



## Description

The R60R8 ORP 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 R60R8 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 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 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



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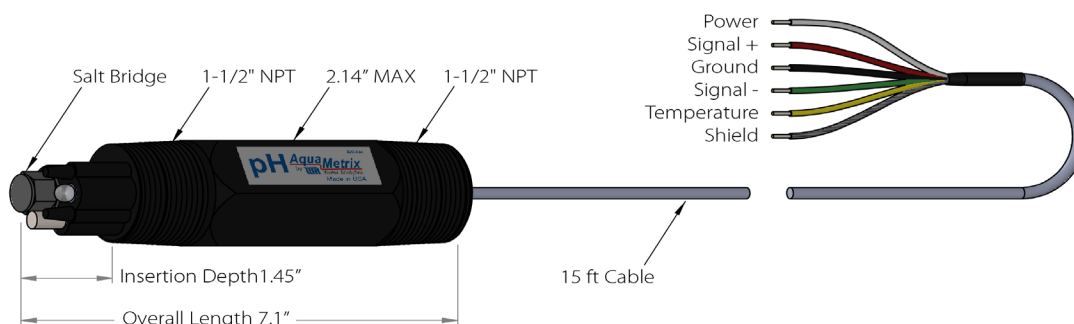
[www.WaterAnalytics.net](http://www.WaterAnalytics.net)

# Model R60R8 Differential ORP Sensor

## Technical Data

Measuring Range	-2000 to +2000 mV	Stability	2.0 mV per day, non-cumulative
Wetted Materials	Ryton, Kynar, glass, titanium palladium alloy, Viton, and Platinum	Sensitivity	0.1 mV
Temperature Limits	-5 to 95°C (23 to 203°F)	Accuracy	± 5 mV
Maximum Pressure	100 psig at 150°F (65°C)	Sensor Cable	5 Conductor plus shield, 15 ft. (4.6m)
Maximum Flow Rate	10 ft./sec maximum (3 meters/sec) Flow should be as low as possible in water with low conductivity water or suspended sol		
Automatic Temperature Compensation	Standard PT1000Ω RTD Optional ATC: 300 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-R200-1P	ORP Buffer, 200 mV, 1 pint (500 mL)
AM-R600-1P	ORP Buffer, 600 mV, 1 pint (500 mL)

## Ordering Information

R60R8-015	ORP sensor, 1-1/2" NPT threaded body
R60R8G-015	ORP sensor with Gold electrode
R60R8N-015	ORP sensor with 300NTC thermistor
<b>ANALYZERS</b>	
AM-2250	Multi-Parameter Controller
AM-2250TX	Multi-Parameter Transmitter
AM-2251	Multi-Parameter Controller