to be used for maximum versatility. HI802 iris® visible spectrophotometer is portable and allows for measurement in the spectrum of all wavelengths of visible light and not just pre-specified wavelengths. Spectrophotometers work by isolating light at specific wavelengths from white light.

- Supplied with 103 factory methods
- Create up to 100 user methods
- Automatic method identification of vial samples
- Vial barcode reader
- Shared single-zero measurement across multiple vial methods
- 5 cuvette types (16 mm round, 22 mm round, 13 mm vial, 10 mm square, 50 mm rectangular) with automatic detection
- Data storage for 9999 measurements with ability to auto log results
- Simplified data transfer to a PC or Mac
- Field upgradeable firmware
- Rechargeable battery

Ordering information:
HI802-01 (115V) and HI802-02 (230V) is supplied with sample cuvette and cap, 22 mm (4 pcs.), cuvette adapter (3 pcs.), vial adapter with barcode reading feature , cloth for wiping cuvettes, scissors, USB cable, 15 VDC power adapter, USB flash drive, instrument quality certificate, and instruction manual.

- Accessories**
HI7408018 replacement 13 mm vial adapter with barcode reader
HI7408011 replacement 16 mm vial adapter
HI7408012 replacement 10 mm vial adapter
HI7408014 replacement Tungsten-Halogen lamp
HI7408015 replacement battery

HI801
Spectrophotometer
with advanced split beam optical system, customizable methods, and rechargeable battery
iris portable spectrophotometer allows for measurement in the spectrum of all wavelengths of visible light and not just pre-specified wavelengths.

- Supplied with 80 methods for chemical analysis
- Create up to 100 user methods
- 5 cuvette types with automatic detection
- 9999 measurements with ability to auto log results

General Specifications	HI801 iris Spectrophotometer
Wavelength Range	340 to 900 nm
Wavelength Resolution	1 nm
Wavelength Accuracy	±1.5 nm
Photometric Range	0.000 to 3.000 Abs
Photometric Accuracy	5 mAbs at 0.000 to 0.500 Abs, 1 % at 0.500 to 3.000 Abs
Stray Light	< 0.1 % T at 340 nm with NaNO ₂
Measurement Mode	transmittance (%), absorbance and concentration
Spectral Bandwidth	5nm
Number of Methods	up to 150 factory (96 pre-loaded), up to 100 user
Data Points Stored	9999 measured values
Wavelength Selection	automatic, based on the selected method (editable for user methods only)
Light Source	tungsten halogen lamp
Optical System	split beam



General Specifications	HI802 iris
Wavelength Range	340 to 900 nm
Wavelength Resolution	1 nm
Wavelength Accuracy	±1.5 nm
Photometric Range	0.000 to 3.000 Abs
Photometric Accuracy	5 mAbs at 0.000 to 0.500 Abs, 1 % at 0.500 to 3.000 Abs
Stray Light	< 0.1 % T at 340 nm with NaNO ₂
Measurement Mode	transmittance (%), absorbance and concentration
Spectral Bandwidth	5nm
Number of Methods	up to 150 factory (100 pre-loaded), up to 100 user
Data Points Stored	9999 measured values
Wavelength Selection	automatic, based on the selected method (editable for user methods only)
Light Source	tungsten halogen lamp
Optical System	split beam

SPECTROPHOTOMETER

HI83300 Family Multiparameters Photometers with Digital pH Electrode Input

The HI83300 family of multiparameter photometers features seven models to cover a wide variety of applications. These meters are compact and versatile making them ideal for both benchtop or portable operation.

Aquaculture	HI83303
Boilers & Cooling Towers	HI83305
Environmental Analysis	HI83306
Laboratory Analysis	HI83300
Nutrient Analysis	HI83325
Pool & Spa Applications	HI83326
Wastewater	HI83224
Wastewater	HI83314
Water Conditioning	HI83308



PHOTOMETERS

HI839800 COD Test Tube Heater

The HI839800 COD Test Tube Heater is an easy to use thermoreactor constructed of durable materials. The aluminum block incorporates a 25 vial capacity and a well for a reference temperature probe. Its well-marked user interface provides intuitive operation, equipped with two arrows to set the built-in timer and a temperature button with two predefined temperature settings: 170°C,150°C and 105°C. Additional features include status indicator lights, a thermal fuse to prevent overheating, and continuous LCD display.

- 170 °C (COD methods)
- 150 °C (COD methods, Iron Total, Phosphorus Acid Hydrolyzable, Phosphorus Total methods)
- 105 °C (Chromium (VI) and Total, Nitrogen Total methods)



HI839150 COD Reactor for Chemical Oxygen Demand and User-specific Analysis

The HI839150 is a robust 25 vial capacity thermo-reactor for COD determination of industrial wastewater. The reactor has two stored digestion temperature programs that support analysis methods at:

- 150°C (all COD methods, Iron Total, Phosphorus Acid Hydrolyzable, Phosphorus Total methods)
- 105°C (Chromium and Nitrogen Total methods)



HI83399

Multiparameter Photometer

with COD for Water and Wastewater

with Digital pH Electrode Input



HI83399 benchtop photometer measures key water and wastewater quality parameters using methods that allow for multiple ranges and variations in chemistry for specific applications. The Chemical Oxygen Demand (COD) parameter is included for industrial and municipal wastewater treatment.

The Phosphorous and Nitrogen parameters included are beneficial to municipal wastewater treatment customers that need to monitor their biological and chemical nutrient removal process. This photometer features an innovative optical system that uses LEDs, narrow band interference filters, focusing lens and both a silicon photodetector for absorbance measurement and a reference detector to maintain a consistent light source ensures accurate and repeatable photometric readings every time.

Compact and versatile, the HI83399 is ideal for both benchtop and portable operations. With the CAL Check feature users are able to validate the performance of the instrument and apply a user calibration (if necessary). Hanna Instruments® CAL Check cuvettes are made with NIST traceable standards.

To save valuable laboratory benchtop space, the HI83399 doubles as a professional pH meter with its digital pH/temperature electrode input and one or two-point calibration. Now one meter can be used for both photometric and pH measurements.

Ordering Info

HI83399 is supplied with sample cuvettes and caps (4 ea.), digestion vials (6), vial adapter, cloth for wiping cuvettes, USB to micro USB cable connector, power adapter and instruction manual.

Parameter	Range	Method
Alkalinity	0 to 500 mg/L (as CaCO ₃)	Colorimetric
Alkalinity, Marine	0 to 300 mg/L (as CaCO ₃)	Colorimetric
Aluminum	0.00 to 1.00 mg/L (as Al ₃ ⁺)	aluminon
Ammonia Low Range	0.00 to 3.00 mg/L (as NH ₃ -N)	Nessler
Ammonia Low Range (16 mm vial)	0.00 to 3.00 mg/L (as NH ₃ -N)	Nessler
Ammonia Medium Range	0.00 to 10.00 mg/L (as NH ₃ -N)	Nessler
Ammonia High Range	0.0 to 100.0 mg/L (as NH ₃ -N)	Nessler
Ammonia High Range (16 mm vial)	0.0 to 100.0 mg/L (as NH ₃ -N)	Nessler
Bromine	0.00 to 8.00 mg/L (as Br ₂)	DPD
Calcium	0 to 400 mg/L (as Ca ²⁺)	Oxalate
Calcium, Marine	200 to 600 mg/L (as Ca ²⁺)	Zincon
Chloride	0.0 to 20.0 mg/L (as Cl ⁻)	Mercury (II) thiocyanate
Chlorine Dioxide	0.00 to 2.00 mg/L (as ClO ₂)	Chlorophenol red
Chlorine Dioxide, Rapid Method	0.00 to 2.00 mg/L (as ClO ₂)	DPD
Chlorine, Free	0.00 to 5.00 mg/L (as Cl ₂)	DPD
Chlorine, Free Ultra Low Range	0.000 to 0.500 mg/L (as Cl ₂)	DPD
Chlorine, Total	0.00 to 5.00 mg/L (as Cl ⁻)	DPD
Chlorine, Total Ultra Low Range	0.000 to 0.500 mg/L (as Cl ₂)	DPD
Chlorine, Total Ultra High Range	0 to 500 mg/L (as Cl ₂)	Standard Methods 4500-Cl
Chromium(VI) Low Range	0 to 300 µg/L (as Cr ⁶⁺)	Diphenylcarbohydrazide
Chromium(VI) High Range	0 to 1000 µg/L (as Cr ⁶⁺)	Diphenylcarbohydrazide
COD Low Range (16 mm vial)	0 to 150 mg/L (as O ₂)	EPA 410.4
COD Medium Range (16 mm vial)	0 to 1500 mg/L (as O ₂)	EPA 410.4
COD HR (16 mm vial)	0 to 15000 mg/L (as O ₂)	EPA 410.4
COD UHR (16 mm vial)	0 to 60.0 g/L (as O ₂)	EPA 410.4
Color of Water	0 to 500 PCU (Platinum Cobalt Units)	Colorimetric platinum cobalt
Copper Low Range	0.000 to 1.500 mg/L (as Cu ²⁺)	Bicinchoninate
Copper High Range	0.00 to 5.00 mg/L (as Cu ²⁺)	Bicinchoninate
Cyanuric Acid	0 to 80 mg/L (as CYA)	Turbidimetric
Fluoride Low Range	0.00 to 2.00 mg/L (as F ⁻)	SPADNS
Fluoride High Range	0.0 to 20.0 mg/L (as F ⁻)	SPADNS
Hardness, Calcium	0.00 to 2.70 mg/L	Calmagite
Hardness, Magnesium	0.00 to 2.00 mg/L (ppm) (as CaCO ₃)	EDTA
Hardness, Total Low Range	0 to 250 mg/L (as CaCO ₃)	EPA 130.1
Hardness, Total Medium Range	200 to 500 mg/L (as CaCO ₃)	EPA 130.1
Hardness, Total High Range	400 to 750 mg/L (as CaCO ₃)	EPA 130.1
Hydrazine	0 to 400 µg/L (as N ₂ H ₄)	p-Dimethylaminobenzaldehyde
Iodine	0.0 to 12.5 mg/L (as I ₂)	DPD
Iron Low Range	0.000 to 1.600 mg/L (as Fe)	TPTZ
Iron High Range	0.00 to 5.00 mg/L	phenanthroline
Magnesium	0 to 150 mg/L (as Mg ²⁺)	Calmagite
Manganese Low Range	0 to 300 µg/L (as Mn)	PAN
Manganese High Range	0.0 to 20.0 mg/L (as Mn)	Periodate
Molybdenum	0.0 to 40.0 mg/L (as Mo ⁶⁺)	Mercaptoacetic acid
Nickel Low Range	0.000 to 1.000 mg/L (as Ni)	PAN
Nickel High Range	0.00 to 7.00 g/L (as Ni)	EDTA
Nitrate	0.0 to 30.0 mg/L (as NO ₃ ⁻ - N)	Cadmium reduction
Nitrate (16 mm vial)	0.0 to 30.0 mg/L Nitrate (as NO ₃ ⁻ - N)	Chromotropic acid
Nitrite Ultra Low Range, Marine	0 to 200 µg/L (as NO ₂ ⁻ - N)	Diazotization
Nitrite Low Range	0 to 600 µg/L (as NO ₂ ⁻ - N)	Diazotization
Nitrite High Range	0 to 150 mg/L (as NO ₂ ⁻ - N)	Ferrous sulfate
Nitrogen, Total Low Range (16 mm vial)	0.0 to 25.0 mg/L (as NO ₃ ⁻ - N)	Chromotropic acid
Nitrogen, Total High Range (16 mm vial)	0 to 150 mg/L (as N)	Chromotropic acid
Oxygen, Dissolved	0.0 to 10.0 mg/L (as O ₂)	Winkler
Oxygen, Scavengers	0.00 to 1.50 mg/L (as Carbohydrazide)	Iron reduction
Oxygen, Scavengers	0 to 1000 µg/L (as DEHA)	Iron reduction
Oxygen, Scavengers	0.00 to 2.50 mg/L (as Hydroquinone)	Iron reduction
Oxygen, Scavengers	0.00 to 4.50 mg/L (as Iso-ascorbic acid)	Iron reduction
Ozone	0.00 to 2.00 mg/L (as O ₃)	DPD
pH	6.5 to 8.5 pH	Phenol red
Phosphate Ultra Low Range, Marine	0 to 200 µg/L (as P)	Ascorbic acid
Phosphate Low Range	0.00 to 2.50 mg/L (ppm)	Ascorbic acid
Phosphate High Range	0.0 to 30.0 mg/L (as PO ₄ ³⁻)	Amino acid
Phosphorus Reactive Low Range (16 mm vial)	0.00 to 1.60 mg/L (as P)	Ascorbic acid
Phosphorus Reactive High Range (16 mm vial)	0.0 to 32.6 mg/L (as P)	Vanadomolybdophosphoric acid
Phosphorus Acid Hydrolyzable (16 mm vial)	0 to 1.6 mg/L (ppm) (as P)	Ascorbic acid
Phosphorus, Total Low Range (16 mm vial)	0.00 to 1.15 mg/L (as P)	Ascorbic acid
Phosphorus, Total High Range (16 mm vial)	0.0 to 32.6 mg/L (as P)	Vanadomolybdophosphoric acid
Potassium	0.0 to 20.0 mg/L (as K)	Turbidimetric tetraphenylborate
Silica Low Range	0.00 to 2.00 mg/L (as SiO ₂)	Heteropoly blue
Silica High Range	0 to 200 mg/L (as SiO ₂)	EPA
Silver	0.000 to 1.000 mg/L (as Ag)	PAN
Sulfate	0 to 150 mg/L (as SO ₄ ²⁻)	Barium Chloride
Surfactants, Anionic	0.00 to 3.50 mg/L (as SDBS)	EPA 425.1
Zinc	0.00 to 3.00 mg/L (as Zn)	Zincon
Standards HI83399-11	CAL Check Cuvette Kit for HI83399	

PHOTOMETERS

HI97000 Series

Advanced Waterproof Portable Photometers

- Advanced LED optical system
- CAL Check™
- On-screen tutorial mode with animations
- Waterproof and floating IP67 case
- Unit of measure is displayed along with reading
- Built-in timer
- Error messages on display



- GLP data
- Auto logging
- Battery status indicator & Auto-shut off

Model	Application	Range
HI97733	Ammonia HR	0.0 to 100.0 mg/L
HI97715	Ammonia MR	0.00 to 10.00 mg/
HI97769	Anionic Surfactants	0.00 to 3.50 mg/L
HI97738	Chlorine Dioxide	0.00 to 2.00 mg/L
HI97701	Chlorine, Free	0.00 to 5.00 mg/L
HI97723	Chromium VI HR	0 to 1000 µg/L
HI97739	Iuoride HR	0.0 to 20.0 mg/L
HI97729	Fluoride LR	0.00 to 2.00 mg/L
HI97720	Hardness, Ca	0.00 to 2.70 mg/L
HI97719	Hardness, Mg	0.00 to 2.00 mg/L
HI97735	Hardness, EPA	0 to 250 mg/L

Model	Application	Range
HI96785	Honey Color	0 to 150 mm Pfund
HI97721	Iron HR	0.00 to 5.00 mg/L
HI97728	Nitrate, as Nitrogen	0.0 to 30.0 mg/L
HI97708	Nitrite HR	0 to 150 mg/L
HI97707	Nitrite LR	0 to 600 µg/L
HI97732	Oxygen, Dissolved	0.0 to 10.0 mg/L
HI97713	Phosphate LR	0.00 to 2.50 mg/L
HI97706	Phosphorus	.0 to 15.0 mg/L
HI97750	Potassium	0.0 to 10.0 mg/L
HI97705	Silica LR	0.00 to 2.00 mg/L
HI97757	Ozone	0.00 to 2.00 mg/L (as O ₃)

