



# pH FIELD & LAB ELECTRODES

## High Accuracy ALpHA® pH Electrodes

PHE-4810  
Starts at  
**\$149**



- ✓ Fast Response
- ✓ Accurate Performance
- ✓ Stable Readings
- ✓ Covers Entire 0 to 14 pH Range
- ✓ Suitable for Temperature from 0 to 100°C (32 to 212°F)
- ✓ Rapid Renew Junctions Models Available
- ✓ BNC Connector

PHB-600R, \$570, (see page B-25 in the GREEN BOOK® section of this handbook) and PHE-4821, \$184, shown smaller than actual size.



OMEGA Engineering is pleased to offer the ALpHA® Series of pH electrodes. The special internal design allows rapid, stable readings to be taken even during large temperature shifts. The double junction construction prevents silver ions from contacting the sample, eliminating reactions with heavy metals, sulfides, and proteins. ALpHA Series electrodes are available in a variety of styles to suit a wide range of applications.

The low maintenance sealed designs are economical and easy to use. Their porous polyethylene junction resists clogging and provides good chemical compatibility with many solutions. The refillable ALpHA® Series electrodes have a unique spring-loaded knob that opens the sleeve junction to provide fresh reference fluid. The refillable style also has a twist-seal refill hole that opens by simply turning the collar, making the refilling process less awkward. ALpHA® Series pH electrodes are available in epoxy body and glass body styles. The epoxy model is used for applications that require a more rugged electrode; the glass style offers a better range of chemical compatibility. All ALpHA® Series electrodes can measure the full 0 to 14 pH scale (0 to 12 pH without sodium ion error) and can withstand temperatures from 0 to 100°C (32 to 212°F).

### Application Suggestions

**PHE-4810** Sealed with an epoxy body and removable bulb guard. Suitable for general laboratory applications that require a double junction style.

**PHE-4815** Sealed with a glass body. Suggested for applications similar to the PHE-4810, but with broader chemical compatibility.

**PHE-4821** Refillable electrode with epoxy body and removable bulb guard. Suitable for samples that can cause junction fouling. Also features Rapid Renewal Junction.

**PHE-4830** Sealed, with a flat measuring surface. Suitable for measuring semi-solids, slurries, and viscous materials.

**PHE-4841** Refillable with a glass body. Suggested for similar applications suited to the PHE-4821, but provides better chemical compatibility. Rapid Renewal Junction feature.

# pH FIELD & LAB ELECTRODES



BNC  
Connector  
Standard.

PHE-4815,  
\$149.

PHE-4830,  
\$184.

PHE-4810,  
\$149.

PHE-4821,  
\$184.

PHE-4841,  
\$184.

All models shown  
smaller than actual size.



PHE-4821 and PHE-4841 refillable electrodes feature rapid renewal junctions, allowing the junctions to be cleaned when scaling occurs.

- ✓ Covers Entire 0 to 14 pH Range
- ✓ Suitable for Temperature from 0 to 100°C (32 to 212°F)
- ✓ Fast Response
- ✓ Accurate Performance
- ✓ Stable Readings
- ✓ Rapid Renewal Junction Models Available
- ✓ BNC Connector



MOST POPULAR MODEL HIGHLIGHTED!

To Order (Specify Model Number)				
Model No.	Price	Length mm (in)	Dia. mm (in)	Description
PHE-4810	\$149	150 (6)	12 (0.47)	Epoxy body, sealed, with removable bulb guard
PHE-4815	149	150 (6)	12 (0.47)	Glass body, sealed
PHE-4821	184	150 (6)	12 (0.47)	Epoxy body, refillable, with removable bulb guard and rapid renewal junction
PHE-4830	184	150 (6)	12 (0.47)	Epoxy body, sealed, with flat measuring surface
PHE-4841	184	150 (6)	12 (0.47)	Glass body, refillable, with removable bulb guard and rapid renewal junction
CH-5527	16	Reference Book: A Dictionary of Chemistry		



Comes complete with 75 cm (30") of cable with BNC connector, and operator's manual.

Ordering Examples: PHE-4830, epoxy-bodied sealed electrode with flat measuring surface, 150 mm (6") length, 12 mm (0.47") diameter, \$184.  
PHE-4810, epoxy body electrode with removable guard, \$149.

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