

HI1312

HALO™

3.8

The world's first pH electrode with Bluetooth® Smart technology

HALO™ is the world's first professional pH probe with Bluetooth® Smart technology (Bluetooth® 4.0). It is a high quality, double junction, refillable glass pH probe with a built-in temperature sensor that can be used virtually anywhere: in the field, laboratory or classroom. Its flexibility and ease of use will revolutionize the way pH is measured.



HALO™ features

- Refillable glass pH electrode
- Double junction reference design
- Integrated temperature sensor
 - Ensures the calibration and measurement is automatically temperature compensated, thus eliminating error
- Wide pH (0 to 13) and temperature (-5 to 80°C) range
- Clear the clutter
 - Data is wirelessly transmitted to an iPad® running the Hanna Lab App via Bluetooth® Smart technology. HALO™ provides up to 500 hours of battery life
- One button sample tagging
 - Pressing either the button on the HALO™ pH probe or the probe icon in the Hanna Lab App will tag sample data for easy reference
- Calibration is stored
 - HALO™ stores calibration information; no additional calibration is needed when switching to another iPad
- Battery condition
 - The measurement screen of the Hanna Lab App displays the name, battery life and condition of the HALO™ probe

New Products

Hanna Lab App

pH Meter Application for use with HALO™

3.10

The first app that turns an iPad® into a full-featured pH meter!

The Hanna Lab App turns an iPad® into a full-featured pH meter when used with the Hanna HALO™ pH electrode with Bluetooth® Smart technology. Functions include calibration, measurement, data logging, graphing and data sharing. Measurement and logging of pH and temperature at one second intervals start as soon as the probe is connected. Measurements can be displayed alone on the display, with tabulated data or as a graph. The graph can be panned and zoomed with the iPad's pinch-to-zoom technology for enhanced viewing.



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HALO™ and Hanna Lab App



	pH Range	0.001 pH Resolution	Five-point pH Calibration	Calibration Buffers	GLP features	iPad Compatible	Bluetooth® Wireless Technology	Hanna Lab App Required	Data Logging	Battery Life	Page
HI11312	0.00-13.00	•	•	up to 7	•	•	•	yes (page 3.10)	•	500 hours	3.8

edge® pH • EC • DO Kit and Single Parameter



	pH Measurement	EC/TDS Measurement	DO Measurement	pH CAL Check™	0.001 pH Resolution	Five-point pH Calibration	Two Custom pH Buffers	GLP Features	Capacitive Touch Buttons	Data Logging	8 Hour Battery Life	PC Connectivity	Benchtop, Portable & Wall-Mount	3.5 mm probe input	Page
Kit Versions (all kit edge® versions have the capability to measure pH, EC and DO with compatible electrodes)															
edge® with pH Kit	•	*	*	•	•	•	•	•	•	•	•	•	•	•	3.12
edge® with EC Kit	*	•	*	*	*	*	*	•	•	•	•	•	•	•	3.12
edge® with DO Kit	*	*	•	*	*	*	*	•	•	•	•	•	•	•	3.12
Single Parameter (edge® single parameter versions have single parameter capability only)															
edge® pH	•			•	•	•	•	•	•	•	•	•	•	•	3.18

* With optional edge® compatible probe

HI5000
Research Grade pH Benchtop Meters



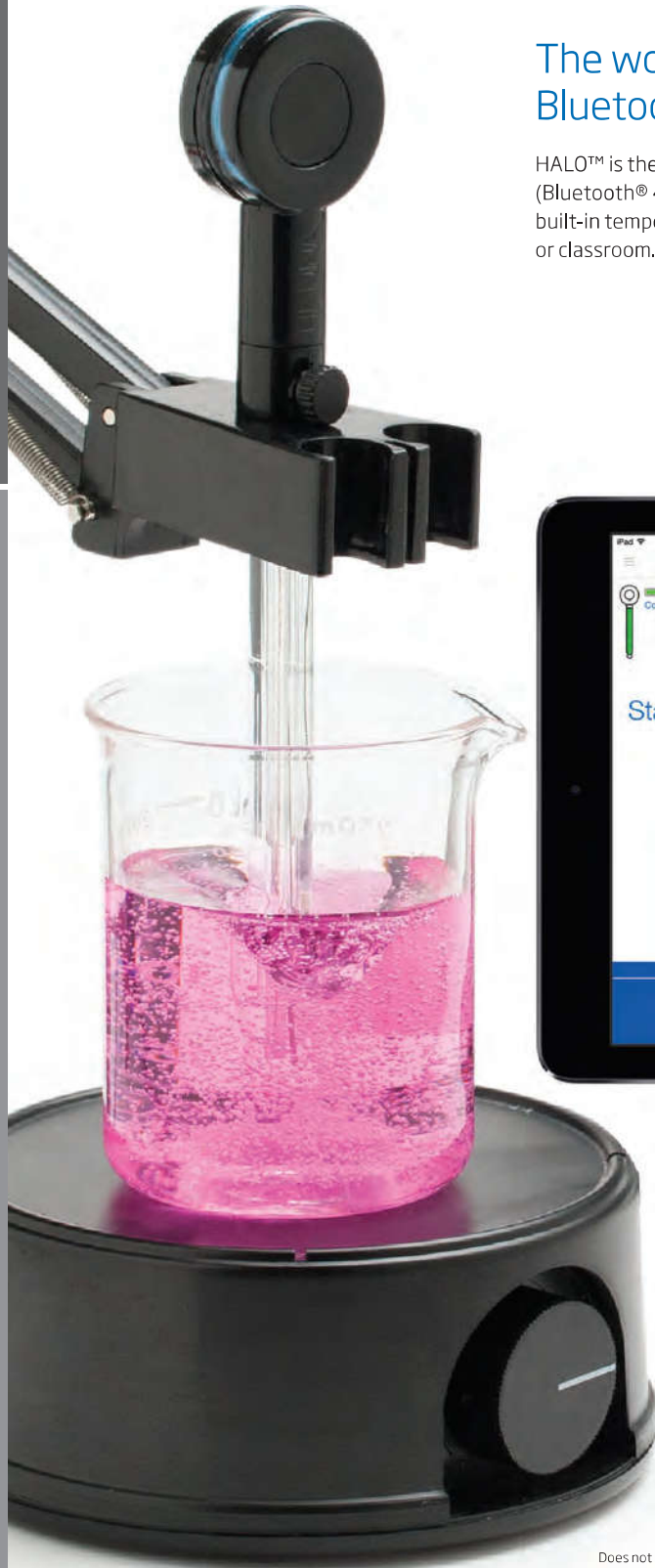
	Two Channels	ISE Measurement	EC/TDS Measurement	CAL Check™	0.001 pH Resolution	Five-point pH Calibration	Five Custom pH Buffers	GLP Features	Real Time Graphing	Data Logging	Incremental Methods	PC Connectivity	Fully Customizable	Page
HI5222	•	•	•	•	•	•	•	•	•	•	•	•	•	3.22
HI521	•		•	•	•	•	•	•	•	•	•	•	•	3.22
HI5222	•	•		•	•	•	•	•	•	•	•	•	•	3.28
HI5221				•	•	•	•	•	•	•		•	•	3.28