HI97105

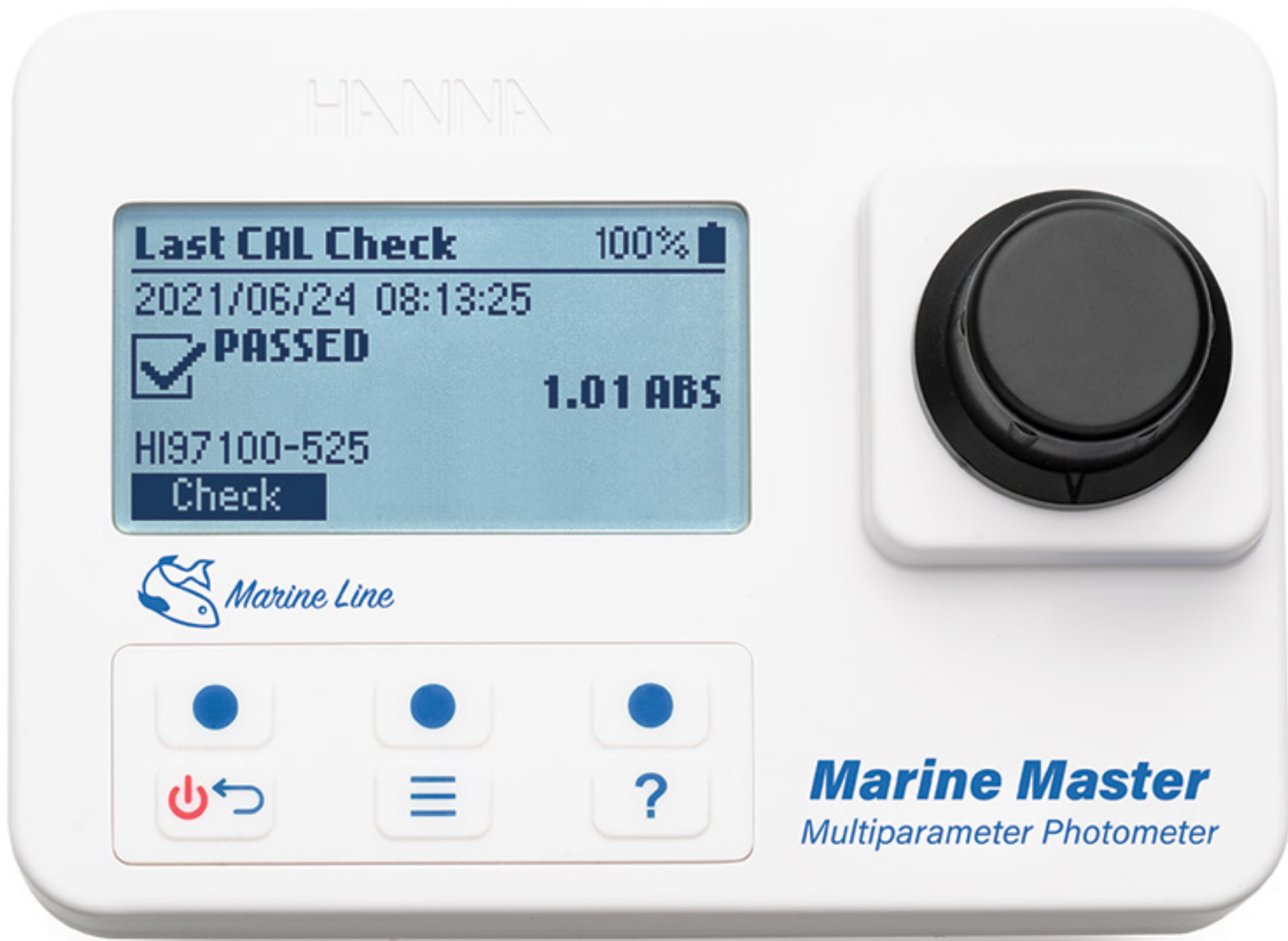
Marine Master Waterproof Multiparameter Photometer

Measure pH, Alkalinity, Ammonia, Calcium, Magnesium, Nitrate LR, Nitrate HR, Nitrite ULR, and Phosphate ULR

- Precise and advanced LED optical system
- CAL Check™ validation and calibration
- On-screen tutorial mode with animations
- Waterproof and floating IP67 case
- Unit of measure is displayed along with reading
- Built-in timer
- Error messages on display

Application	Range
pH	6.3 to 8.6 pH
Alkalinity	0.0 to 20.0 dKH
Ammonia	0.00 to 2.50 ppm (as NH ₃)
Calcium	200 to 600 ppm
Magnesium	1000 to 1800 ppm (as Mg ²⁺)

Application	Range
Nitrate LR	0.00 to 5.00 ppm (as NO ₃ ⁻)
Nitrate HR	0.0 to 75.0 ppm (as NO ₃ ⁻)
Nitrite ULR	0 to 200 ppb (as NO ₂ ⁻ -N)
Phosphate ULR	0.00 to 0.90 ppm



Ordering Information
HI97105 is supplied with sample cuvette (2 pcs.), sample cuvette cap (2 pcs.), 1.5V AA alkaline batteries (3 pcs.), instrument quality cer tificate, and quick reference guide with QR code for instruction manual download.

CAL Check standards and testing reagents sold separately

HI971044

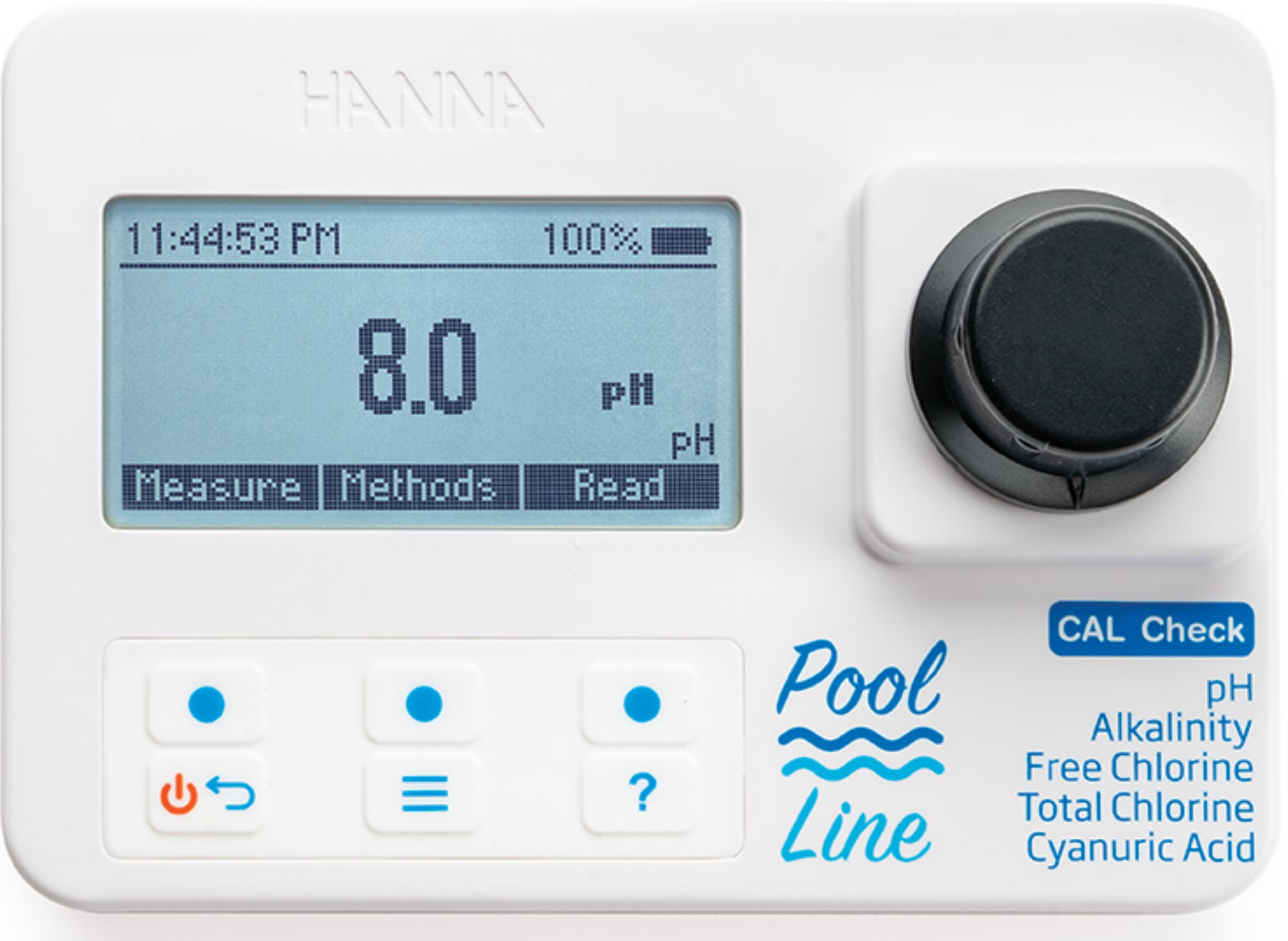
pH, Alkalinity, Free and Total Chlorine and Cyanuric Acid Portable Photometer

The HI97115 is a compact and versatile Marine multiparameter photometer designed to accurately determine important marine parameters. This can be used as a photometer or can be connected to the Hanna Lab App via Bluetooth.

- Advanced LED optical system
- CAL Check™
- On-screen tutorial mode with animations
- Waterproof and floating IP67 case
- Unit of measure is displayed along with reading
- Built-in timer
- Error messages on display

Ordering Information
HI97104 and HI971044 is supplied with sample cuvettes (2), sample caps (2), plastic stoppers (2), 1.5V AA batteries (3), instrument quality certificate, and instruction manual. CAL Check standards and testing reagents sold separately HI97104C and HI971044C includes photometer, CAL Check standards, sample cuvettes (2), sample caps (2), plastic stoppers (2), 1.5V AA batteries (3), cuvette wiping cloth, scissors, CAL Check standard certificate, instrument quality certificate, instruction manual, and HI7101414 rigid carrying case.

Reagents sold separately



Application	Range
pH	6.5 to 8.5 pH
Alkalinity	0 to 500 mg/L (as CaCO ₂)
Chlorine, Free and Total	0.00 to 5.00 mg/L (as Cl ^o)
Cyanuric Acid	0 to 80 mg/L (as CYA)



Specifications	Range	Method
COD LR	0 to 150 mg/L (as O ₂)	US EPA 410.4
COD MR	0 to 1500 mg/L (as O ₂)	US EPA 410.4
COD HR	0 to 15000 mg/L (as O ₂)	US EPA 410.4
COD UHR	0 to 60.0 g/L (as O ₂)	US EPA 410.4

Ordering information:

HI97106 is supplied with adapter for 16 mm vial, 1.5V AA Alkaline batteries (3 pcs.), instrument quality certificate, and quick reference guide with instructions for manual download.

HI97106

Chemical Oxygen Demand Portable Photometer

Low, Medium, High, Ultra High Range

The HI97106 is a waterproof portable photometer with an advanced optical system that uses a Light Emitting Diode and a narrow band interference filter for accurate, repeatable readings.

- Exclusive positive locking system to ensure that the vials are placed into the holder in the same position every time
- CAL Check™ functionality for performance validation
- Built-in tutorial mode

Reagents, Standards, and Accessories

HI97106-11 CAL Check™ standards for HI97106

HI93754A-25 Reagents EPA Low Range for 25 tests

HI93754F-25 Reagents ISO Low Range for 25 tests

HI93754B-25 Reagents EPA Medium Range for 25 tests

HI93754G-25 Reagents ISO Medium Range for 25 tests

HI93754D-25 Reagents Hg Free Low Range for 25 tests

HI93754E-25 Reagents Hg Free Medium Range for 25 tests

HI93754

COD Certified Standards and Reagents

Hanna COD reagents are available in the following formats :



COD Test (- 150°C, 2 hours)	Range	Method	Reagent Code
COD LR	0 to 150 mg/L (as O ₂)	dichromate EPA*	HI93754A-25
	0 to 150 mg/L	dichromate mercury-free**	HI93754D-25
	0 to 150 mg/L	dichromate ISO***	HI93754F-25
COD MR	0 to 1500 mg/L (as O ₂)	dichromate EPA*	HI93754B-25
	0 to 1500 mg/L	dichromate mercury-free**	HI93754E-25
	0 to 1500 mg/L	dichromate ISO***	HI93754G-25
COD HR	0 to 15000 mg/L (as O ₂)	dichromate	HI93754C-25
COD UHR	0.0 to 60.0 g/L	dichromate	HI93754J-25

Each box of 25 vials is supplied with a Hanna certificate of quality.
The reagents are traceable to NIST SRM® 930.

COD Rapid Method:

The Rapid Method digestion time is reduced from 2 hours to 15 minutes when the digestion temperature is increased from 150°C to 170°C.

COD Test	Range	Method	Reagent Code
COD LR / Rapid Method - 170°C, 15 minutes	0 to 150 mg/L (as O ₂)	adaptation of dichromate EPA	HI93754A-25
	0 to 1500 mg/L	adaptation of dichromate mercury-free	HI93754D-25
	0 to 1500 mg/L	adaptation of dichromate ISO	HI93754F-25
COD MR / Rapid Method - 170°C, 15 minutes	0 to 150 mg/L (as O ₂)	adaptation of dichromate EPA	HI93754B-25
	0 to 1500 mg/L	adaptation of dichromate mercury-free	HI93754E-25
	0 to 1500 mg/L	adaptation of dichromate ISO	HI93754G-25

Hanna Checker®HC Series
Handheld Colorimeters

Single parameter Checkers that fits easily in palm and very accurate compared to chemical test kits. Affordable and easy to use, Hanna Checkers bridges the gap between chemical test kits and professional instrumentation.

- Easier to use and more accurate than chemical test kits
- Use for quick and accurate on-the-spot analysis
- Single-button operation: zero and measure
- Operated by a single AAA battery
- Dedicated to a single parameter
- Small size, big convenience



CHECKERS

Model	Application	Range
HI700	Ammonia Low	0.00 to 3.00 ppm NH3-N
HI715	Ammonia Medium	0.00 to 9.99 ppm NH3-N
HI733	Ammonia High	0.0 to 99.9 ppm as NH ₄ ⁺
HI701	Free Chlorine	0.00 to 2.50 ppm
HI762	Free Chlorine ULR	0 to 500 ppb
HI702	Copper High	0.00 to 5.00 ppm
HI747	Copper Low	0 to 999 ppb
HI705	Silica Low	0.00 to 2.00 ppm
HI770	Silica High	0 to 200 ppm
HI706	Phosphorus High	0.0 to 15.0 ppm
HI736	Phosphorus Marine ULR	0 to 200 ppb
HI707	Nitrite Low	0 to 600 ppb NO ₂ ⁻
HI708	Nitrite High	0 to 150 ppm NO ₂ ⁻
HI709	Manganese High	0.0 to 20.0 ppm
HI711	Chlorine Total	0.00 to 3.50 ppm
HI761	Chlorine Total ULR	0 to 500 ppb
HI771	Chlorine ULR	0 to 500 ppm
HI713	Phosphate Low	0.00 to 2.50 ppm
HI774	Phosphate Marine ULR	0.00 to 0.90 ppm
HI717	Phosphate High	0.0 to 30.0 ppm
HI716	Bromine	0.00 to 8.00 ppm
HI718	Iodine	0.0 to 12.5 ppm
HI719	Magnesium Hardness	0.00 to 2.00 ppm
HI720	Calcium Hardness	0.00 to 2.70 ppm

Model	Application	Range
HI721	Iron High	0.00 to 5.00 ppm
HI746	Iron Low	0 to 999 ppb
HI723	Chromium VI High	0 to 999 ppb
HI749	Chromium VI Low	0 to 300 ppb
HI726	Nickel High	0.00 to 7.00 g/L
HI727	Color of Water	0 to 500 g/L PCU
HI729	Fluoride Low	0.00 to 2.00 ppm
HI739	Fluoride High	0.0 to 20.0 ppm
HI735	Total Hardness	0 to 350 ppm (mg/L) as CaCO ₃
HI753	Chloride	0.0 to 20.0 ppm
HI755	Marine Alkalinity	0 to 300 ppm CaCO ₃
HI772	Marine Alkalinity	0.0 to 20.0 dKH
HI775	Fresh water Alkalinity	0 to 500 ppm CaCO ₃
HI758	Marine Calcium	200 to 600 ppm
HI759	Maple Syrup Digital Grader	0 to 100% transmittance
HI767	Marine Nitrite Low	0 to 999 ppb
HI764	Marine Nitrite ULR	0 to 200 ppb NO ₂ ⁻ -N
HI779	pH	6.3 to 8.6 pH
HI780	Marine pH	6.3 to 8.6 pH
HI781	Marine Nitrate Low	0.00 to 5.00 ppm (as NO ₃ ⁻) 0.0 to 50.0 ppm (calculated) using dilution
HI782	Marine Nitrate High	0.0 to 75.0 ppm (as NO ₃ ⁻)
HI783	Marine Magnesium	1000 to 1800 ppm Magnesium
HI784	Marine Ammonia	0.00 to 2.50 ppm (mg/L) NH ₃

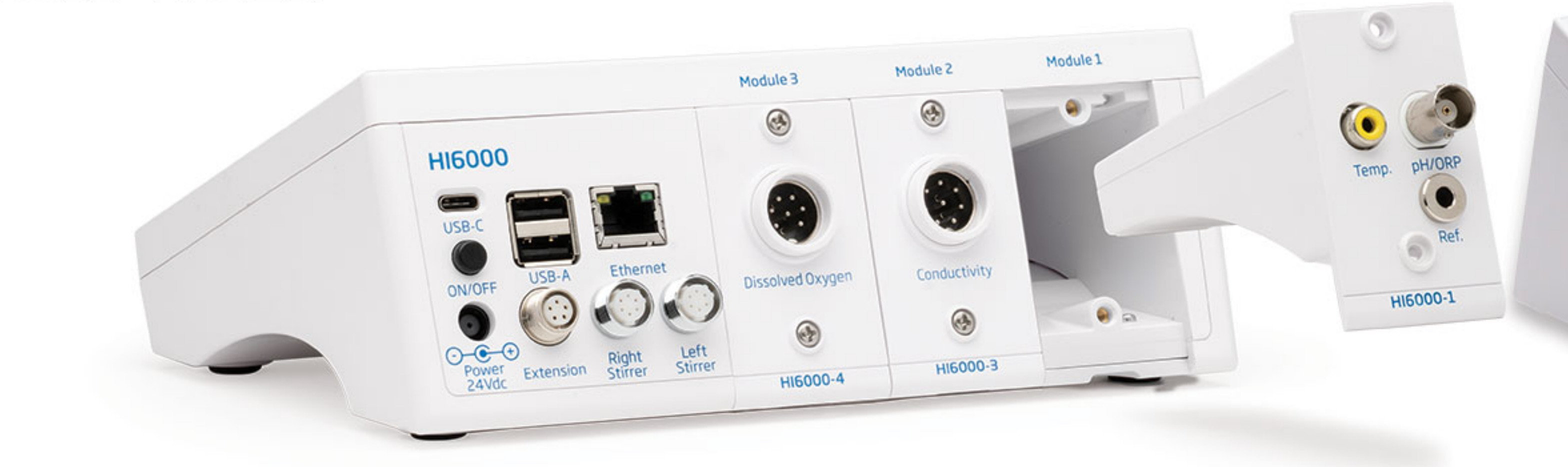
HI6000 series
Research Grade Meters
Low, Medium, High, Ultra High Range

Introducing the advanced HI6000 series research grade benchtop meters for pH/ORP/EC/TDS/Salinity/DO measurements. These benchtop meters have on-screen tutorials for main functionalities, a fully customizable home touchscreen, and Ethernet and Wi-Fi enabled for data transfer.

