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<sup>Compatible with:</sup> iOS Android™ edge®blu

#### Ideal for field applications

HI12302 HALO is an innovative, pH electrode with Bluetooth® Smart technology that allows a compatible Apple or Android smart device to be used as a pH meter. HI12302 is a general purpose, PEI plastic body pH electrode for routine measurements in the field, lab, or at home.

- PEI plastic body
- Durable, chemically resistant plastic
- Double Junction
  - Silver free outer reference that is compatible with most samples
- Built-in temperature sensor
  - High accuracy temperature compensated measurements
- Gel-filled reference
  Maintenance free with no fill solutions required

## **PEI Plastic Body**

The body of the HI12302 is composed of polyetherimide (PEI) resin. PEI is a high quality plastic that is chemically resistant to many aggressive chemicals making it ideal for a wide range of applications. The PEI body excels in field measurements due to its durability. The shield around the spherical glass tip also helps to minimize breakage due to accidental bumping or dropping of the electrode.

# **Double Junction**

HI12302 is a double junction pH electrode in which the Ag/AgCl necessary for the reference cell is located behind an inner ceramic junction. The electrolyte between the inner and outer junction is silver free. This is important to prevent the precipitation of silver by Tris buffer, metals, and sulfides that would clog the junction leading to erratic readings.

### Built-in Temperature Sensor

A thermistor temperature sensor is built into the tip of the pH electrode. A thermistor based temperature sensor provides for a high accuracy temperature reading while being in the tip of the electrode allows for a rapid determination of the temperature as it impacts the effect on the glass membrane potential.

## Maintenance Free Gel-filled Reference

HI12302 contains a silver free gel in the outer reference cell. There is no fill solution to replenish as the probe is used. Other than routine calibration and cleaning, this probe is maintenance free.



HALO Specifications	HI12302
Measurement Range	0.00 to 12.00 pH
Reference Cell Type	double, Ag/AgCl
Junction Type	ceramic
Electrolyte	gel
Body Material	PEI
Tip / Shape	dome
Temperature Operating Range	-5 to 70°C (23 to 158°F)
Glass Type	LT (low temperature)
Body Length/Overall Length	100 mm / 165 mm
Temperature Sensor	integrated
Outer Diameter	12 mm (plastic)
Connector Type	Bluetooth Smart (Bluetooth 4.0), 10 m (33') range
Battery Type/Life	CR2032 3V lithium ion / approximately 500 hours
Environment	0 to 50°C (32 to 122°F); electronic module is not waterproof
Ordering Information	H112302 (HALO) is supplied with storage solution, cleaning solution, pH 7.01 buffer solution, pH 4.01 buffer solution, battery, quality certificate, and instruction sheet.

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