PREAMPLIFIED ALpHA® pH ELECTRODES 📷



Basic Unit

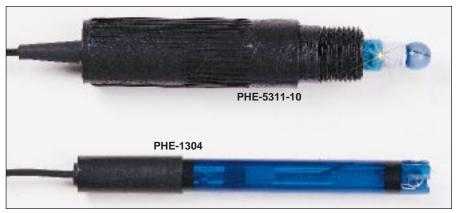
SO4 With Preamplifier

- Interfaces Directly with Most Instrumentation that Accepts mV Input Signal
- Signal can be Run Up to 305 m (1000')
- Power Supply Available in Three Styles

OMEGA Engineering offers pH electrodes with integral preamplifiers for laboratory or industrial applications. These electrodes can interface directly with equipment that accepts a millivolt input signal with a 10 k Ω or greater input impedance, such as a data acquisition interface or multimeter. The preamplifier converts the high impedance millivolt signal of the electrode into a low impedance signal, enabling the signal to be run up to 305 m (1000') without signal loss. The electrode is supplied with 1 to 3 m (3 to 10') of coaxial cable,

Power Options

| | - | |
|---|-------|---|
| Suffix to Add to Model No. of Electrode | Price | Description |
| -EB | \$60 | Replaceable External battery pack |
| -PB | 60 | Battery encapsulated in the cap of the electrode. Battery life approximately one year. Battery cannot be replaced. |
| -NB | 50 | Requires external dc power supply of ±1.5 Vdc to ±9 Vdc |



depending on the model. If longer cable lengths are required, simply splice on extension cable.

These preamplified electrodes are available in a variety of styles and can interface with any pH meter, controller, transmitter, multimeter or data acquisition system with a one-to-one unity gain.

An accompanying power supply is available in three styles: an encapsulated battery design, an external battery style, and a style for use with an external dc power source.

SPECIFICATIONS

Output: 0 pH = +414.1 mV; 14 pH = -414.1 mV @ 25°C (77°F)

Temperature: -5 to 100°C (23 to 212°F) Impedance: $10 \text{ k}\Omega$ Unity Gain: 1 Power Supply: ±1.5 Vdc to ±9 Vdc; 0.5 mA current Battery Life: 1 year

CC pН

Accessories

| Model No. | Price | Description |
|-----------|-------|---|
| EB-SPARE | \$10 | Spare battery pack for -EB option. |
| PHE-DPS | 50 | ±3 Vdc power supply to operate preamplified electrodes, input 115 Vac |

| Model No. | Price | Description | | |
|-----------------|-------|--|--|--|
| PHE-1304-(*) | \$32 | Combination gel-filled, epoxy-bodied, general purpose laboratory pH electrode. pH range 0 to 12, temp. 0 to 80°C (32 to 176°F). | | |
| PHE-2114-(*) | 77 | Combination general purpose, large bulb, refillable glass pH electrode. pH range 0 to 13, temp. 0 to 1000°C (32 to 1832). | | |
| PHE-5311-10-(*) | 103 | Industrial in-line combination, general purpose, gel filled, pH electrode, Kynar housing, ½" MNPT threading, insertion length 1". 10' of cable standard. pH range 0 to 13, temp. range -5 to 100°C. (23 to 212°F). Dimensions: 127 x 25 mm (5 x 1"). | | |
| PHE-5411-10-(*) | 124 | Industrial in-line combination double junction electrode. MNPT threading, insertion length 1". 10' of cable standard. pH range 0 to 13, temp. range -5 to 100°C (23 to 212°F). Dimensions: 127 x 25 mm (5 x 1"). | | |
| PHE-5316-10-(*) | 93 | Industrial in-line combination, general purpose, gel-filled, pH electrode, CPCV housing, ³ / ["] MNPT threading, 2" insertion length. 10' cable standard. pH range 0 to 13, temp. range -5 to 80°C (23 to 176°F). Dimensions: 168 x 25 mm (6.6 x 1"). | | |
| PHE-6351-10-(*) | 114 | Industrial submersible, combination, general purpose, gel-filled, pH electrode. Electrode potted in 36" ABS pipe. 10' cable standard. pH range 0 to 13, temp. range 0 to 80°C (32 to 176°F). Dimensions: 28 x 914 mm (1.1 x 36"). | | |
| PHE-6451-10-(*) | 134 | Industrial submersible, combination, double junction, gel-filled, pH electrode. Electrode potted in 36" ABS pipe. 10' cable standard. pH range 0 to 13, temp. range 0 to 80°C (32 to 176°F). Dimensions: 28 x 914 mm (1.1 x 36"). | | |

* Specify power option (see table) and add additional cost to price of electrode: "-EB" (\$60), "-PB" (\$60), or "-NB" (\$50).

Ordering Example: PHE-5411-10-EB, industrial in-line double junction preamplified electrode with external battery, \$124 + 60 = \$184

omega.co.uk®

Your One-Stop Source for Process Measurement and Control!

Freephone 0800 488 488 | International +44(0) 161 777 6622 | Fax +44(0) 161 777 6622 | Sales@omega.co.uk

www.omega.co.uk



UNITED STATES www.omega.com 1-800-TC-OMEGA Stamford, CT.

CANADA www.omega.ca Laval(Quebec)

1-800-TC-OMEGA

GERMANY

www.omega.de Deckenpfronn, Germany 0800-8266342 UNITED KINGDOM www.omega.co.uk Manchester, England 0800-488-488 +44-(0)161-777-6611

> FRANCE www.omega.fr 0800-466-342

BENELUX www.omega.nl 0800-099-33-44



More than 100,000 Products Available!

Temperature

Calibrators, Connectors, General Test and Measurement Instruments, Handheld Instruments for Temperature Measurement, Ice Point References, Indicating Labels, Crayons, Cements and Lacquers, Infrared Temperature Measurement Instruments, Recorders, Relative Humidity Measurement Instruments, PT100 Probes, PT100 Elements, Temperature & Process Meters, Timers and Counters, Temperature and Process Controllers and Power Switching Devices, Thermistor Elements, Probes and Assemblies, Thermocouples, Thermowells and Head and Well Assemblies, Transmitters, Thermocouple Wire, RTD Probes

Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

Data Acquisition

Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485, Ehernet and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

• Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Pressure Transmitters, Strain Gauges, Torque Transducers, Valves

Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters