



## Description

The P60R8 pH sensor is a dependable industrial grade sensor designed to provide accurate measurement and longer service life under the most demanding conditions. Some features of this sensor include: differential measurement technology, replaceable salt bridge and encapsulated preamp.

The P60R8 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 sensor.

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 sensors: ground loop problems are virtually eliminated, and the salt bridge is easily replaced.

If the internal solution becomes contaminated, the sensor can be rejuvenated at modest cost by replacing the salt bridge and reference solution. Automatic temperature compensation is accomplished through the use of a Pt1000 RTD at the tip of the sensor. This Pt1000 RTD 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 P65 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

## Applications

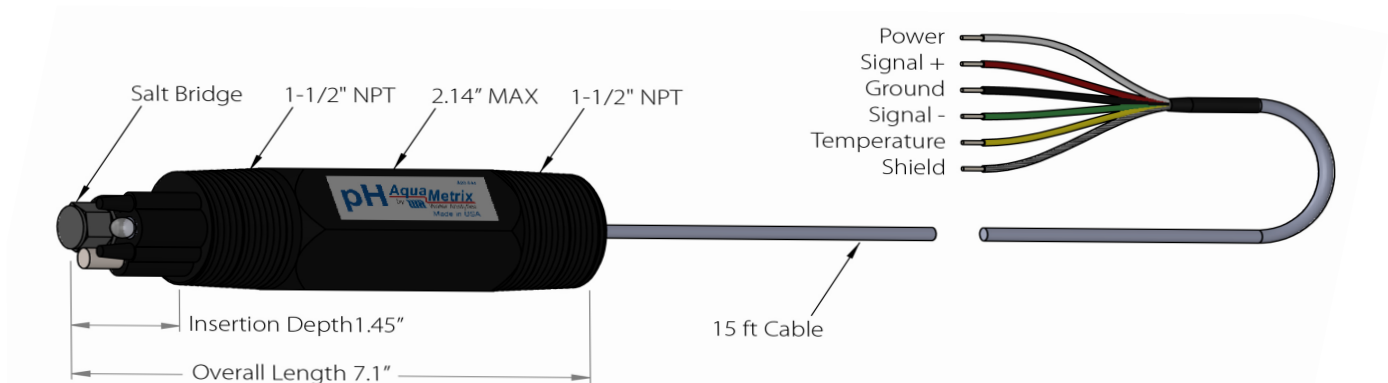
- Process Control
- Industrial and Municipal Water Treatment
- Industrial and Municipal Waste Treatment and Neutralization
- Fume Scrubbers
- Plating
- Circuit Board Manufacturing
- Food and Beverage
- Chemical Processing
- Pulp and Paper
- Mining

# AquaMetrix P60R8 Differential pH Sensor

## Technical Data

|                                    |   |
|------------------------------------|---|
| Linear Measurement Range           | 1 to 12 pH<br>Response at pH<1 or >12 is non-linear (<59.2 mV/pH @ 25 °C)   |
| Wetted Materials                   | Ryton, CPVC, Kynar, glass, titanium palladium alloy and Viton<br>*PVC (cable jacket) and Dynaflex (strain relief) when fully submerged. |
| Temperature Limits                 | -5 to 75°C (23 to 167°F)  |
| Maximum Pressure                   | 100 psig at 150°F (65°C)  |
| Maximum Flow Rate                  | 10 ft./sec maximum (3 meters/sec) but lower in water with low conductivity water or suspended solids                                    |
| Automatic Temperature Compensation | Standard PT1000Ω RTD; Optional: 300 NTC   |
| Stability                          | 0.03 pH per day, non-cumulative   |
| Sensitivity                        | 0.01 pH   |
| Accuracy                           | ± 0.02 pH   |
| Sensor Cable                       | Default Length 15 ft. (4.6m)<br>5 Conductor plus shield   |

## Dimensions



## Related Products

### ACCESSORIES

|             |   |
|-------------|---|
| AM-SBK3-R8  | Salt bridge kit for -R8 series sensor (3 Pack)  |
| AM-SBK10-R8 | Salt bridge kit for -R8 series sensor (10 Pack) |
| AM-ARM-8    | Submersion hardware for -8 series sensor        |
| AM-CBL      | Extension cable for 60 series                   |
| AM-JB2      | NEMA 4X junction box                            |
| AM-PTR-8    | Electrode protector for -R8 series sensor       |
| AM-TEE-8    | 2" Union Tee with adaptor for -R8 series        |
| AM-JET-8    | Jet cleaner for -R8 series sensor               |
| AM-SFL-8    | 2" Sanitary flange for -8 series sensor         |

### ANALYZERS

|           |                                       |
|-----------|---------------------------------------|
| AM-2250   | Multi-Parameter Controller            |
| AM-2250TX | Multi-Parameter Transmitter           |
| AM-2252   | Dual Input Multi-Parameter Controller |

## Ordering Information

|            |                                     |
|------------|-------------------------------------|
| P60R8-015  | pH sensor, 1-1/2" NPT threaded body |
| P60R8H-015 | pH sensor with Hard glass electrode |
| P60R8A-015 | pH sensor with Antimony electrode   |
| P60R8F-015 | pH sensor with flat faced electrode |
| P60R8N-015 | pH sensor with 300NTC thermistor    |

### 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) |