Four variants are available -

HI6221 HI6421

HI6321 HI6421P



HI6221
Advanced pH/ORP Meter
pH/ORP and Temperature

- Measure pH/mV (pH) or mV/Rel. mV (ORP) with temperature

Ordering information:

HI6221 is supplied with HI1131B pH electrode; HI7662-TW temperature probe; pH calibration starter kit consisting of: pH 4.01 buffer solution sachet (2 pcs.); pH 7.01 buffer solution sachet (4 pcs.); pH 10.01 buffer solution sachet (2 pcs.); HI700601 electrode cleaning solution sachet (2 pcs.); HI7082 3.5M KCl electrolyte solution (30 mL); HI764060 electrode holder; capillary pipette; 24 VDC power adapter; USB-C to USB-A cable; quick reference guide with instrument quality certificate.

Specifications

pH	
Range	-2.0 to 20.0 pH; -2.00 to 20.00 pH; -2.000 to 20.000 pH
Resolution	0.1 pH; 0.01 pH; 0.001 pH
Accuracy	±0.1 pH; ±0.01 pH; ±0.002 pH
mV	
Range	±2000.0 mV
Resolution	1 mV; 0.1 mV
Accuracy	±0.2 mV ±1 last significant digit
Relative mV offset range	±2000.0 mV
Connectivity	Wi-Fi, Ethernet & USB



HI6321
Advanced Conductivity Meter
Conductivity/Resistivity/TDS/Salinity/Temperature

- Measure µS/cm, mS/cm (Conductivity); Ω·cm, kΩ·cm, MΩ·cm (Resistivity); ppm, ppt (TDS); ppt, PSU, % (Salinity) with temperature

Ordering information:

HI6321 is supplied with HI7631233 probe; HI764060 electrode holder; capillary pipette; 24 VDC power adapter; USB-C to USB-A cable; probe quality certificate; quick reference guide with instrument quality certificate

Specifications

Conductivity	
Range	0.000 to 9.999 µS/cm; 10.00 to 99.99 µS/cm; 100.0 to 999.9 µS/cm; 1.000 to 9.999 mS/cm; 10.00 to 99.99 mS/cm; 100.0 to 1000.0 mS/cm
Resolution	0.001 µS/cm; 0.01 µS/cm; 0.1 µS/cm; 0.001 mS/cm; 0.01 mS/cm; 0.1 mS/cm
Accuracy	±1 % of reading (±0.01 µS/cm)
Resistivity	
Range	1.0 to 99.9 Ω·cm; 100 to 999 Ω·cm; 1.00 to 9.99 KΩ·cm; 10.0 to 99.9 KΩ·cm; 100 to 999 KΩ·cm; 1.00 to 9.99 MΩ·cm; 10.0 to 100.0 MΩ·cm
Resolution	0.1 Ω·cm; 1 Ω·cm; 0.01 KΩ·cm; 0.1 KΩ·cm; 1 KΩ·cm; 0.01 MΩ·cm; 0.1 MΩ·cm
Accuracy	±1 % of reading (±1 Ω·cm)
TDS	
Range	0.000 to 9.999 ppm; 10.00 to 99.99 ppm; 100.0 to 999.9 ppm; 1.000 to 9.999 ppt; 10.00 to 99.99 ppt; 100.0 to 400.0 ppt; actual TDS (with 1.00 factor)
Resolution	0.001 ppm; 0.01 ppm; 0.1 ppm; 0.001 ppt; 0.01 ppt; 0.1 ppt
Accuracy	±1 % of reading (±0.01 ppm)
Salinity	
Range	0.00 to 42.00 PSU - Practical Scale 0.00 to 80.00 ppt - Natural Sea Water 0.0 to 400.0 % - Percent Scale
Resolution	0.01 for Practical Scale / Natural Sea Water 0.1 % for Percent Scale
Accuracy	±1 % of reading
Temperature	
Range	-20.0 to 120.0 °C - 4.0 to 248.0 °F 253.0 to 393.0 K
Resolution	0.1 °C; 0.1 °F; 0.1 K
Accuracy	±0.2 °C; ±0.4 °F; ±0.2 K
Connectivity	Wi-Fi, Ethernet & USB

HI6421 - HI6421P
Advanced Dissolved Oxygen Meters
with Optical and Polarographic Probe Compatibility

- Measure %Sat, mg/L, ppm (DO); mg/L, ppm (BOD); mg/L (OUR); ppm, mg/L (SOUR)

Ordering information:
HI6421 is supplied with HI7641133 optical dissolved oxygen probe (opdo®)
HI6421P is supplied with HI764833 polarographic probe
Both meters are supplied with HI764060 electrode holder; capillary pipette; 24 VDC power adapter; USB-C to USB-A cable; probe quality certificate; quick reference guide with instrument quality certificate.



DO (HI7641133 Optical probe)	
Range	0.00 to 50.00 mg/L (ppm) concentration; 0.0 to 500.0 % saturation
Resolution	0.01 mg/L (ppm); 0.1 % saturation
Accuracy	from 0.00 to 20.00 mg/L (ppm) 1.5 % of reading or ± 0.01 mg/L (ppm), whichever is greater from 20.00 to 50.00 mg/L (ppm) ± 5 % of reading from 0.0 to 200.0 % saturation ± 1.5 % of reading or ± 0.1 %, whichever is greater from 200.0 to 500.0 % saturation ± 5 % of reading

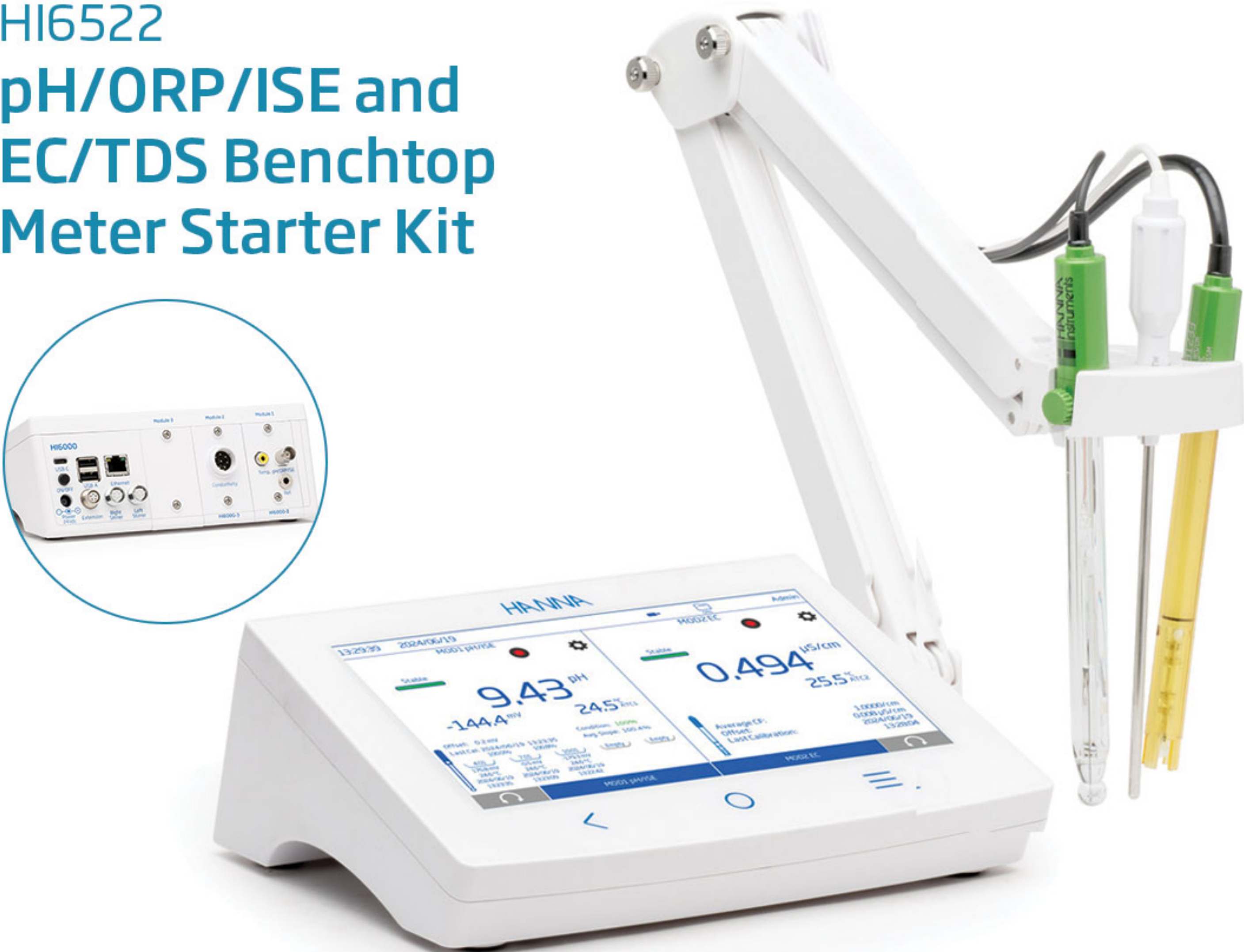
DO (HI764833 Polarographic probe)	
Range	0.00 to 90.00 mg/L (ppm) concentration; 0.0 to 600.0 % saturation
Resolution	0.01 mg/L (ppm); 0.1 % saturation
Accuracy	±1.5 % of reading ±1, least significant digit
Connectivity	Wi-Fi, Ethernet & USB

HI6222
pH/ORP/ISE
Benchtop Meter Starter Kit



Specifications	
Range	
pH	-2.0 to 20.0 pH; -2.00 to 20.00 pH; -2.000 to 20.000 pH
mV	-2000.0 to 2000.0 mV
ISE	1.0×10 ⁻⁵ to 300.0 ppt (g/L or mg/mL); 5.0×10 ⁻³ to 1.0×10 ⁵ ppm (mg/L or µg/mL) 1.0 to 5.0×10 ⁷ ppb (µg/L); 1.0×10 ⁻⁷ to 10.0 M (mol/L); 1.0×10 ⁻⁴ to 1.0×10 ⁴ mmol/L 1.0×10 ⁻⁶ to 60.0 %w/v; 5.0×10 ⁻⁷ to 5.0×10 ⁷ user
Temp	-20.0 to 120°C; -4.0 to 248.0°F; 253.15 to 393.15K
Connectivity	Wi-Fi, Ethernet & USB

HI6522
pH/ORP/ISE and
EC/TDS Benchtop
Meter Starter Kit



Specifications	
Range	
pH	-2.0 to 20.0 pH; -2.00 to 20.00 pH; -2.000 to 20.000 pH
mV	-2000.0 to 2000.0 mV
ISE	1.0×10 ⁻⁵ to 300.0 ppt (g/L or mg/mL); 5.0×10 ⁻³ to 1.0×10 ⁵ ppm (mg/L or µg/mL) 1.0 to 5.0×10 ⁷ ppb (µg/L); 1.0×10 ⁻⁷ to 10.0 M (mol/L); 1.0×10 ⁻⁴ to 1.0×10 ⁴ mmol/L 1.0×10 ⁻⁶ to 60.0 %w/v; 5.0×10 ⁻⁷ to 5.0×10 ⁷ user
Conductivity	0.000 to 9.999 µS/cm; 10.00 to 99.99 µS/cm; 100.0 to 999.9 µS/cm; 1.000 to 9.999 mS/cm; 10.00 to 99.99 mS/cm; 100.0 to 1000.0 mS/cm
Resistivity	1.0 to 99.9 Ω•cm; 100 to 999 Ω•cm; 1.00 to 9.99 KΩ•cm; 10.0 to 99.9 KΩ•cm; 100 to 999 KΩ•cm; 1.00 to 9.99 MΩ•cm; 10.0 to 100.0 MΩ•cm
TDS	0.000 to 9.999 ppm; 10.00 to 99.99 ppm; 100.0 to 999.9 ppm; 1.000 to 9.999 ppt; 10.00 to 99.99 ppt; 100.0 to 400.0 ppt; actual TDS (with 1.00 factor)
Salinity	0.00 to 42.00 PSU (Practical Salinity Scale); 0.00 to 80.00 ppt (Natural Sea Water); 0.0 to 400.0 % (Percent Scale)
Temp	-20.0 to 120.0 °C; -4.0 to 248.0 °F; 253.2 to 393.2 K
Connectivity	Wi-Fi, Ethernet & USB

HI6542
pH/ORP/ISE and DO
Benchtop Meter Starter Kit



HI6553
pH/ORP/ISE and EC/TDS and DO
Benchtop Meter Starter Kit



Specifications

Range	
pH	-2.0 to 20.0 pH; -2.00 to 20.00 pH; -2.000 to 20.000 pH
mV	-2000.0 to 2000.0 mV
ISE	1.0×10 ⁻⁵ to 300.0 ppt (g/L or mg/mL); 5.0×10 ⁻³ to 1.0×10 ⁵ ppm (mg/L or µg/mL) 1.0 to 5.0×10 ⁷ ppb (µg/L); 1.0×10 ⁻⁷ to 10.0 M (mol/L); 1.0×10 ⁻⁴ to 1.0×10 ⁴ mmol/L 1.0×10 ⁻⁶ to 60.0 %w/v; 5.0×10 ⁻⁷ to 5.0×10 ⁷ user
DO	0.0 to 500.0 % saturation; 0.00 to 90.00 mg/L (ppm) concentration
Barometric Pressure	450.0 to 850.0 mmHg; 600.0 to 1133.2 mbar; 60.00 to 113.32 kPa; 17.72 to 33.46 inHg; 8.702 to 16.436 psi; 0.5921 to 1.1184 atm
Temp	-20.0 to 120.0 °C; -4.0 to 248.0 °F; 253.2 to 393.2 K
Connectivity	Wi-Fi, Ethernet & USB

Specifications

Range	
pH	-2.0 to 20.0 pH; -2.00 to 20.00 pH; -2.000 to 20.000 pH
mV	-2000.0 to 2000.0 mV
ISE	1.0×10 ⁻⁵ to 300.0 ppt (g/L or mg/mL); 5.0×10 ⁻³ to 1.0×10 ⁵ ppm (mg/L or µg/mL) 1.0 to 5.0×10 ⁷ ppb (µg/L); 1.0×10 ⁻⁷ to 10.0 M (mol/L); 1.0×10 ⁻⁴ to 1.0×10 ⁴ mmol/L 1.0×10 ⁻⁶ to 60.0 %w/v; 5.0×10 ⁻⁷ to 5.0×10 ⁷ user
Conductivity	0.000 to 9.999 µS/cm; 10.00 to 99.99 µS/cm; 100.0 to 999.9 µS/cm; 1.000 to 9.999 mS/cm; 10.00 to 99.99 mS/cm; 100.0 to 1000.0 mS/cm
Resistivity	1.0 to 99.9 Ω•cm; 100 to 999 Ω•cm; 1.00 to 9.99 KΩ•cm; 10.0 to 99.9 KΩ•cm; 100 to 999 KΩ•cm; 1.00 to 9.99 MΩ•cm; 10.0 to 100.0 MΩ•cm
TDS	0.000 to 9.999 ppm; 10.00 to 99.99 ppm; 100.0 to 999.9 ppm; 1.000 to 9.999 ppt; 10.00 to 99.99 ppt; 100.0 to 400.0 ppt; actual TDS (with 1.00 factor)
Salinity	0.00 to 42.00 PSU (Practical Salinity Scale); 0.00 to 80.00 ppt (Natural Sea Water); 0.0 to 400.0 % (Percent Scale)
DO	0.0 to 500.0 % saturation; 0.00 to 90.00 mg/L (ppm) concentration
Barometric Pressure	450.0 to 850.0 mmHg; 600.0 to 1133.2 mbar; 60.00 to 113.32 kPa; 17.72 to 33.46 inHg; 8.702 to 16.436 psi; 0.5921 to 1.1184 atm
Temp	-20.0 to 120.0 °C; -4.0 to 248.0 °F; 253.2 to 393.2 K
Connectivity	Wi-Fi, Ethernet & USB

HI6000180
Mini Magnetic Stirrer

Our Mini Magnetic Stirrer (HI6000180) is compatible with our Multiparameter Modular System HI6000.

