

# Aquametrix Combination Style pH and ORP Sensors

### Model P575 (pH) Model R575 (ORP)



#### **Features**

- Fixed insertion depth
- Industrial-grade quality
- Convertible design allows for flow-through and submersion use
- 1000Ω RTD temperature element included
- Mounts from either end in standard 1" FNPT fittings
- Durable CPVC shell provides excellent chemical resistance

#### Description

These industrial combination pH or ORP sensors use the conventional measurement technique, employing a process pH glass electrode (platinum for ORP) which is compared to a reference electrode in KCL solution.

For relatively clean water they are an economical alternative to our flagship differential 60/65 series probe.

Our combination sensors have been completely modernized with several major upgrades.

A durable CPVC shell material provides excellent chemical resistance, and temperature compensation (PT1000RTD) is now a standard option.

The temperature element is now embedded in the glass electrode for a faster response. One cable now includes both pairs of wires for process and temperature output.

The reference chamber now contains a rugged ceramic double junction, replacing the single junction used in the past. This results in an approximate doubling of the sensor's lifespan.

The dual-threaded, 1" fixed-insertion design of these probes allows them to be used in both flow-through and submersion applications, minimizing specialized inventory

requirements.

These sensors are available with an optional screw-on electrode protector for submersion mount use (AM-PTR-5). It is easily removed for flow-through installations when the probe is mounted to a tee. The sensor can also be mounted on a submersion arm (AM-ARM-5) for hard-to-reach applications.

The 575 series probes can be directly connected to the AM-2250 TX transmitter or AM-2250 controller, as well as to all legacy lines of Aquametrix analyzers. For ease of installation, the analyzer must be located within reach of the 15 ft (4.5 m) standard sensor cable. Nonstandard cable lengths are also available; however, a preamplifier is required for transmission distances greater than 50ft.

An alternative model is installed with a 3/4" MNPT compression fitting. With this design, the probe does not screw into the process line, but is simply inserted through the compression fitting. Probe cleaning and system calibration has never been easier. To order this style, ask for data sheet P/R585.

For industrial or municipal wastewater applications, AquaMetrix differential sensors still provide the lowest lifetime cost of ownership.

#### **Applications**

- Process Control
- Industrial and Municipal Water Treatment
- Circuit Board Manufacturing
- Mining
- Power Generation
- Food and Beverage
- Aquaculture
- · Agriculture

by Water Analytics
100 School Street

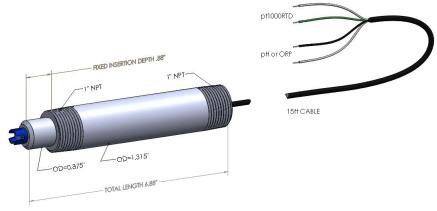
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## Model P575 and R575 Combination Style pH or ORP Sensors

#### **Technical Data**

Measuring Range		Stability	
рН	0 to 14 pH (Consult factory for applications below 2 or above 12).	рН	0.05 pH per day, non-cumulative
		ORP	3.0 mV per day, non-cumulative
ORP	-1000 to +1000 mV	Sensitivity	
Wetted Materials	CPVC body, polycarbonate (or epoxy), ceramic junction, silicone rubber, glass electrode, EPDM Optional: platinum for ORP, teflon for HF-resistant pH, antimony for HFA	рН	0.01 pH unit
		ORP	0.1 mV
		Accuracy	
Temperature Limits	23 to 176°F (-5 to 80°C) at amospheric pressure	рН	± 0.02 pH
Maximum Pressure	100 psig at 150°F (65°C)	ORP	± 5 mV
Maximum Flow Rate	10 ft. (3 meters) per second	Sensor Cable	Default length 15 ft (4.5m) dual coaxial, tinned wires Up to 50ft cable available Optional BNC connectors
Automatic Tempera- ture Compensation	Standard PT1000 $\Omega$ RTD Optional ATC: 300 NTC, pt100 $\Omega$ RTD, 3000 NTC		

#### **Dimensions**



#### Related Products Ordering Information

ANALYZERS			Standard Industrial Combination pH probe for flow-through or submersion application	
AM-2250	Multi-Parameter Controller		with pt1000RTD temperature compensa-	
AM-2250TX	Multi-Parameter Transmitter		tion device and 15 ft dual coaxial cable	
ACCESORIES		R575T1-015	Standard Industrial Combination ORP probe	
AM-ARM-5	Submersion mounting arm, 4ft		for flow-through or submersion application with pt1000RTD temperature compensa-	
AM-PTR-5	Electrode protector, CPVC		tion device and 15 ft dual coaxial cable	
CALIBRATION SOLUTIONS			Industrial Combination pH probe for applica-	
AM-PH4-1P AM-PH7-1P AM-PH10-1P AM-R200-1P	pH 4 Buffer, 1 pint (500 mL) pH 7 Buffer, 1 pint (500 mL) pH 10 Buffer, 1 pint (500 mL) ORP Buffer, 200 mV, 1 pint (500 mL)	P575HF1-015	tions with low concetration (<2%) of HF acid. Flow-through or submersion application with pt1000RTD temperature compensa- tion device and 15 ft dual coaxial cable	
AM-R600-1P	ORP Buffer, 600 mV, 1 pint (500 mL)	P575HFA-015	Industrial Combination pH probe for applications with a 50/ LIF acid. Flow through	
DIFFERENTIAL SENSORS			plications with <5% HF acid. Flow-through or submersion application. Single junc-	
P60R8-015 R60R8-015	Differential pH sensor with 1-1/2" NPT Differential ORP sensor with 1-1/2" NPT		tion with no temperature compensation device and 15 ft dual coaxial cable	