HI11312

HALO™

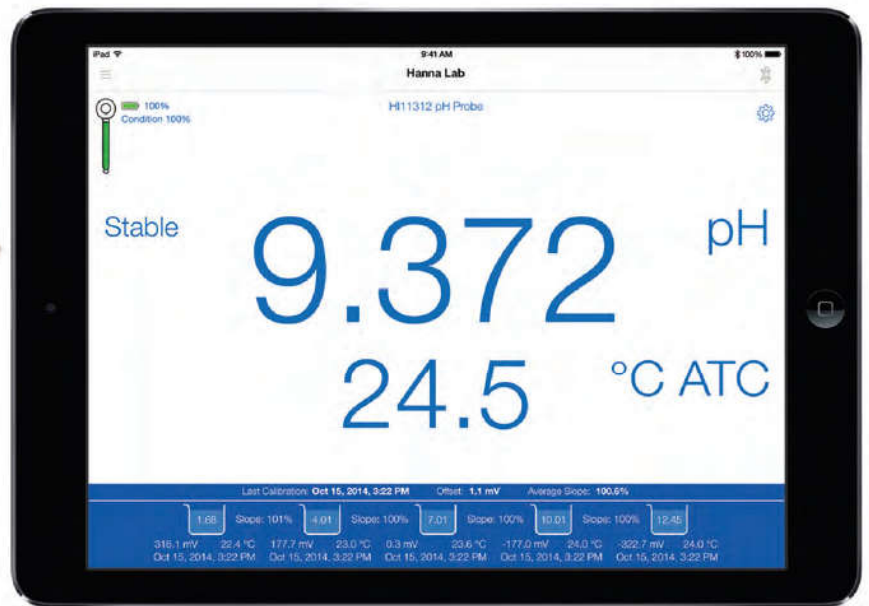
pH

HALO™



The world's first pH electrode with Bluetooth® Smart technology

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iPad not included.

Does not include electrode holder, beaker and magnetic stirrer.

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HI11312 HALO™ Specifications

Reference	double, Ag/AgCl
Junction	ceramic
Electrolyte	3.5M KCl
Range	0,00 to 13,00 pH ±420 mV -5,0 to 80,0°C (23,0 to 176,0°F)
Tip Shape	spheric
Outer Diameter (glass)	12 mm
Overall Length	195 mm
Environment	0,0 to 50,0°C (32,0 to 122,0°F), electronic module is not waterproof
Solution Temperature	-5,0 to 80,0°C (23,0 to 176,0°F)
Temperature Sensor	integrated
Body material	glass
Connection	Bluetooth® Smart (Bluetooth 4.0), 10 m (33') range
Battery Type / Life	CR2032 3V lithium ion / approximately 500 hours

Ordering Information

HI11312 (HALO™) is supplied with storage solution, storage cap, pH 7.01 buffer solution sachets (2), pH 4.01 buffer solution sachets (2), electrode cleaning solution sachets (2), HI7082 fill solution (30 mL), pipette for fill solution, battery, quality certificate and instruction sheet.

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One press connect

Easily connect to the Hanna Lab App* at the press of a button via Bluetooth® wireless technology (10 m range (33')),

*Required for use. See the Hanna Lab App on the next page.



Status indicator

Visible from a distance, the LED halo light indicates the probe is active and transmitting.



Easy to replace battery

The HALO's CR2032 lithium ion battery is easily replaceable and lasts for approximately 500 hours.