Speed can be regulated by dragging a slider on the HI6000's display or through the speed knob at the front of the stirrer. Stirring direction can be changed in system settings or through the speed knob.

- Optimized for Compatibility: Designed for the HI6000, ensuring seamless performance and reliability
- Durable and Long-Lasting: Built to withstand rigorous use, offering dependable operation over time
- Resilient to Accidents: Chemical-resistant housing protects against damage by accidental falls



BENCHTOP METERS

edge Meters

Hybrid meters that can be used in portable, wall-mount and benchtop configurations

HI2002
edge® pH/ORP meter

Ordering information:
The HI2002-02 edge pH includes: HI11310 glass body, refillable pH electrode, pH 4 buffer sachets (4), 7 & 10 buffer sachets (2), cleaning solution sachets (2), benchtop docking station with electrode holder, wall-mount cradle, USB cable, 5 VDC power adapter, quality certificates, and instruction manual.

HI2002-03 includes the above without electrode.

Specifications	
pH	-2.00 to 16.00 pH; -2.000 to 16.000 pH†
pH/mV	±1000 mV
ORP	±2000 mV
Temperature	-20.0 to 120.0°C; -4.0 to 248.0°F



EDGE METERS

HI2003
edge® EC

Ordering information:
HI2003-01 (115V) and HI2003-02 (230V) edge EC includes: HI763100 Conductivity probe, 1413 µS/cm conductivity standard sachets (4), 12880 µS/cm conductivity standard sachets (2), 5000 µS/cm conductivity standard sachets (2), electrode rinse solution sachets (2), benchtop docking station with electrode holder, wall-mount cradle, USB cable, 5 VDC power adapter, quality certificates and instruction manual.

HI2003-03 includes the above without probe.

Specifications	
EC	0.00 to 29.99 µS/cm; 30.0 to 299.9 µS/cm; 300 to 2999 µS/cm; 3.00 to 29.99 mS/cm; 30.0 to 200.0 mS/cm; up to 500.0 mS/cm absolute EC**
TDS	0.00 to 14.99 mg/L (ppm); 15.0 to 149.9 mg/L (ppm); 150 to 1499 mg/L (ppm); 1.50 to 14.99 g/L; 15.0 to 100.0 g/L; up to 400.0 g/L absolute TDS using 0.80 conversion factor**
Salinity	0.0 to 400.0 ‰ NaCl; 2.00 to 42.00 PSU; 0.0 to 80.0 g/L
Temperature	-20.0 to 120.0°C; -4.0 to 248.0°F

HI2004
edge® DO

Ordering information:
HI2004-02 (230V) edge DO includes: HI764080 dissolved oxygen electrode, HI7041S refill electrolyte solution, DO membrane caps (2), o-rings (2), benchtop docking station with electrode holder, wall-mount cradle, USB cable, 5 VDC power adapter, quality certificates and instruction manual.

HI2004-03 includes the above without electrode.

Specifications	
DO	0.00 to 45.00 ppm (mg/L); 0.0 to 300.0 % saturation
Temperature	-20.0 to 120.0°C; -4.0 to 248.0°F





HI2020
edge® pH/EC/DO Meter

Ordering information:
The HI2020-02 pH kit includes: HI11310 glass body, refillable pH electrode, pH 4 buffer sachets (4), 7 & 10 buffer sachets (2), and cleaning solution sachets (2), benchtop docking station with electrode holder, wall-mount cradle, USB cable, 5 VDC power adapter, quality certificates, and instruction manual.
HI2020-03 includes the above without electrode.

Specifications	HI2020
pH	-2.00 to 16.00 pH; -2.000 to 16.000 pH†
pH/mV	±1000 mV
Temperature	-20.0 to 120.0°C; -4.0 to 248.0°F

HI2030
edge® pH/EC/DO/TDS/Salinity Meter

Ordering information:
The HI2030-02 (230V) EC kit includes: HI763100 Conductivity probe, 1413 µS/cm conductivity standard sachets (4), 12880 µS/cm & 5000 µS/cm conductivity standard sachets (2), and electrode rinse solution sachets (2).

All edge compatible pH, EC and DO digital probes are interchangeable with HI2030 and can be ordered separately.

HI2030-03 includes the above without electrode.

Specifications	
EC	0.00 to 29.99 µS/cm; 30.0 to 299.9 µS/cm; 300 to 2999 µS/cm; 3.00 to 29.99 mS/cm; 30.0 to 200.0 mS/cm; up to 500.0 mS/cm absolute EC**
TDS	0.00 to 14.99 mg/L (ppm); 15.0 to 149.9 mg/L (ppm); 150 to 1499 mg/L (ppm); 1.50 to 14.99 g/L; 15.0 to 100.0 g/L; up to 400.0 g/L absolute TDS using 0.80 conversion factor**
Salinity	0.0 to 400.0 ‰ NaCl; 2.00 to 42.00 PSU; 0.0 to 80.0 g/L
Temperature	-20.0 to 120.0°C; -4.0 to 248.0°F

HI2040
edge® pH/EC/DO Meter

Ordering information:
The HI2040-02 (230V) DO kit also includes: HI764080 dissolved oxygen electrode, HI7041S refill electrolyte solution, DO membrane caps (2), o-rings (2)

All edge compatible pH, EC and DO digital probes are interchangeable with HI2040 and can be ordered separately.

HI2040-03 includes the above without electrode.

Specifications	
DO	0.00 to 45.00 ppm (mg/L); 0.0 to 300.0 % saturation
Temperature	-20.0 to 120.0°C; -4.0 to 248.0°F

Turbidity Meters



TURBIDITY METERS

																								
	Turbidity	pH	Free Chlorine	Total Chlorine	Bromine (Br)	Iodine (I)	Cyanuric Acid (CYAC)	Iron, LR (Fe, LR)	Ratio Mode	Non-Ratio Mode	FNU Mode	FAU Mode	NTU Ratio Mode	NTU Non-Ratio Mode	Max. Calibration Points	CAL Check™	Logging	EPA Compliant	ISO	GLP	PC Connectivity	Fast Tracker™	Backlit LCD	Auto-off
EPA Compliant Meters																								
HI83414	●		●	●					●	●					5	●	●	●		●	●		●	
HI88703	●								●	●					5		●	●		●	●		●	
HI93414	●		●	●											4	●	●	●		●	●	●	●	●
HI98703	●														4		●	●		●	●	●	●	●
ISO Compliant Meters																								
HI88713	●										●	●	●	●	5		●		●	●	●		●	
HI98713	●														4		●		●	●	●	●	●	●
HI93703	●														3				●	●				●
Application Specific Meters																								
HI93102	●	●	●	●	●	●	●	●							2		●	●						●
HI83749	●								●						4		●	●		●	●	●	●	●
HI847492	●														4		●			●	●	●	●	●

Chemical Test Kits

Single Parameter Test Kits	
HI3811	Alkalinity Test Kit
HI3812	Total Hardness Test Kit
HI3815	Chloride Test Kit
HI3831F	Free Chlorine Test Kit With Color Cube
HI38017	Free & Total Chlorine Test Kit Low and Medium Range with Checker® Disc
HI3859	Glycol Yes/No Test Kit
HI3812	Total Hardness Test Kit
HI3810	Dissolved Oxygen Test Kit
HI38054	Ozone Test Kit
HI38067	Silica Test Kit High Range
Multiparameter Test Kits	
HI3895	NPK Agriculture Test Kit
HI3817	Water Quality Test Kit



Backpack Lab® Multiparameter Test Kits

HI3817BP Backpack Lab®
Water Quality
Educational Test Kit

HI3896BP Backpack Lab®
Soil Quality
Educational Test Kit

HI3899BP Backpack Lab®
Marine Science
Educational Test Kit



HI96800 - HI96801 - HI96802 - HI96803 - HI96804
HI96811 - HI96812 - HI96813 - HI96814 - HI96816

Refractometer

Eliminate uncertainties from your measurements with Hanna Refractometers tailored for every industry. Our Refractometers are portable and easy to operate.

	Sugar Content
HI96800	1.3300 to 1.5080 nD; 1.3330 to 1.5040 nD ₂₀ ; 0.0 to 85.0% Brix
HI96801	0 to 85% Brix
HI96802	0 to 85% mass (% w/w fructose)
HI96803	0 to 85% mass (% w/w glucose)
HI96804	0 to 85% mass (% w/w invert sugar)
HI96811	0 to 50% Brix
HI96812	0 to 28°Baumé
HI96813	0 to 50% Brix; 0 to 25% V/V Potential Alcohol
HI96814	0 to 50% Brix; 0 to 230°Oechsle; 0 to 42°KMW
HI96816	4.9 to 56.8% V/V potential alcohol; (10 to 75% Brix)*



HI96821

Digital Refractometer

for Sodium Chloride Measurement Throughout the Food Industry



Specs	HI96821
g/100 g	0 to 28
g/100 mL	0 to 34
Specific Gravity (S.G.)	1.000 to 1.216
°Baumé	0 to 26

HI96822

Digital Refractometer

for Natural or Artificial Seawater Analysis



Specs	HI96822
PSU	0 to 50
ppt	0 to 150
Specific Gravity (S.G.)	1.000 to 1.114
Temperature	0 to 80°C

REFRACTOMETERS



HI96831 - HI96832

Digital Refractometers

for Ethylene and Propylene Glycol Analysis

Specs	HI96831 Ethylene Glycol	HI96832 Propylene Glycol
% Volume (% v/v)	0 to 100%	0 to 100%
Freezing Point (FP)	0 to -50°C (32 to -58°F)	0 to -51°C (32 to -59.8°F)
Temperature	0 to 80°C (32 to 176°F)	0 to 80°C (32 to 176°F)

HI9829
GPS Multiparameter Meters
pH/ORP/ISE, EC/TDS/Resistivity/Salinity/Seawater σ,
Turbidity, DO, Temperature and Atmospheric Pressure



HI 98290 Kit Specific Components

Code	Cable Length	GPS	Logging	Turbidity Probe Probe & Solutions	USB PC - Probe	pH/ORP, EC, DO Sensors	Quick-Cal Solution	Calibr. Beaker	USB PC - Meter & Software	Probe Maint. Kit	iButton
HI9829-00041	4	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-00042	4	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-00101	10	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-00102	10	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-00202	20	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-01041	4	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-01042	4	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-01101	10	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-01102	10	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-01202	20	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-02042	4	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-02102	10	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-02202	20	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-03041	4	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-03042	4	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-03101	10	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-03102	10	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-03202	20	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-10041	4	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-10042	4	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-10101	10	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-10102	10	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-10202	20	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-11042	4	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-11102	10	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-11202	20	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-12042	4	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-12102	10	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-12202	20	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-13042	4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-13101	10	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-13102	10	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-13201	20	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
HI9829-13202	20	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

PORTABLE METERS

HI9829

GPS Multiparameter Meters

pH/ORP/ISE, EC/TDS/Resistivity/Salinity/Seawater σ , Turbidity, DO, Temperature and Atmospheric Pressure

Specifications		HI98290 with GPS	
Temp. Compensation		automatic from -5 to 55°C	
GPS		12 channel receiver (HI 9829 with GPS)	
Logging Memory from Meter		44,000 records	
Logging		Interval 1 second to 3 hours	
Computer Interface		USB (with HI 929829 software)	
		Waterproof Protection	IP 67
		Environment	0 to 50°C; RH 100%

Specifications		HI9829 (Parameter)	
Range	Resolution	Accuracy	
pH / mV of pH Input			
0.00 to 14.00 pH / ±600.0 mV	0.01 pH / 0.1 mV	±0.02 pH / ±0.5 mV	
ORP			
±2000.0 mV	0.1 mV	±1.0 mV	
Ammonium - Nitrogen			
0.02 to 200 ppm (as N)	0.01 ppm to 1 ppm; 0.1 ppm to 200 ppm	±5% of reading or 2 ppm, whichever is greater	
Chloride			
0.6 to 200 ppm	0.01 ppm to 1 ppm; 0.1 ppm to 200 ppm	±5% of reading or 2 ppm, whichever is greater	
Nitrate - Nitrogen			
0.62 to 200 ppm (as N)	0.01 ppm to 1 ppm; 0.1 ppm to 200 ppm	±5% of reading or 2 ppm, whichever is greater	
Conductivity			
0 to 200 mS/cm (absolute EC up to 400 mS/cm)	manual: 1 μS/cm; 0.001 mS/cm; 0.01 mS/cm; 0.1 mS/cm; 1 mS/cm; automatic: 1 μS/cm from 0 to 9999 μS/cm; 0.01 mS/cm from 10.00 to 99.99 mS/cm; 0.1 mS/cm from 100.0 to 400.0 mS/cm; automatic mS/cm: 0.001 mS/cm from 0.000 to 9.999 mS/cm; 0.01 mS/cm from 10.00 to 99.99 mS/cm; 0.1 mS/cm from 100.0 to 400.0 mS/cm	±1% of reading or 1μS/cm, whichever is greater	
TDS			
0 to 400000 mg/L or ppm (the maximum value depends on the TDS factor)	manual: 1 ppm; 0.001 ppt; 0.01 ppt; 0.1 ppt; 1 ppt autorange scales: 1 ppm from 0 to 9999 ppm 0.01ppt from 10.00 to 99.99 ppt; 0.1 ppt from 100.0 to 400.0 ppt autorange g/L (ppt) scales: 0.001 ppt from 0.000 ppt to 9.999 ppt; 0.01 ppt from 10.00 to 99.99 ppt; 0.1 ppt from 100.0 to 400.0 ppt	±1% of reading or ±1 mg/L, whichever is greater	
Resistivity			
0 to 999999 Ω•cm; 0 to 1000.0 kΩ•cm; 0 to 1.0000 MΩ•cm	dependent on resistivity reading	-	
Salinity			
0.00 to 70.00 PSU	0.01 PSU	±2% of reading or ±0.01 PSU, whichever is greater	
Seawater			
0 to 50.0 σ _t , σ ₀ , σ ₁₅	0.1 σ _t , σ ₀ , σ ₁₅	±1 σ _t , σ ₀ , σ ₁₅	
Turbidity			
0.0 to 99.9 FNU; 100 to 1000 FNU	0.1 FNU from 0.0 to 99.9 FNU; 1 FNU from 100 to 1000 FNU	±0.3 FNU or ±2% of reading, whichever is greater	
Dissolved Oxygen			
0.0 to 500.0%; 0.00 to 50.00 ppm	0.1%; 0.01 ppm	0.0 to 300.0%: ±1.5% of reading or ±1.0% whichever is greater; 300.0 to 500.0%: ±3% of reading; 0.00 to 30.00 ppm: ±1.5% of reading or 0.10 ppm, whichever is greater; 30.00 ppm to 50.00 ppm: ±3% of reading	
Atmospheric Pressure			
450 to 850 mm Hg; 17.72 to 33.46 in Hg; 600.0 to 1133.2 mbar; 8.702 to 16.436 psi; 0.5921 to 1.1184 atm; 60.00 to 113.32 kPa	0.1 mm Hg; 0.01 in Hg; 0.1 mbar; 0.001 psi; 0.0001 atm; 0.01 kPa	±3 mm Hg within ±15°C from the temperature during calibration	
Temperature			
-5.00 to 55.00°C	0.01°C; 0.01°F; 0.01K	±0.15°C; ±0.27°F; ±0.15K	

Note: Meter, Sensors & Probes can be purchased separately. To choose right configuration please contact us

PORTABLE METERS

HI98190 - HI98191
Professional Waterproof Meter
pH/ORP/ISE

Ordering Information:
HI98190 & HI98191 are supplied with HI7004M pH 4.01 buffer solution (230 mL), HI7007M pH 7.01 buffer solution (230 mL), electrode cleaning solution sachet (2), 100 mL plastic beaker (2), HI92000 PC software, HI920015 micro USB cable, 1.5V AA batteries (4), quick start guide, quality certificate, rugged carrying case and instruction manual.
HI98190 is supplied with HI12963 pH electrode,
HI98190-03 includes the above without electrode.
HI98191 is supplied with HI72911B pH electrode,
HI98191-03 includes the above without electrode.

