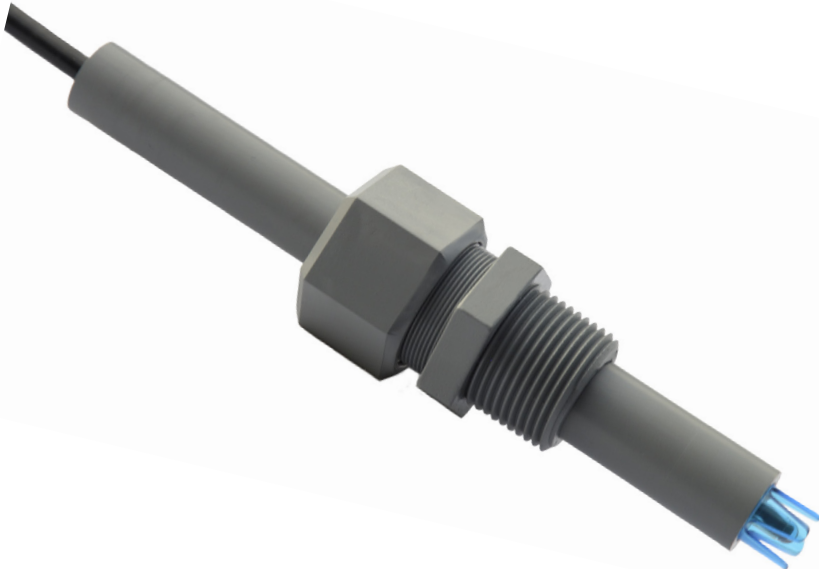


## AquaMetrix Combination Style pH and ORP Sensors Model P585 (pH) Model R585 (ORP)



### 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 new, more 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 convertible design of these probes allows them to be used in both flow-

through and submersion applications, minimizing specialized inventory requirements.

These models are installed using a standard 3/4" MNPT compression fitting, giving this sensor drop-in compatibility with any off-the-shelf 3/4" tee.

With this design, the probe does not screw into the process line, but is simply inserted through the compression fitting. No more twisted cables means probe cleaning and system calibration has never been easier.

The 585 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. Non-standard cable lengths are also available; however, a preamplifier is required for transmission distances greater than 50ft.

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

### Features

- Industrial-grade quality
- 1000Ω RTD temperature element included
- Double junction for longer life
- Temperature rated to 80°C
- Variable insertion depth - 0" to 3.75"
- Compact: mounts in 3/4" FNPT
- Chemically resistant CPVC body
- CPVC compression fitting included
- Universal style: flow-through and submersion
- Easy in, easy out: no special tools and no twisted cables!

### Applications

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



**AquaMetrix**  
by  Water Analytics

100 School Street  
Andover, MA 01810  
978-749-9949

Toll free 855-pH Probe  
(855-747-7623)

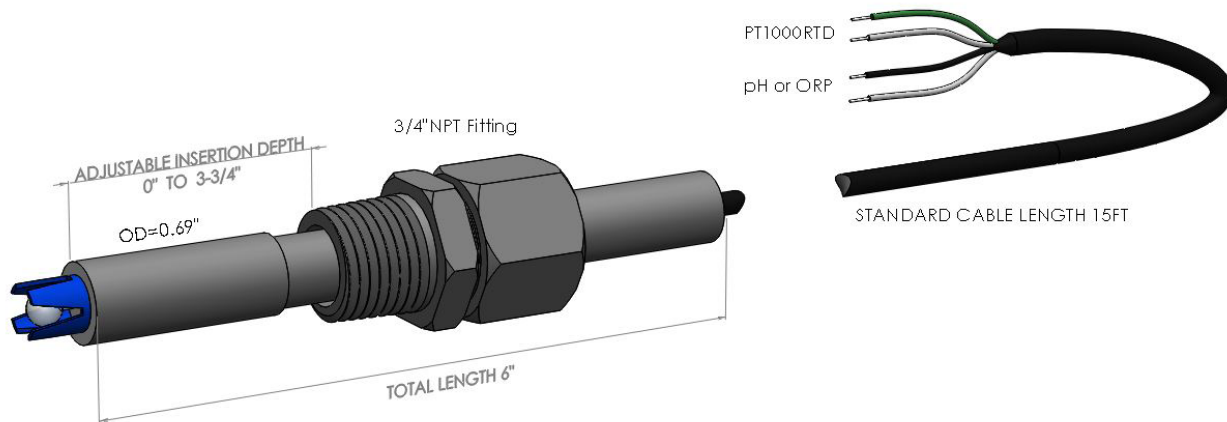
[www.WaterAnalytics.net](http://www.WaterAnalytics.net)

# Model P585T1 and R585T1 Combination Style pH or ORP Sensors

## Technical Data

<b>Measuring Range</b>		<b>Stability</b>	
pH	0 to 14 pH (Consult factory for applications below 2 or above 12).	pH	0.05 pH per day, non-cumulative
ORP	-1000 to +1000 mV	ORP	3.0 mV per day, non-cumulative
<b>Wetted Materials</b>		<b>Sensitivity</b>	
CPVC body, polycarbonate (or epoxy), ceramic junction, silicone rubber, glass electrode, EPDM Optional: platinum for ORP, teflon for HF-resistant pH, antimony for HFA		pH	0.01 pH unit
<b>Temperature Limits</b>		ORP	0.1 mV
23 to 176°F (-5 to 80°C) at atmospheric pressure		<b>Accuracy</b>	
<b>Maximum Pressure</b>	100 psig at 150°F (65°C)	pH	± 0.02 pH
<b>Maximum Flow Rate</b>	10 ft. (3 meters) per second	ORP	± 5 mV
<b>Automatic Temperature Compensation</b>	Standard PT1000Ω RTD Optional ATC: 300 NTC, pt100Ω RTD, 3000 NTC	<b>Sensor Cable</b>	
		Default length 15 ft (4.5m) dual coaxial, tinned wires Up to 50ft cable available Optional BNC connectors	

## Dimensions



## Related Products

### ANALYZERS

AM-2250	Multi-Parameter Controller
AM-2250TX	Multi-Parameter Transmitter

### ACCESORIES

AM-JB1	NEMA 4X junction box
AM-BT1	Blind 4-20mA transmitter in fully encapsulated enclosure
AM-TEE-AS	1" Union Tee with 3/4" fitting
AM-CCF-AS	CPVC 3/4" compression fitting
AM-SCF-AS	316SS 3/4" compression fitting

### 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

P585T1-015	Standard Industrial Combination pH probe for flow-through or submersion application with pt1000RTD temperature compensation device and 15 ft dual coaxial cable
R585T1-015	Standard Industrial Combination ORP probe for flow-through or submersion application with pt1000RTD temperature compensation device and 15 ft dual coaxial cable
P585HF1-015	Industrial Combination pH probe for applications with low concentration (<2%) of HF acid. Flow-through or submersion application with pt1000RTD temperature compensation device and 15 ft dual coaxial cable
P585HFA-015	Industrial Combination pH probe for applications with <5% HF acid. Flow-through or submersion application. Single junction with no temperature compensation device and 15 ft dual coaxial cable