



## Description

The new and improved one inch sensor is the latest additions to the legendary AquaMetrix differential sensor family. The 1" version now comes in distinctive blue PPS (Ryton®) for superior resistance to chemical and mechanical weathering.

The replaceable salt bridge has been completely redesigned for this series - no special tools required! Simply grab a #3 Philips screwdriver or 1/2" wrench and rejuvenate your sensor in seconds.

The improved, universal flat-faced glass process electrode is specially designed for tough applications. A larger surface area guarantees quick readings and outstanding performance, and a self-cleaning flush fit when installed inline ensures upkeep will be minimal. The process electrode is now encased in a protective layer of PPS offering increased resistance to physical damage compared to previous versions.

All of our 60 and 65-series sensors are dependable industrial grade sensors designed to provide accurate measurement and longer service life under the most demanding conditions. The new R5-series incorporates all the benefits of differential measurement found in other models of the 60 series, field proven in thousands of installations.

Differential measurement technology uses two glass electrodes to make the measurement differentially with respect to a third metal electrode. The resulting true differential measurement has several advantages over conventional sensors: ground loop problems are virtually eliminated and the sensor can be restored to factory condition 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 new version of this sensor is compatible with any off-the-shelf 1" NPT fittings, and serves as a drop-in replacement in fittings designed for the previous iteration.

The encapsulated preamplifier in 60-series provides an output signal which can be transmitted 2,000 feet over inexpensive cable. Our 65-series of this sensor encapsulates a blind 4-20 mA two wire transmitter which can transmit a virtually unlimited distance over a twisted pair cable.

## Features

- Low cost of ownership
- Replaceable Salt Bridge
- Flat face electrode is standard
- Encapsulated preamplifier transmit up to 2,000 ft
- Chemically resistant PPS body
- Universal style: flow-through and submersion
- 4-20mA output
- Quick Ship Available

## Applications

- Process Control
- Industrial and Municipal Waste Treatment and Neutralization
- Fume Scrubbers
- Plating
- Circuit Board Manufacturing
- Mining
- Power Generation
- Food and Beverage
- Aquaculture
- Agriculture



**AquaMetrix**  
by  Water Analytics

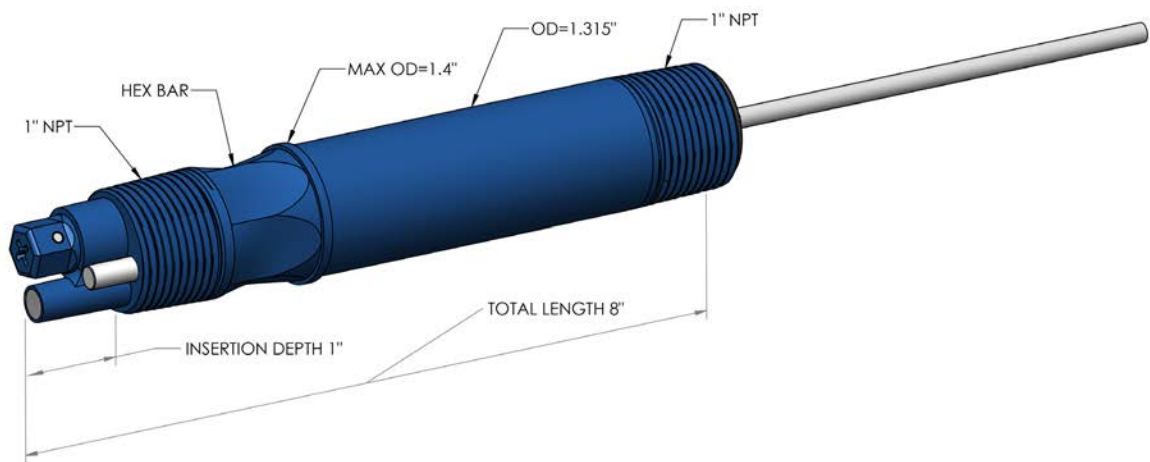
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# P65R5 pH Differential Sensor

## Technical Data

Measuring Range	0 to 14 pH	Stability	0.03 pH per day, non-cumulative
Wetted Materials	Ryton® (PPS) body, ceramic junction, glass electrode, Viton®, Titanium	Sensitivity	0.01 pH unit
Temperature Limits	23 to 203°F (-5 to 95°C) at amospheric pressure	Accuracy	± 0.02 pH
Maximum Pressure	100 psig at 150°F ( 65°C)	Sensor Cable	Default length 15 ft (4.5m) 2-wire
Maximum Flow Rate	10 ft. (3 meters) per second		
Automatic Temperature Compensation	10k $\Omega$ thermistor		

## Dimensions



## Related Products

### ANALYZERS

AM-2300	Multi-Input Controller
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### ACCESORIES

AM-SBK-R5	Salt bridge kit (3 pack) for R5 sensor
AM-CFT-R5	1.5" compression fitting for R5 sensor
AM-TEE-5	2" Union TEE with adapter
AM-ARM-5	Submersion Arm
AM-PTR-5	Electrode Protector
AM-JET-5	Jet Cleaner
AM-SFL-5	2" Sanitary Flange

## Ordering Information

P65R5-015	Analog output (4-20mA) industrial differential pH sensor for flow-through or submersion application. Compatible with AM-2300 and any PLC with 4-20mA input. Standard 15 ft cable.
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### 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)