Specifications	HI98190	HI98191
pH	-2.0 to 20.0 pH; -2.00 to 20.00 pH; -2.000 to 20.000 pH	-2.0 to 20.0 pH; -2.00 to 20.00 pH; -2.000 to 20.000 pH
mV	+ -2000 mV	+ -2000 mV
ISE	-	from 1.00 E-7 to 9.99 E ¹⁰ concentration
Temperature	-20.0 to 120.0 °C	-20.0 to 120.0 °C



HI98192 - HI98197
Professional Waterproof Meter
EC/TDS/Salinity

Ordering Information:
HI98192 is supplied with HI763133 stainless steel, four-ring conductivity/TDS probe, HI7031M 1413 µS/cm calibration solution (230 mL), HI7035M 111.8 mS/cm calibration solution (230 mL), 100 mL plastic beaker (2), HI92000 PC software, HI920015 micro USB cable, 1.5V AA batteries (4), quick start guide, quality certificate and instruction manual in an HI720192 rugged carrying case with custom insert.
HI98197 is supplied with HI763123 platinum, four-ring conductivity/TDS probe with internal temperature sensor and 1 m (3.3') cable, HI605453 stainless steel flow cell for ultrapure water, tubing, HI7031M 1413 µS/cm calibration solution (230 mL), HI7033M 84 µS/cm calibration solution (230 mL), 100 mL plastic beaker (2), HI92000 PC software, HI920015 micro USB cable, 1.5V batteries (4), quality certificate, instruction manual and quick start guide in an HI720197 rugged carrying case with custom insert.



Specifications	Range - HI98192
EC	0 to 400 mS/cm (shows values up to 1000 mS/cm actual conductivity) 0.001 to 9.999 µS/cm; 10.00 to 99.99 µS/cm; 100.0 to 999.9 µS/cm; 1.000 to 9.999 mS/cm; 10.00 to 99.99 mS/cm; 100.0 to 1000.0 mS/cm (autoranging)
TDS	0.00 to 99.99 ppm; 100.0 to 999.9 ppm; 1.000 to 9.999 g/L; 10.00 to 99.99 g/L; 100.0 to 400.0 g/L (autoranging)
Salinity	% NaCl : 0.0 to 400.0%; practical salinity: 0.00 to 42.00 (PSU); seawater scale: 0.00 to 80.00 (ppt)

Specifications	Range - HI98197
EC	0.000 to 9.999 µS/cm; 10.00 to 99.99 µS/cm; 100.0 to 999.9 µS/cm; 1.000 to 9.999 mS/cm; 10.00 to 99.99 mS/cm; 100.0 to 1000.0 mS/cm (actual conductivity*; temperature compensated to 400 mS/cm)
TDS	0.00 to 99.99 ppm; 100.0 to 999.9 ppm; 1.000 to 9.999 g/L; 10.00 to 99.99 g/L; 100.0 to 400.0 g/L (autoranging)
Salinity	% NaCl : 0.0 to 400.0%; practical salinity: 0.00 to 42.00 (PSU); seawater scale: 0.00 to 80.00 (ppt)

HI98193 - HI98198
DO & BOD Meter

Ordering information:

HI98193 supplied with HI7040 bi-component zero oxygen solution (230 mL + 30 mL), HI7041S electrolyte solution (30 mL), preformed PTFE membrane caps (2), DO protective cap, O-rings (2), 100 mL plastic beaker (2), HI92000 PC software, HI920015 micro USB cable, 1.5V AA batteries (4), quick start guide, quality certificate and instruction manual in an HI720193 rugged carrying case with custom insert. HI98193 is supplied with HI764073 polarographic DO probe with protective sleeve and 4m (13') cable.

HI98198 (opdo) is supplied with HI764113 Optical DO probe with built-in temperature sensor, protective shield and 4 m (13.1') cable, HI764113-1 Smart Cap™ with o-ring, HI7040 Bicomponent Zero Oxygen Solution, Calibration/storage vessel, 100 mL plastic beaker (2), 1 syringe with silicon grease, 1 lens wipe, 1.5V AA batteries (4), Instruction manual, meter quality certificate, probe quality certificate, cap quality certificate, HI920016 USB Type A to C cable in a rugged carrying case.

Specifications	Range
DO Range	0.00 to 50.00 mg/L (ppm); 0.0 to 500.0% saturation
DO Calibration	one or two points automatic calibration at 100% (8.26 mg/L) and 0% (0 mg/L); Single point manual using a value entered by the user in % saturation or mg/L
Barometric Pressure Compensation	automatic from 450 to 850 mmHg (HI98193) automatic from 420 to 850 mmHg (HI98198)
Salinity Compensation	automatic from 0 to 70 g/L (HI98193) automatic from 0 to 70 PSU (manually set)(HI98198)
Temperature	-5.0 to 50.0 °C (23 to 122 °F)
Probe	polarographic DO probe(HI98193) optical DO probe

HI98194 - HI98195 - HI98196
Multiparameter Waterproof Meters

pH/ORP/EC/TDS/Resistivity/Salinity/Seawater σ/Dissolved Oxygen/ Atmospheric Pressure and Temperature

Ordering Information:

All models are supplied with HI7698194-1 pH/ORP sensor, HI7698194-3 EC sensor, HI7698295 short protective probe shield, HI9828-20 quick calibration solution, HI76981952 probe maintenance kit, HI7698290 calibration beaker, HI9298194 PC software, HI920015 micro USB cable, batteries (4), quality certificate and instruction manual in a rugged carrying case with custom insert.

HI98194 is also supplied with HI7698194-2 DO sensor

HI98195 is also supplied with HI7698195 multiparameter probe with 4m cable.

HI98196 is also supplied with HI7698196 multiparameter probe with 4m cable.

Specifications	HI98194	HI98195	HI98196
pH/mV	0.00 to 14.00 pH/± 600.0 mV	0.00 to 14.00 pH/± 600.0 mV	0.00 to 14.00 pH/± 600.0 mV
ORP	±2000.0 mV	±2000.0 mV	±2000.0 mV
EC	0 to 200 mS/cm	0 to 200 mS/cm	-
TDS	0.0 to 400.0 ppt	0.0 to 400.0 ppt	-
Resistivity	0 to 999999 ohms.cm; 0 to 1000.0 kohms.cm; 0 to 1.0000 Mohms.cm	0 to 999999 ohms.cm; 0 to 1000.0 kohms.cm; 0 to 1.0000 Mohms.cm	-
Salinity	0.00 to 70.00 PSU	0.00 to 70.00 PSU	-
Seawater	0.0 to 50.0 σt, σ0, σ15	0.0 to 50.0 σt, σ0, σ15	-
DO	0.0 500.0%; 0.00 to 50.00 ppm (mg/L)	-	0.0 to 500.0%; 0.00 to 50.00 ppm (mg/L)
Atmospheric Pressure	450 to 850 mm Hg; 17.72 to 33.46 in Hg; 600.0 to 1133.2 mbar; 8.702 to 16.436 psi; 0.5921 to 1.1184 atm; 60.00 to 113.32 kPa (HI98194 & HI98196)		
Temperature	-5.00 to 55.00°C; 23.00 to 131.00°F; 268.15 to 328.15K		



PORTABLE METERS

HI98199
Multiparameter Portable
pH/EC/DO Waterproof Meter

Specifications	
pH	0.00 to 14.00 pH
mV	±600.0 mV
EC	0 to 200 mS/cm
TDS	0.0 to 200.0 ppt (g/L) (the maximum value depends on the TDS factor)
Salinity (PSU)	0.00 to 70.00 PSU
Resistivity	0 to 999999 Ω cm; 0 to 1000.0 kΩ cm; 0 to 1.0000 MΩ cm
DO	0.0 to 500.0%; 0.00 to 50.00 ppm (mg/L)
Temp	-5.00 to 55.00 °C; 23.00 to 131.00 °F; 268.15 to 328.15 K

Ordering information:
HI98199 is supplied with the HI829113 pH digital probe with 4m (13') cable, pH calibration solution sachets, PC software, micro USB cable, batteries, quality certificate, and instruction manual in a rugged carrying case.



HI98494
Multiparameter Bluetooth®
pH/EC/OPDO® Meter
pH, ORP, EC, TDS, Resistivity, Salinity, Seawater σ, Dissolved
Oxygen, Atmospheric Pressure and Temperature

Specifications	
pH / mV	0.00 to 14.00 pH / ±600.0 mV
ORP	±2000.0 mV
EC	0 to 200 mS/cm
TDS	0.0 to 400.0 ppt (g/L)
Resistivity	0 to 999999 Ω•cm; 0 to 1000.0 kΩ•cm; 0 to 1.0000 MΩ•cm
Salinity	0.00 to 70.00 PSU
Seawater σ	0.0 to 50.0 σt, σ0, σ15
Dissolved Oxygen	0.0 to 500.0%; 0.00 to 50.00 ppm (mg/L)
Atmospheric Pressure	450 to 850 mm

Ordering information:
All models are supplied with: HI7698194-1 pH/ORP sensor, HI7698194-3 EC sensor, HI7698295 short protective probe shield, HI7698494-5 optical DO sensor, HI9828-20 quick calibration solution, zero oxygen solution, HI76984942 probe maintenance kit, HI920016 USB type-C cable, HI7698290 calibration beaker, batteries (4), quality certificate, and instruction manual in a rugged carrying case with custom insert.

PORTABLE METERS



HI98594
Multiparameter Bluetooth®
Portable pH/EC/Turbidity/OPDO® Meter
pH, ORP, EC, TDS, Turbidity, Resistivity, Salinity, Seawater σ ,
Dissolved Oxygen, Atmospheric Pressure and Temperature

Perfect for many industries and applications

- Environmental Water Quality
- Water Treatment
- Industrial
- Laboratory
- Education and Research
- Beverage Manufacturing
- Aquaculture
- Municipalities

HI98594 is a portable logging multiparameter system (meter and probe) that monitors up to 14 different water quality parameters (7 measured and 7 calculated) such as pH, ORP, turbidity, conductivity, dissolved oxygen and temperature.

- **Monitors up to 14 different water quality parameters**
- **Instantaneous conductivity and turbidity measurements**
- **Shipped with sensors installed**
- **Dual battery system for extended field use**
- **Good Laboratory Practice feature, the last 5 calibrations are automatically stored**
- **Log-on-demand and automatic logging on meter for all parameters**

Ordering information:

All HI98594 models are supplied with:
HI7698594 multisensor probe; HI7698296 protective probe shield;
HI76984942 probe maintenance kit; HI7698194-1 pH/ORP sensor;
HI7698594-4 EC/Turbidity sensor; HI7698594-5 optical DO sensor;
HI764113-1 DO Smart Cap with o-ring; HI7698293 long calibration beaker;
HI9828-25 quick calibration standard solution (500 mL);
HI7040 zero oxygen solution set (120 mL); HI9829-16 0 FNU calibration solution (230 mL);
HI9829-17 20 FNU calibration solution (230 mL);
HI9829-18 200 FNU calibration solution (230 mL); HI710034 protective rubber boot;
HI920016 USB cable; 1.5V AA alkaline batteries (4 pieces);
quality certificates (instrument, probe, DO Smart Cap); and quick reference guide..

HI98594 is supplied with multisensor probe with 4m (13.1') cable
HI98594/10 is supplied with multisensor probe with 10m (33.0') cable
HI98594/20 is supplied with multisensor probe with 20m (65.6') cable
HI98594/30 is supplied with multisensor probe with 30m (98.4') cable
HI98594/40 is supplied with multisensor probe with 40m (131.2') cable
HI98594/50 is supplied with multisensor probe with 50m (164') cable



Achieve peace of mind with water analysis results at your fingertips

Equipped with Bluetooth® 5.0 wireless technology. Gain full visibility and traceability over GLP data. Simply connect your phone or tablet via Bluetooth® and use the Hanna Lab App to transfer, review or email batches of logged data.



PORTABLE METERS

Specifications

pH / mV	0.00 to 14.00 pH* / ± 600.0 mV
ORP	± 2000.0 mV
DO	0.0 to 500.0 % saturation; 0.00 to 50.00 ppm (mg/L)
EC	0 to 200 mS/cm; 0 to 400 mS/cm (absolute)
TDS	0 to 400000 ppm (mg/L)
Resistivity	0 to 999999 $\Omega \cdot \text{cm}$; 0 to 1000.0 $\text{k}\Omega \cdot \text{cm}$; 0 to 1.0000 $\text{M}\Omega \cdot \text{cm}$
Salinity	0.00 to 70.00 PSU
Seawater σ	0.0 to 50.0 σ_t , σ_{15}
Atmospheric Pressure	450 to 850 mm
Temp	-5.00 to 50.00 $^{\circ}\text{C}$; 23.00 to 122.00 $^{\circ}\text{F}$; 268.15 to 323.15 K

HI9816X Series
Foodcare pH Meters
with application probe

- pH measuring range - -2.0 to 20.0 pH
- Application specific probes



Specifications	Application	Range
HI98161	Food	FC2023 PVDF body, conical, quick DIN connector
HI98162	Milk	FC1013 PVDF body, spherical, quick DIN connector
HI98163	Meat	FC2323 PVDF body, conical, quick DIN connector
HI98164	Yogurt	FC2133 glass body, conical, quick DIN connector

Specifications	Application	Range
HI98165	Cheese	FC2423 pre-amplified pH and temperature probe with titanium sheath, conical, quick DIN connector
HI98167	Beer	FC2143 Titanium body, flat tip, quick DIN connector
HI98169	Wine	FC10483 preamplified, dome shape tip, DIN connector

PORTABLE METERS

99 Series
Portable Waterproof Meters

- pH measuring range -2.0 to 20.0 pH
- Application specific probes



Specifications	Application
HI991001	General
HI991003 (pH/ORP)	General
HI99121	Direct Soil pH
HI99131	Plating Baths
HI99141	Boiler & Cooling Towers
HI99171	Leather & Paper
HI99162	Milk
HI99164	Yogurt
HI99165	Cheese
HI99161	Semi Solids
HI99163	Meat
HI99192	Drinking Water
HI99151	Beer
HI99111	Wine
HI99181	Skin & Scalp

HI981914
Professional Waterproof Meter
pH/ORP/ISE

- ISE measurement units (ppm, ppt, g/L, µg/L, mg/L, M, mol/L, mmol/L, %, w/v, user)
- Waterproof
- CAL Check™
- Automatic or manual temperature compensation

Ordering Information
HI981914 is supplied with HI72911B pH electrode, HI7004M pH .01 buffer solution (230 mL), HI7007M pH 7.01 buffer solution (230 L), electrode cleaning solution sachet (2), 100 mL plastic beaker (2), I92000 PC software, HI920015 micro USB cable, 1.5V AA batteries (4), quick start guide, quality certificate and instruction manual in an

Specifications

pH	-2.0 to 20.0 pH; -2.00 to 20.00 pH; -2.000 to 20.000 pH
mV	±2000.0 mV
ISE	from 1.00 E ⁷ to 9.99 E ¹⁰ concentration
Temp	-20.0 to 120.0 °C (-4.0 to 248.0°F)



HI98168
GroLine Professional Portable
Soil pH Meter

- Comes with all the necessary solutions and batteries- everything you need to get started measuring right away
- Multiple language options are available, users can switch how messages are displayed
- Conveniently transfer data via a USB connection

Ordering Information:
HI98168 is supplied with HI12923 glass body pH electrode, HI7004M pH 4.01 buffer solution (230 mL), HI7007M pH 7.01 buffer solution (230 mL), HI7051M soil sample preparation solution (230 ml), HI700663 electrode cleaning solution for soil deposits sachet (1), HI700664 electrode cleaning solution for humus deposits sachet (1), HI 721319 ground auger (1), 100 mL plastic beaker (2), 1.5V AA batteries (4), HI92000 PC software, HI920015 micro USB cable, instruction manual with quick start guide, instrument quality certificate and HI720161 hard carrying case.



Specifications	Range
pH	-2.0 to 20.0 pH / -2.00 to 20.00 pH / -2.000 to 20.000 pH
mV	±2000.0 mV
Temperature	-20.0 to 120.0 °C (-4.0 to 248.0 °F)
Probes	HI12923 pH & temperature

HI510 - HI520

Single and Dual-Channel Universal Process Controllers

HI510 and HI520 are advanced process controllers designed for applications that require monitoring and/or control of water analysis parameters such as pH, ORP, DO, EC/TDS, Resistivity, and Turbidity.

