



## Description

The P60R-8 pH and the R60R-8 ORP probe are dependable industrial grade sensors designed to provide accurate measurement and longer service life under the most demanding conditions. Some features of these probes include: differential measurement technology, replaceable salt bridge and encapsulated preamp.

The P/R60R-8 incorporates all the benefits of differential measurement found in other models of the 60 series, field proven in thousands of installations. This technique uses two glass electrodes to make the measurement differentially with respect to a third metal electrode. The domed glass process electrode is specially designed for tough applications. The second electrode is immersed in a pH 7 buffer encapsulated in the probe.

This second electrode is protected from the process by a double junction replaceable salt bridge. The resulting true differential measurement has several advantages over conventional probes: ground loop problems are virtually eliminated, and the salt bridge is easily replaced.

If the internal solution becomes contaminated, the probe can be rejuvenated at modest cost by replacing the salt bridge and reference solution. Automatic temperature compensation is accomplished through the use of a thermistor at the tip of the probe. This thermistor placement provides rapid response for process temperature variations.

The encapsulated preamplifier provides an output signal which can be transmitted 3000 feet over inexpensive cable. Another version encapsulates a blind 4-20 mA two wire transmitter which can transmit a virtually unlimited distance over a twisted pair cable. (See P/R65 data sheet).

## Features

- Differential measurement technology
- Replaceable Salt Bridge
- Double junction for longer life
- Low Maintenance Cost
- Field-proven
- Encapsulated Preamplifier
- Transmits up to 3000 ft.
- Chemically resistant
- 4-20 mA two-wire blind transmitter version available (model P/R65)
- ORP available with gold electrode

## Applications

- Process Control
- Industrial and Municipal Water Treatment
- Industrial and Municipal Waste Treatment and Neutralization
- Fume Scrubbers
- Plating
- Circuit Board Manufacturing
- Food and Beverage
- Chemical Processing
- Pulp and Paper
- Mining



**AquaMetrix**  
by  Water Analytics

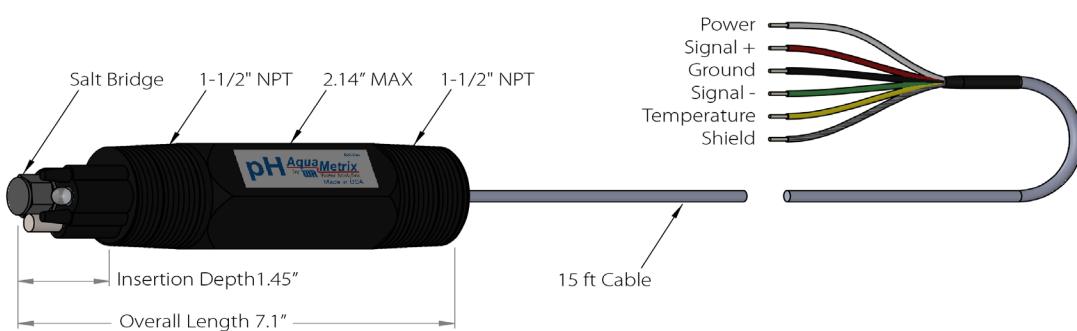
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# Model P/R60R8 Differential pH or ORP Probes

## Technical Data

Measuring Range	Stability	
pH	pH	0.03 pH per day, non-cumulative
ORP	ORP	2.0 mV per day, non-cumulative
Wetted Materials	Sensitivity	
Ryton, Kynar, glass, titanium palladium alloy and Viton (Platinum for ORP probe).	pH	0.001 pH unit
Temperature Limits	ORP	0.1 mV
-5 to 95°C (23 to 203°F)	Accuracy	
Maximum Pressure	pH	± 0.02 pH
100 psig at 150°F (65°C)	ORP	± 5 mV
Maximum Flow Rate	Sensor Cable	
10 ft./sec maximum (3 meters/sec) Flow should be as low as possible in water with low conductivity water or suspended sol	5 Conductor plus shield, 15 ft. (4.6m)	
Automatic Temperature Compensation		
Standard PT1000Ω RTD Optional ATC: 300 NTC, pt100Ω RTD, 3000 NTC		

## Dimensions



## Related Products

### ACCESORIES

AM-JB1	NEMA 4X junction box
AM-ARM-8	Submersion hardware for -8 series sensor
AM-CBL60	Extension cable for 60 series
AM-SBK-8	Salt bridge kit for -8 series sensor (3 Pack)
AM-PTR-8	Electrode protector for -8 series sensor
AM-TEE-8	2" Union Tee with adaptor for -8 series sensor
AM-JET-8	Jet cleaner for -8 series sensor
AM-SFL-8	2" Sanitary flange for -8 series sensor

### CALIBRATION SOLUTIONS

AM-PH4-1P	pH 4 Buffer, 1 pint (500 mL)
AM-PH7-1P	pH 7 Buffer, 1 pint (500 mL)
AM-PH10-1P	pH 10 Buffer, 1 pint (500 mL)
AM-R200-1P	ORP Buffer, 200 mV, 1 pint (500 mL)
AM-R600-1P	ORP Buffer, 600 mV, 1 pint (500 mL)

## Ordering Information

P60R8-015	pH probe, 1-1/2" NPT threaded body
P60R8H-015	pH probe with Hard glass electrode
P60R8A-015	pH probe with Antimony electrode
P60R8F-015	pH probe with flat faced electrode
R60R8-015	ORP probe, 1-1/2" NPT threaded body
R60R8H-015	ORP probe with Hard glass electrode
R60R8G-015	ORP probe with Gold electrode