- Waterproof IP65 (NEMA 4X) enclosure
- Universal mounting
- Universal Hanna digital probe
- Single or dual channel

Specs	HI510	HI520
Digital Probes	Supported	Supported
Channels	1	2
Digital Inputs	2 independent, galvanically isolated inputs (configurable for Hold & Cleaning functions) On state: 5 to 24 Vdc, low or high level active	
Analog Outputs	2 or 4 independent, galvanically isolated outputs 0 - 22 mA configurable as: 0 - 20 mA; 4 - 20 mA 22 mA as alarm signal, configurable option	
Relays	Up to 5 relays (independently configurable for process variables) Electromechanical relay SPDT and SPST contact outputs 5A - 250 Vac; 5A - 30 Vdc (resistive load) Enclosure* Single case ½ DIN, type 4X, IP65 ingress protection	

Ordering Information:

HI510-0540 (5 relays & 4 analog outputs),
HI510-0320 (3 relays & 2 analog outputs),
HI520-0540 (5 relays & 4 analog outputs),
HI520-0320 (3 relays & 2 analog outputs)
are supplied with 3m power cable, cable gland set, instrument certificate, and quick reference guide with instructions for manual download.

Industrial Smart Probes Compatible with HI510 & HI520

Probe	Code	Probe Description	Application	Parameter
	HI2004-18 HI2014-18	Flat Tip Glass Sensor, PVDF Body	Platinum-sensor series are designed to provide the best response over a wide range of applications. Used in reducing processes such as chlorine dosing in pools and spas or chromate reduction.	ORP & Temp
	HI2004-28 HI2014-28	Gold Sensor, Flat Tip	Gold-sensor series are designed for oxidative processes such as cyanide oxidation in the mining industry.	ORP & Temp
	HI1006-18 HI1016-18	HI1006 - PTFE Junction HI1016 - Ceramic Junction Low Temperature (LT) glass sensor, titanium matching pin	Designed for low conductivity or low-temperature process environments	pH & Temp
	HI1006-38 HI1016-38	HI1006-38 - PTFE Junction HI1016-38 - Ceramic Junction High Temperature (HT) glass sensor, titanium matching pin	Designed for extended pH range or high-temperature process environments	pH & Temp
	HI1006-48 HI1016-48	HI1006-48 - PTFE Junction HI1016-48 - Ceramic Junction Fluoride-resistant (HF) glass sensor, titanium matching pin	Designed for process environments where hydrofluoric acid is present	pH & Temp
	HI7630-28 zz Series	Two-electrode cell conductivity, AISI 316 stainless steel cell constant k ≈ 0.1/cm Smart probe, with RS485 connection Cable available in 5,10,15,25,50 meters		EC & Temp
	HI7630-48 zz Series	Four-ring conductivity, platinum on glass cell constant k ≈ 1.0/cm Smart probe, with RS485 connection Cable available in 5,10,15,25,50 meters		EC & Temp
	HI7640-18	Galvanic sensor Smart probe, with RS485 connection Cable available in 5,10,15,25,50 meters		Galvanic DO
	HI7640-58	Optical DO sensor Smart probe, with RS485 connection Cable available in 5,10,15,25,50 meters		Opdo
	HI7660-28	Low Range Turbidity Probe for HI510 and HI520 Process Controllers	Drinking water, municipal and industrial water treatment, desalination and water quality monitoring	Turbidity & Temperature



BL93XXX & BL983XXX-X Series
Mini controllers
with & without 4-20mA output

Compact, panel-mounted, process controllers for measuring pH, EC & TDS of a process stream. Models available with & without 4-20 mA galvanic isolated output with external dosing disable contact.

- Adjustable Dry Contact Dosing Relay
- Programmable Overdose Protection
- Relay Control Override
- Labeled Termination Connections



Controller	Parameter	Range	Recommended Probe	Probe
BL931700 BL981411-1	pH	0.00 to 14.00 pH	HI1001PVDF body pH electrode	
BL932700 BL982411-1	ORP	±1000 mV	HI2001 PVDF body ORP electrode	
BL983313-1 BL983313-2	EC	0 to 1999 µS/cm	HI7634-00 EC/TDS probe with internal temperature sensor	
BL983320-1 BL983320-2	EC	0.0 to 199.9 µS/cm	HI7634-00/4 EC/TDS probe with internal temperature sensor	
BL983322-1 BL983322-2	EC	0.00 to 19.99 µS/cm	HI7634-00/5 EC/TDS probe with internal temperature sensor	
BL983317-1 BL983317-2 BL983327-1 BL983327-2	EC	0.00 to 10.00 mS/cm	HI7632-00 & HI7632-00/6 EC/TDS probe with internal temperature sensor	
BL983315 -1 BL983315 -2	TDS	0.0 to 199.9 mg/L(ppm)	HI7634-00 EC/TDS probe with internal temperature sensor	
BL983319 -1 BL983319 -2	TDS	0 to 1999 mg/L (ppm)	HI7634-00/4 EC/TDS probe with internal temperature sensor	
BL983321 -1 BL983321 -2	TDS	0.00 to 19.99 mg/L (ppm)	HI7634-00/5 EC/TDS probe with internal temperature sensor	
BL983329 -2 BL983329 -2	TDS	0 to 999 mg/L (ppm)	HI7634-00/5 EC/TDS probe with internal temperature sensor	
BL983314	Resistivity	0.00 to 19.90 MΩ•cm	HI3314 resistivity probe with 2 m (6.6') cable	

PROCESS INSTRUMENT

PCA310 - PCA320 - PCA330 - PCA340
PCA Series Analyzers
Chlorine, pH, ORP and Temperature

The PCA family are process analyzers for the continuous measurement of chlorine, pH (PCA320, PCA330, PCA340 only) and temperature.

- Nema 4X protection
- DPD chlorine measurement method
- Amplified pH/temperature probe (excl. PCA310)
- Two analog outputs for recording or dosing devices (PCA340)

Ordering Information:
Each PCA300 series model is supplied with reagent bottles (2), reagent caps (2), 1 DPD compound powder, tubing and instructions.;

PCA310-1 Free & total chlorine analyzer/control (115V);

PCA310-2 Free & total chlorine analyzer/control (230V);

PCA330-1 Free & total chlorine analyzer/control, pH control, ORP monitoring, temperature (115V);

PCA330-2 Free & total chlorine analyzer/control, pH control, ORP monitoring, temperature (230V)

PCA320-1 Free & total chlorine analyzer/control, pH control, temperature (115V);

PCA320-2 Free & total chlorine analyzer/control, pH control, temperature (230V);

PCA340-1 Free & total chlorine analyzer/control, pH control, temperature with dual analog outputs (115V);

PCA340-2 Free & total chlorine analyzer/control, pH control, temperature with dual analog outputs (230V)



Specs	PCA310	PCA320	PCA330	PCA340
Free and Total Chlorine	0.00 to 5.00 mg/L (ppm)	0.00 to 5.00 mg/L (ppm)	0.00 to 5.00 mg/L (ppm)	0.00 to 5.00 mg/L (ppm)
pH	-	0.00 to 14.00 pH	0.00 to 14.00 pH	0.00 to 14.00 pH
ORP	-	-	0 to 2000 mV -	
Temperature	-	5.0 to 75.0°C	5.0 to 75.0°C	5.0 to 75.0°C
Additional Specifications				
Analog output dosing	(1) 4-20mA	(1) 4-20mA	(1) 4-20mA	(2) 4-20mA
Sample Inlet Pressure	0.07 to 4 bar with no external pressure regulator (for pressure exceeding four bar an external pressure regulator is required)			
Sample Flow	100 to 300 mL/min			
Recommended Probes	HI1005 Flow-thru Monitoring pH electrode, HI2008 Flow-thru Monitoring ORP Electrode			

PROCESS INSTRUMENT



BL SERIES
BlackStone Chemical Dosing Pumps

- Versatile & Simple operation
- Manufactured with the High Quality Materials
- IP65 protection against splashes and spills
- Rugged Design

Part Number	Max Output	Rated Pressure	Dosing Frequency strokes/min
With Large Diaphragm			
BL20	18.3 lph (4.8 gph)	0.5 bar (7.4 psi)	120
BL15	15.2 lph (4.0 gph)	1 bar (14.5 psi)	120
BL10	10.8 lph (2.9 gph)	3 bar (43.5 psi)	120
BL7	7.6 lph (2.0 gph)	3 bar (43.5 psi)	120
With Small Diaphragm			
BL5	5.0 lph (1.3 gph)	7 bar (101.5 psi)	120
BL3	2.9 lph (0.8 gph)	8 bar (116 psi)	120
BL1.5	1.5 lph (0.4 gph)	13 bar (188.5 psi)	120

BL120 - BL121
pH/ORP Swimming Pool and Spa Controllers
with Built-In Chemical Feed Pumps

- Peristaltic Dosing Pumps
- Automatic Proportional Pump Control
- Adjustable Flow Rate
- ORP (Chlorine) Dosing Consent
- Acid and Chlorine Tank Level Inputs
- Programmable Alarm System
- Multicolored LED Indicators

Specifications

pH	Range	0.00 to 14.00 pH
	Resolution	0.01 pH
	Accuracy (@25°C/77°F)	±0.05 pH
	Calibration	pH buffer calibration: automatic, two-point (4.01, 7.01, 10.01 pH) pH process calibration: one-point, manual input
	pH Dosing	proportional with adjustable set point and proportional band; delay to start at power-on and overdosing protection
mV	Range	±2000 mV
	Resolution	1 mV
	Accuracy (@25°C/77°F)	±5 mV
	ORP (mV) calibration	one-point, manual input
	ORP Dosing	proportional with adjustable set point and proportional band; delay to start at power-on and overdosing protection; pH dosing interlocked
Temperature	Range	-5.0 to 105.0°C (23.0 to 221.0°F)
	Resolution	0.1°C (0.1°F)
	Accuracy (@25°C/77°F)	±1°C (±1.8°F)



BL100
pH Controller and Dosing Pump
for Swimming Pools, Hot Tubs, and Spas



- Peristaltic Dosing Pumps
- Automatic Proportional Pump Control
- Adjustable Flow Rate
- ORP (Chlorine) Dosing Consent
- Acid and Chlorine Tank Level Inputs
- Programmable Alarm System
- Multicolored LED Indicators

BL100 pH Controller and Dosing Pump is a system engineered for maintaining the pH of swimming pools, hot tubs, and spas. Typically chlorine, whether liquid or solid, is alkaline and will raise the pH of the water that it is added to. As the pH increases above 7.4, a form of chlorine known as hypochlorite ion (OCl-) increases. This form of chlorine is 100 time less effective at killing bacteria as compared to the other form of chlorine known as hypochlorous acid (HOCl). For this reason it is important to maintain the correct pH level in order to ensure that the more powerful hypochlorous acid form is available for disinfection.

Specifications

Range	0.00 to 14.00 pH
Resolution	0.01 pH
Accuracy (@25°C/77°F)	±0.10 pH
pH Calibration	user calibration: automatic
Temp Range	-5.0 to 105°C (23.0 to 221.0°F)
Temp Compensation	automatic (with Pt100 probe) or manual from -9.9 to 120°C

PROCESS INSTRUMENT

HI151
Checktemp®4 Temperature Tester

- Instrument Quality Certificate for Traceability
- CAL-Check (Internal calibration verification)
- The sharp, AISI 316 stainless steel probe
- Waterproof to IP67 Standards
- Turns on by motion sensor
- Selectable °C or °F

Common Specifications

Thermistor Temperature Range	-50.0 to 300 °C / -58.0 to 572 °F
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HI151 - White
For Dairy Products



HI151-1 - Red
For Raw Meat



HI151-2 - Blue
For Raw Fish



HI151-3 - Yellow
For Cooked Meat



HI151-4 - Green
For Salad & Fruits



HI151-5 - Brown
For Vegetables



HI98501
Checktemp® Digital Thermometer
with Stainless Steel Penetration Probe

- Large display
- IP65 water resistant protection
- HACCP
- AISI 316 stainless steel penetration probe

Specs	HI98501
Range	-50.0 to 150.0°C



HI98509 Checktemp®1
Digital Thermometer
with Stainless Steel Probe Attached to
a 1 m (3.3') Silicone Cable

- EN13485 certified
- Battery life up to two years
- HACCP
- AISI 316 stainless steel penetration probe
- IP65 water resistant protection

Specs	HI98509
Range	-50.0 to 150.0°C



HI145
T-Shaped Thermometer

HI145 thermometers were developed for HACCP programs that require high standards of performance with simplicity of use. The durable T-shaped handle fits comfortably in your hand and is ideal for applications where applied force is necessary for insertion, such as with incoming meat inspection and semi-frozen foods. The LCD positioned on top of the meter allows for easy reading in cooking applications.

- CAL Check™
- HOLD Feature



Specs	HI145-00	HI145-01	HI145-20	HI145-30
Range	-50.0 to 220°C	-58.0 to 428.0°F	-50.0 to 220°C	-58.0 to 428.0°F

HI190M-2
Our Most Popular Magnetic
Mini-Stirrer

- Compact size
- Speedsafe™
- Built to last

Specs	HI190M - 2
Maximum Stirring Capacity	1 liter (0.26 gallons)
Min. Speed Range	100 rpm
Max. Speed Range	1000 rpm
Cover Material	ABS plastic



Thermocouple Thermometers

Hanna electronic thermometers are designed to withstand mechanical stress and extreme environments while maintaining high accuracy. These thermometers are versatile and fast in results

- °C/°F Readout
- Interchangeable Probes
- High/Low Function
- HOLD Function



	K-type	T-type	K,J,T - type	Range	CAL Button	CAL Check™	PC Compatibility	BEPS	HOLD Feature	Waterproof	Autoranging	Logging	Alarm	Interchangeable Probe	Multiple Channels	Backlit LCD	Foodcare
Thermocouple Thermometers																	
HI935005	•			°C/°F				•	•	•				•			
HI935002	•			°C/°F				•	•	•				•	•		
HI93531	•			°C/°F				•	•	•				•			
HI93531N	•			°C/°F	•			•	•	•				•		•	
HI935003	•			°C/°F		•				•				•			
HI935001	•			°C/°F		•				•				•			•
HI935004		•		°C/°F		•				•				•			•
HI935007	•			°C/°F		•				•							•
HI9350011	•			°C/°F		•				•							•
HI9350041	•			°C/°F		•				•							•
Thermistor Thermometers																	
HI93510				°C/°F				•	•	•				•			
HI93510N				°C/°F	•			•	•	•				•		•	
HI935012				°C/°F		•				•				•			•
HI93501				°C/°F		•				•				•			•
Temperature Dataloggers																	
HI144				°C/°F			•					•	•				

HI766
K-Type Thermocouple Probes

Thermocouple probes are designed according to the surfaces and application. These probes are durable and withstand extreme environments.

Probe	Code	Type
	HI766F	High-Temperature Wire Probe with flexible sheath
	HI766F1	Wire Probe for Hard-to-Reach Places
	HI766Z	Wire Probe for Ovens
	HI766TV1	Clamp Probe for Pipes and Tubes

Similarly, Hanna offers K Type thermocouple thermometer for Food Industry. These are specifically designed for various types of Food Products.

Probe	Code	Type
	HI766D HI766PD	Air and Gas Probe
	HI766TR1, HI766TR2, HI766TR3, HI766TR4	Penetration Probes for Semi-Solid Samples
	HI766A HI766PA	Roller Surface Probe for Convex Surfaces
	HI766B1	90° Angle Surface Probe with spring-loaded sensor
	HI766C1 HI766PC	Ultra-Fast Penetration Probe

DiST®: HI98301 - HI98302
HI98303 - HI98304
EC and TDS Testers

- Automatic temperature compensation
- One-point calibration

Specs	HI98301 TDS (DiST® 1)	HI98302 TDS (DiST® 2)
Range	1999 mg/L (ppm)	10.00 g/L (ppt)

Specs	HI98303 TDS (DiST® 3)	HI98304 TDS (DiST® 4)
Range	1999 µS/cm	20.00 mS/cm



HI98308 - HI98309
Water Purity Testers

- Conductometric method for measurements
- Durable casing to withstand harsh environments

Specs	HI98308 (PWT)	HI98309 (UPW)
Range	0.0 to 99.9 µS/cm	0.000 to 1.999 µS/cm



HI98107 pHep® - HI98108 pHep+
pHep pH Testers

- Extractable cloth junction
- Automatic one or two-point calibration

Specs	HI98107	HI98108
pH	0.0 to 14.0 pH	0.00 to 14.00 pH



HI98129 (Combo) - HI98130 (Combo)
pH/EC/TDS Testers

- Waterproof
- Stability indicator
- Automatic Temperature Compensation
- BEPS (Battery Error Prevention System)

Specs	HI98129	HI98130
pH	0.00 to 14.00 pH	0.00 to 14.00 pH
Conductivity	0 to 3999 µS/cm	0.00 to 20.00 mS/cm
TDS	0 to 2000 mg/L (ppm)	0.00 to 10.00 g/L (ppt)



HI98120 - HI98121 - HI981214
pHep pH/ORP & ORP Testers

- Waterproof and designed to float
- HOLD button to freeze readings on the display

Specs	HI98120	HI98121/HI981214
pH	–	-2.00 to 16.00 pH
ORP	± 1000 mV	± 1000 mV



HI98127 - HI98128 - HI981274
pH and Temperature Testers

- Waterproof and designed to float
- Up to three-point calibration (HI98128)

Specs	HI98127/HI981274	HI98128
pH	-2.0 to 16.0 pH	-2.00 to 16.00 pH
Temp	-5.0 to 60.0°C	-5.0 to 60.0°C



HI98311 - HI98312
EC/TDS & Temperature Testers

- Waterproof and designed to float
- Automatic Temperature Compensation (ATC)

Specs	HI98311	HI98312
EC	0 to 3999 µS/cm	0.00 to 20.00 mS/cm
TDS	0 to 2000 ppm (mg/L)	0.00 to 10.00 ppt (g/L)



HI98319
Marine Salinity Tester

- Automatic temperature compensation (ATC)
- Dual pin graphite EC probe

Specs	High Range
ppt (g/L)	0.0 to 70.0
PSU	0.0 to 70.0
S.G. (Specific gravity)	1.000 to 1.041



HI98325
Low and High Range Salinity Tester

- Waterproof
- Automatic temperature compensation (ATC)
- Dual pin graphite EC probe

Specs	Low Range	High Range
ppt (g/L)	0.00 to 10.00	0.0 to 70.0
PSU	0.00 to 10.00	0.0 to 70.0
S.G. (Specific gravity)	1.000 - 1.007 1.	000 to 1.041



HI981304
pH/EC/TDS Combo Tester

- Waterproof
- Automatic temperature compensation (ATC)
- Stability indicator & BEPS (Battery Error Prevention System)

Specs	HI981304
pH	0.00 to 14.00 pH
EC	0.00 to 20.00 mS/cm
TDS	0.00 to 10.00 g/L (ppt)
Temp	0.0 to 60.0°C / 32.0 to 140.0°F



HI98331 Soil Test™
Direct Soil EC and Temperature Tester
with Built-in Stainless Steel EC Probe

- One-point calibration
- Automatic calibration to 1413 µS/cm conductivity standard
- Automatic Temperature Compensation (ATC)

Specs	HI98331 Soil Test™
EC	0 to 4000 µS/cm 0.00 to 4.00 mS/cm (dS/m)
Temp	0.0 to 50.0°C



HI98131
GroLine® pH/EC/TDS Combo Tester
with Built-in Stainless Steel EC Probe

- Waterproof
- Automatic one-point calibration using our Quick Cal solution
- Automatic Temperature Compensation (ATC)

Specs	HI98131
pH	0.00 to 14.00 pH
EC	0.00 to 6.00 mS/cm



HI981030
Soil pH Tester
with specialized probe

- pH electrode with replaceable bridge electrolyte
- Conical tip & PVDF body with Large LCD
- Automatic calibration

Specs	HI981030
pH	0.00 to 12.00 pH



HI98318
EC/TDS Tester

- Waterproof
- Automatic Temperature Compensation (ATC)
- Automatic one-point EC calibration

Specs	HI98318
EC/ TDS	0.00 to 6.00 mS/cm; 0 to 3000 ppm (0.5); 0 to 4000 ppm (0.7)



HI98118
GroLine® pH Tester
with specialized probe

- Waterproof
- Quick calibration mode using Hanna Quick Cal pH/EC calibration solution
- Two-button operation

Specs	HI98118
pH	0.00 to 14.00 pH
Temp	0.0 to 50.0°C



HI9814
pH / EC / TDS / Temperature Meter
with Multiparameter Probe

- Simultaneous, pH, EC/TDS and temperature measurements on a large three-line LCD display
- Watertight Connection
- Large LCD & Durable IP67 waterproof Casing

Specs	HI9814
pH	-2.00 to 16.00 pH
pH-mV	±825 mV
EC	0.00 to 6.00 mS/cm**
TDS	0 to 3000 ppm (500 CF); 0 to 3999 ppm (700 CF)



TESTERS

HI1131B - HI1230B - HI1043B - HI1053B - HI1083B - HI1151B
pH Electrodes



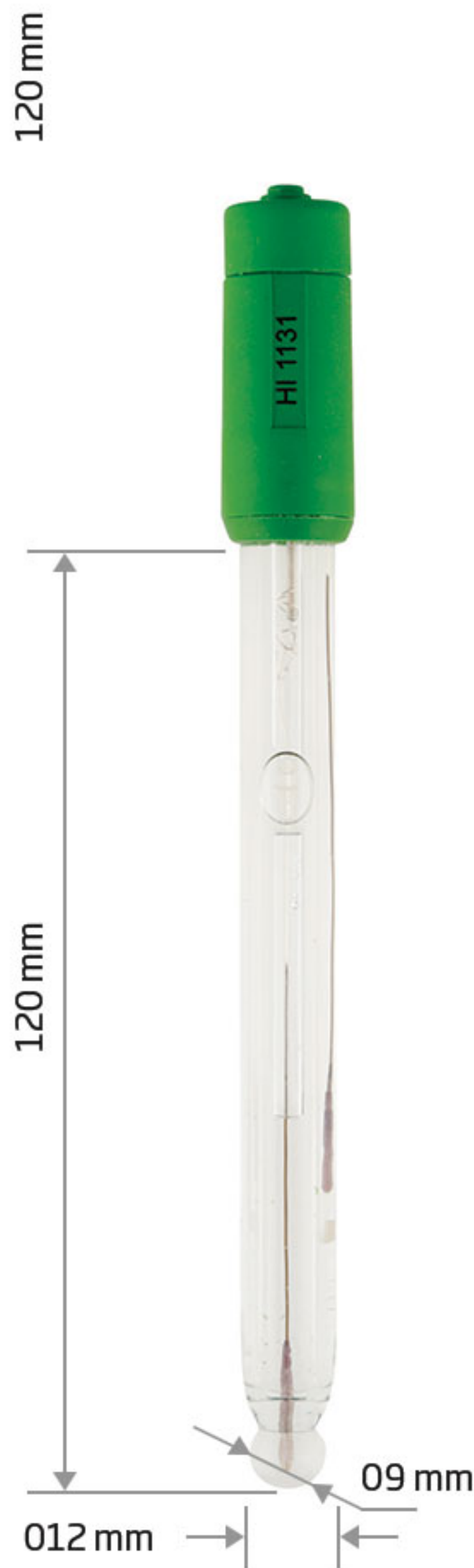
HI1230B
Combination pH Electrode

Reference	double, Ag/AgCl
Junction / Flow Rate	ceramic, single / 15-20 µL/h
Electrolyte	gel
Max Pressure	2 bar
Range	pH: 0 to 12
Recommended Operating Temp.	0 to 70°C (32 to 158°F) – GP
Tip /Shape	spheric (dia: 7.5 mm)
Temperature Sensor	no
Amplifier	no
Body Material	PEI
Recommended Use	field applications, soil solution, photographic chemicals, laboratory (general use)



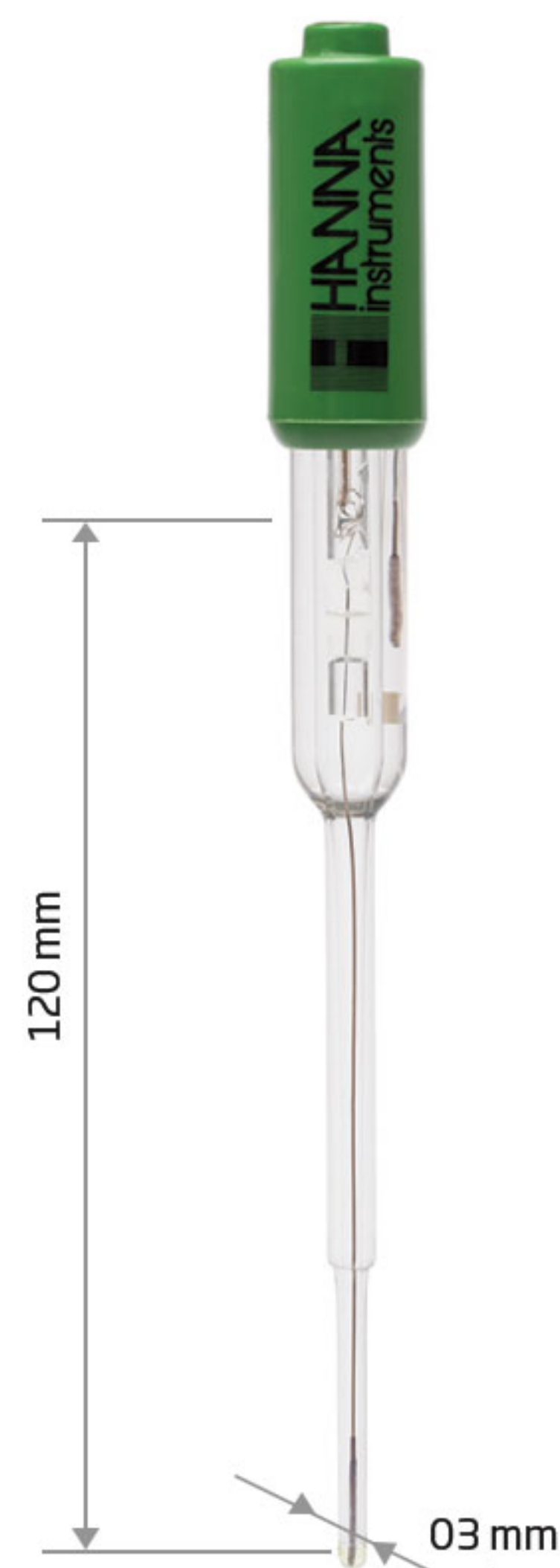
HI1053B
Refillable, Combination pH Electrode
with Low Temperature (LT) Glass and Conical Tip

Reference	double, Ag/AgCl
Junction / Flow Rate	ceramic, triple / 40-50 µL/h
Electrolyte	KCl 3.5M
Max Pressure	0.1 bar
Range	pH: 0 to 12
Recommended Operating Temp.	-5 to 70°C (23 to 158°F) - LT
Tip /Shape	conic (12 x 12 mm)
Temperature Sensor	no
Amplifier	no
Body Material	glass – LT
Recommended Use	fats and creams, high purity water, soil samples, potable water, semi-solid products, low conductivity solutions, emulsions



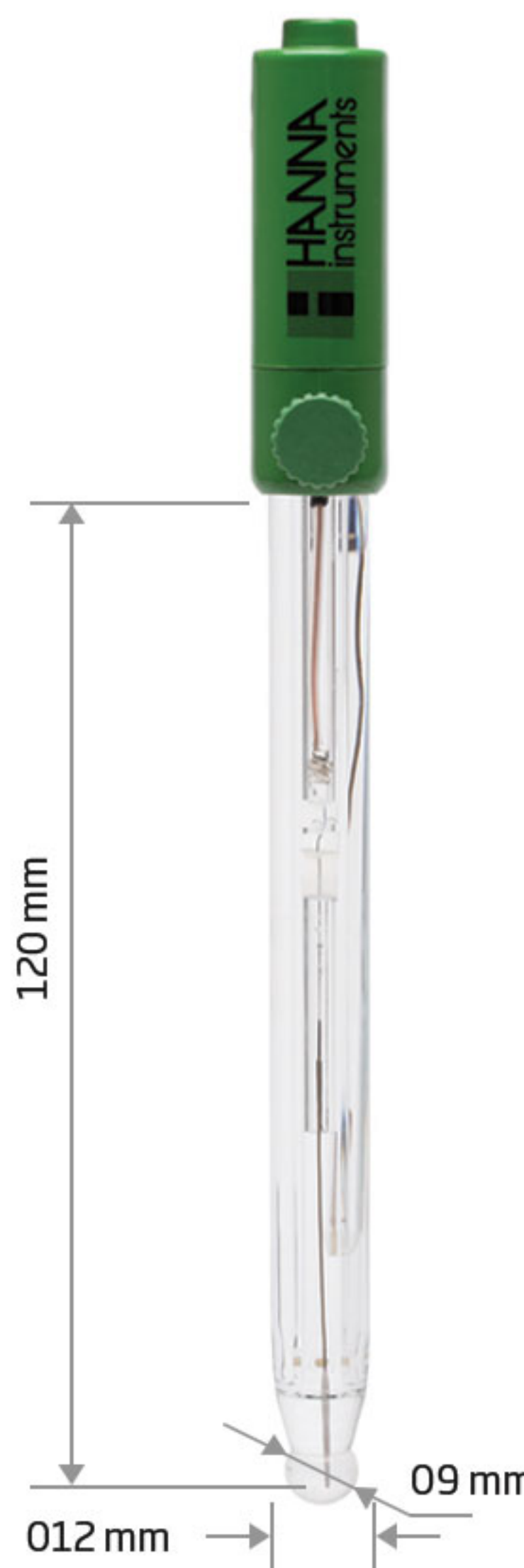
HI1131B
Refillable Combination pH Electrode

Reference	double, Ag/AgCl
Junction / Flow Rate	ceramic, single / 15-20 µL/h
Electrolyte	KCl 3.5M
Max Pressure	0.1 bar
Range	pH: 0 to 14
Recommended Operating Temp.	0 to 100°C (32 to 212°F) – HT
Tip /Shape	spheric (dia: 9.5 mm)
Temperature Sensor	no
Amplifier	no
Body Material	glass
Recommended Use	laboratory general purpose, beer



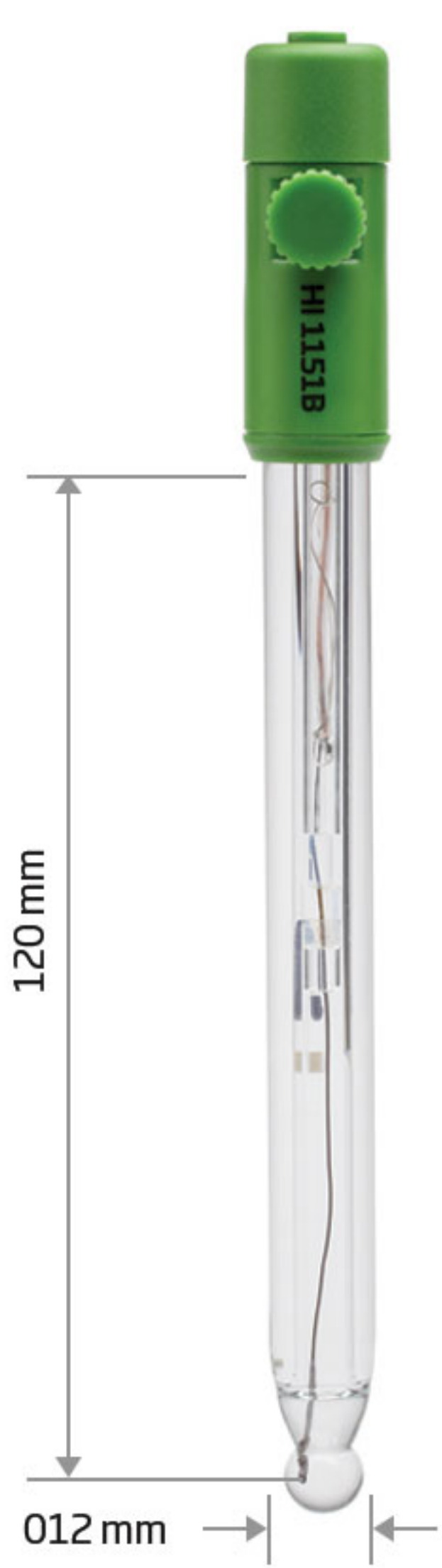
HI1083B
Combination pH electrode
w/micro bulb for small samples

Reference	double, Ag/AgCl
Junction / Flow Rate	open
Electrolyte	viscolene
Max Pressure	0.1 bar
Range	pH: 0 to 12
Recommended Operating Temp.	0 to 50°C (32 to 122°F) - GP
Tip /Shape	spheric (dia: 3 mm)
Temperature Sensor	no
Amplifier	no
Body Material	glass - GP
Recommended Use	biotechnology, samples < 100 µL



HI1043B
Refillable, combination pH electrode

Reference	double, Ag/AgCl
Junction / Flow Rate	ceramic, double / 30-40 µL/h
Electrolyte	KCl 3.5M
Max Pressure	0.1 bar
Range	pH: 0 to 14
Recommended Operating Temp.	0 to 100°C (32 to 212°F) - HT
Tip /Shape	spheric (dia: 9.5 mm)
Temperature Sensor	no
Amplifier	no
Body Material	glass – HT
Recommended Use	hydrocarbons, paints, solvents, sea water, strong acids and bases, high conductivity samples, tris buffer



HI1151B
Refillable, combination pH electrode

Reference	double, Ag/AgCl
Junction / Flow Rate	ceramic, single / 15-20 µL/h
Electrolyte	-
Max Pressure	0.1 bar
Range	pH: 0 to 13
Recommended Operating Temp.	0 to 100°C (32 to 212°F) – HT
Tip /Shape	spheric (dia: 9.5 mm)
Temperature Sensor	no
Amplifier	no
Body Material	glass
Recommended Use	non-aqueous titration

ELECTRODES

HI3131B - HI3230 - HI3149B - HI1413B - FC200B - FC240B
pH & ORP Electrodes



HI3131B
Refillable Combination ORP Electrode

Reference	single, Ag/AgCl
Junction / Flow Rate	ceramic, single / 15-20 µL/h
Electrolyte	KCl 3.5M + AgCl
Max Pressure	0.1 bar
Range	ORP: ±2000 mV
Recommended Operating Temp.	-5 to 70°C (23 to 158°F)
Tip /Shape	platinum pin
Temperature Sensor	no
Amplifier	no
Body Material	glass
Recommended Use	laboratory general use, ORP titrations



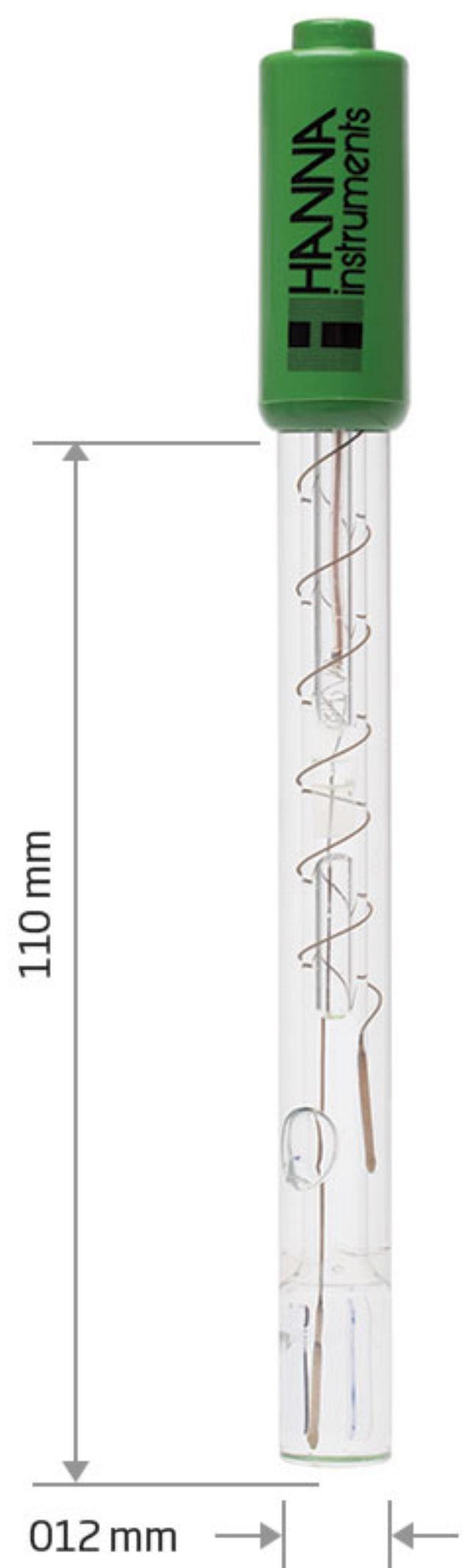
HI3230B
ORP Electrode
Ideal for Municipal Water and QC

Reference	single, Ag/AgCl
Junction / Flow Rate	ceramic, single
Electrolyte	gel
Max Pressure	2 bar
Range	ORP: ±2000 mV
Recommended Operating Temp.	-5 to 70°C (23 to 158°F)
Tip /Shape	platinum pin
Temperature Sensor	no
Amplifier	no
Body Material	PEI
Recommended Use	municipal water, quality control



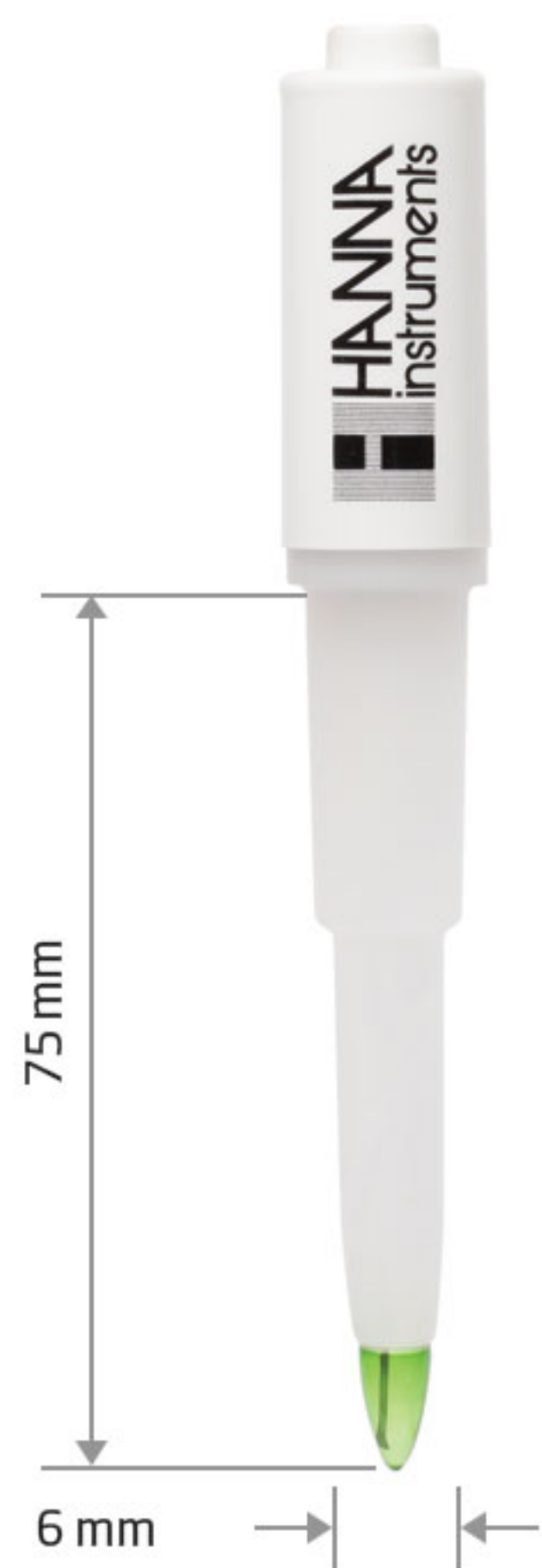
HI3149B
ORP Electrode

Reference	double, Ag/AgCl
Junction / Flow Rate	CPS™
Electrolyte	KCl 3.5M
Max Pressure	0.1 bar
Range	ORP: ±2000 mV
Recommended Operating Temp.	--5 to 60°C (23 to 140°F)
Tip /Shape	platinum ring
Temperature Sensor	no
Amplifier	no
Body Material	glass
Recommended Use	non-aqueous titrations



HI1413B
pH electrode

Reference	single, Ag/AgCl
Junction / Flow Rate	open
Electrolyte	viscolene
Max Pressure	0.1 bar
Range	pH: 0 to 12
Recommended Operating Temp.	0 to 50°C (32 to 122°F) - LT
Tip /Shape	flat
Temperature Sensor	no
Amplifier	no
Body Material	glass
Recommended Use	surface, skin, leather, paper, emulsions



FC200B
pH electrode

Reference	single, Ag/AgCl
Junction / Flow Rate	open
Electrolyte	viscolene
Max Pressure	0.1 bar
Range	pH: 0 to 12
Recommended Operating Temp.	0 to 50°C (32 to 122°F) - LT
Tip /Shape	conic (6 x 10 mm)
Temperature Sensor	no
Amplifier	no
Body Material	PVDF
Recommended Use	penetration, yogurt, cheese, semi-solid foods, fruits, ham and sausages



FC240B
combination pH electrode
with stainless steel sheath

Reference	single, Ag/AgCl
Junction / Flow Rate	open
Electrolyte	gel
Max Pressure	0.1 bar
Range	pH: 0 to 13
Recommended Operating Temp.	0 to 50°C (32 to 122°F) - GP
Tip /Shape	conic (3 x 5 mm)
Temperature Sensor	no
Amplifier	no
Body Material	AISI 316
Recommended Use	penetration, cheese, quality control

ION SELECTIVE ELECTRODES
Combinations, Half Cells & Reference



Parameter	Ammonia	Calcium	Carbon Dioxide	Chloride	Fluoride	Cupric
Combination	HI4101	HI4104	HI4105	HI4107	HI4110	HI4108
Half Cell		HI4004		HI4007	HI4010	HI4008
Type	gas sensing	polymer membrane	gas sensing	solid-state	solid-state	solid-state
Measurement Range	1M to 1X 10 ⁻⁶ M 17000 to 0.02 mg/L (ppm) 14000 to 0.016 mg/L as N	1M to 3X 10 ⁻⁶ M 40080 to 0.12 mg/L (ppm)	1X 10 ⁻³ M to 1X 10 ⁻⁴ M 440 to 4.4 mg/L (ppm)	1M to 5X 10 ⁻⁵ M 35000 to 1.8 mg/L (ppm)	1M to 1X 10 ⁻⁶ M Sat. to 0.02 mg/L (ppm)	0.1M to 1X 10 ⁻⁶ M 6354 to 0.06 mg/L (ppm) (HI4008)
Optimum pH Range	>11	4 to 10	4.2 to 5.2	2 to 11	5 to 8	3 to 7
Temperature Range	0 to 40°C	0 to 40°C	0 to 40°C	0 to 80°C	0 to 80°C	0 to 80°C
Body Material	Delrin	PEI/PVC	Delrin	PEI/epoxy	PEI/epoxy	PEI/epoxy
ISA	HI 4001-00	HI 4004-00	HI 4005-00	HI 4000-00	HI 4010-00 HI 4010-05 HI 4010-06 HI 4010-30	HI 4000-00
Filling Solution	HI 4001-40	HI 7082	HI 4005-40	HI 7072	HI 7075	HI 7072
STD 1	HI 4001-01 0.1 M	HI 4004-01 0.1 M	HI 4005-01 0.1 M	HI 4007-01 0.1 M	HI 4010-01 0.1 M	HI 4008-01 0.1 M
STD 2	HI 4001-02 100 mg/L (ppm)			HI 4007-02 100 mg/L (ppm)	HI 4010-02 100 mg/L (ppm)	
STD 3	HI 4001-03 1000 mg/L (ppm)		HI 4005-03 1000 mg/L (ppm)	HI 4007-03 1000 mg/L (ppm)	HI 4010-03 1000 mg/L (ppm)	



ELECTRODES



Parameter	Lead/Sulfate	Nitrate	Potassium	Silver/Sulfide	Sodium	Reference
Combination	HI4112	HI4113	HI4114	HI4115	FC300B	HI5315
Half Cell	HI4012	HI4013	HI4014	HI4015		
Type	solid-state	polymer membrane	polymer membrane	solid-state	glass combination	n/a
Measurement Range	0.1M to 1X 10 ⁻⁶ M 20700 to 0.21 mg/L (ppm)	1.0M to 1X 10 ⁻⁵ M 62000 to 0.62 mg/L (ppm) 1400 to 0.4 mg/L (ppm) as N	1M to 1X 10 ⁻⁵ M 39100 to 0.039 mg/L (ppm)	Ag ⁺ 1.0M to 1X 10 ⁻⁶ M 107900 to 0.11ppm S2- 1.0M to 1X 10 ⁻⁷ M 32100 to 0.003 ppm	1M to 1X 10 ⁻⁵ M 22990 to 0.23 ppm	n/a
Optimum pH Range	4 to 7	3.0 to 8	1.5 to 12.0	Ag ⁺ 2 to 8 S= 12 to 14	9.75 to 14 pH	n/a
Temperature Range	0 to 80°C	0 to 40°C	0 to 40°C	0 to 80°C	0 to 80°C	0 to 85°C
Body Material	PEI/epoxy	PEI/PVC	PEI/PVC	PEI/epoxy	glass	PEI
ISA	HI 4012-00	HI 4013-00	HI 4014-00	HI 4000-00 (Ag ⁺) HI4015-00 (S ²⁻)	HI 4016-00	n/a
Filling Solution	HI 7072	HI 7078	HI 7076	HI 7072	HI 7079	n/a
STD 1	HI 4012-01 lead 0.1M HI 4012-21 sulfate 0.1 M	HI 4013-01 0.1 M	HI 4014-01 0.1 M	HI 4015-01 0.1 M Silver	HI 4016-01 0.1 M	n/a
STD 2		HI 4013-02 100 mg/L (ppm)			HI 4016-02 100 mg/L (ppm)	n/a
STD 3		HI 4013-03 1000 mg/L (ppm)			HI 4016-03 1000 mg/L (ppm)	n/a



Calibration , Storage & Cleaning Solutions

Hanna supplies a large variety of solutions for virtually any application



pH Technical Buffers with COA

pH Buffers	Code	Package
1.00	HI5001	500 mL
1.68	HI5016	500 mL
2.00	HI 5002	500 mL
3.00	HI5003	500 mL
4.01	HI5004	500 mL
5.00	HI5005	500 mL
6.00	HI5006	500 mL
6.86	HI5068	500 mL
7.01	HI5007	500 mL
8.00	HI5008	500 mL
9.00	HI5009	500 mL
9.18	HI5091	500 mL
10.01	HI5010	500 mL
11.00	HI5011	500 mL
12.00	HI5012	500 mL
12.45	HI5124	500 mL
13.00	HI5013	500 mL

pH Standard Buffers (COA on request)

Solution	Code	Package
pH 1.68	HI7001L	500 mL
pH 4.01	HI7004L	500 mL
pH 7.01	HI7007L	500 mL
pH 6.86	HI7006L	500 mL
pH 8.20	HI70082M	230 mL
pH 8.30	HI70083M	230 mL
pH 9.18	HI7009L	500 mL
pH 10.01	HI7010L	500 mL

Cleaning/Storage/Prep

	Code	Package
Agriculture/Soil Deposits	HI70663L	500 mL
Algae/Bacteria/Fungi	HI70671L	500 mL
Blood	HI70632L	500 mL
Dairy	HI70641L	500 mL
Demineralized Water	HI740230	230 mL
Distilled Water	HI70436	3.75 L
Electrode Cleaning Solution	HI7061L	500 mL
Storage Solution	HI70300L	500 mL
Humus	HI70664L	500 mL
Ink Stains	HI70681L	500 mL
Inorganic Substances	HI7074L	500 mL
Meat Grease/Oils/Fats	HI70631L	500 mL
Milk Deposits	HI70640L	500 mL
Cheese Deposits	HI70642L	500 mL
Proteins	HI8073L	500 mL
Salt Deposits (Industrial)	HI70670L	500 mL
Soil Sample Prepration	HI7051L	500 mL
Skin Grease/Sebum	HI70621L	500 mL
Wine Deposits	HI70635L	500 mL
Wine Stains	HI70636L	500 mL

DO Solutions

	Code	Package
Galvanic Electrolyte	HI7042S	30 mL
Polarographic Electrolyte	HI7041L	500 mL
Zero Oxygen	HI7040L	500 mL
Electrolyte Solution	HI7041S	30 mL

Salinity Standard Solutions

	Code	Package
Seawater Salinty (100% NaCl)	HI7037L	500 mL

ORP Solutions

	Code	Package
240 mV @25C	HI7021L	500 mL
470 mV @25C	HI7022L	500 mL
Pretreatment Reducing	HI7091L	500 mL
Pretreatment Oxidizing	HI7092L	500 mL

TDS Standards

	Code	Package
12.41 ppt	HI7036L	500 mL
1382 ppm	HI7032L	500mL
1500 ppm	HI70442L	500 mL
6.44 ppt	HI70038C	20 mL (25 Sachets)
800 ppm	HI70080C	20 mL (25 Sachets)

EC Standards (without COA)

	Code	Package
84 µS/cm	HI7033L	500 mL
1413 µS/cm	HI7031L	500 mL
5000 µS/cm	HI7039L	500 mL
12880 µS/cm	HI7030L	500 mL
80000 µS/cm	HI7034L	500 mL
111800 µS/cm	HI7035L	500 mL

SOLUTIONS

The Hanna Advantage

A worldwide leader 60 offices in 47 countries, Hanna strives to be a worldwide leader in service and selection.

Local support At every office, we have a team of skilled technicians who are dedicated to providing comprehensive support and services tailored to our customers' needs.

Certification All Hanna products are in compliance with CE directives and our production facilities are ISO 9001:2015 certified.

Quality Our products adhere to rigorous ISO 9001:2015 standards. Every instrument undergoes stringent quality control tests at different stages of manufacturing including 100% quality control checks just prior to shipment

Hanna 360° value When you buy a Hanna product, you're not only buying the best value for your money, but you're also receiving the benefit of Hanna's unsurpassed customer service and post-sale technical support.

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