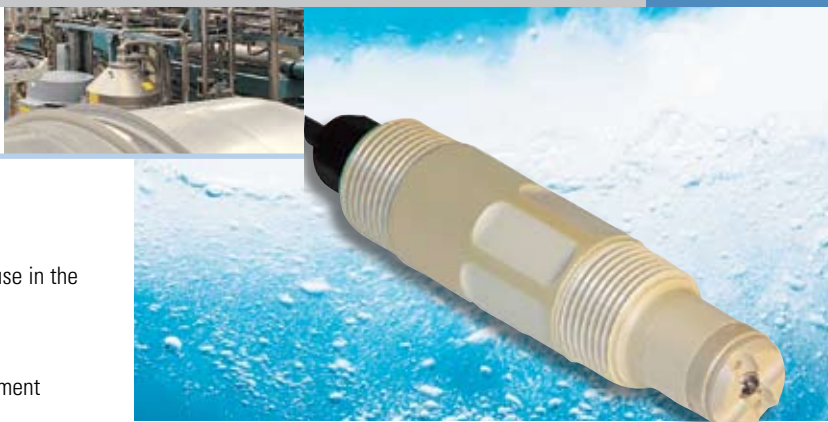


## Thermo Scientific AquaSensors AnalogPlus Differential ORP Sensor – 1.0 Inch

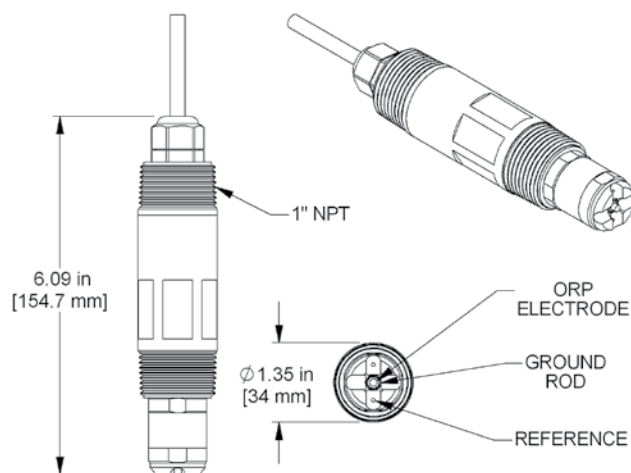


### AquaSensors AnalogPlus™ ORP 1.0 Sensor

- 1 inch NPT mounting
- Differential ORP sensor designed for continuous use in the most demanding industrial applications
- Replaceable salt bridge extends sensor life
- Offered with NTC300 or PT 1000 temperature element
- Electrode protection options
- Available in choice of materials for a wide range of applications

### Markets/Applications

- Wastewater treatment
- Metal finishing
- Bleaching pulp
- Disinfection control



### Engineering Specifications

1. The ORP sensor shall be of differential electrode technique design using two electrodes to compare the process value to a stable internal reference solution. The standard electrode shall have non-flowing and fouling-resistant characteristics.
2. The sensor shall have hex-shaped wrench flats to facilitate mounting, and shall be constructed of a material with exceptional chemical resistance and mechanical strength. This material shall enable the sensor to be installed in metal fittings without leakage usually caused by heating and cooling cycles when dissimilar materials are threaded together.
3. The sensor shall have a 1 inch NPT threads on both ends to mount into a standard 1 inch pipe tee, a 1.5 inch union mounting, or immersion hardware assembly. Sanitary Tri-clamp mounting optional.
4. The built-in electronics of the sensor shall be completely encapsulated and O-ring sealed for protection from moisture and humidity.
5. The sensor shall have an integral temperature sensor to measure temperature independently.
6. The sensor includes a titanium ground electrode (standard) to eliminate ground loop currents in the measuring electrode. 316SS optional.
7. The sensor shall be the Thermo Scientific AquaSensors AnalogPlus Differential ORP.

## Thermo Scientific AquaSensors AnalogPlus ORP 1.0 Sensor

- Global support — with experience that comes from supporting our customers for over 35 years throughout the world, our water quality specialists and customer support teams offer a quick, thorough and professional response to any problem encountered.
- Focus on user benefits — we work closely with you to define your needs, and ensure you are using the monitor in a way that improves your bottom line. For more information, contact your local water quality specialists or visit [www.thermo.com/processwater](http://www.thermo.com/processwater).

### AnalogPlus ORP 1.0 Sensor Specifications

<b>Measurement System Performance<sup>†</sup></b>	<b>Range:</b> -2100 mV to +2100 mV <b>Resolution:</b> 0.1 mV <b>Accuracy:</b> 0.1% of reading <b>Step Response Time:</b> 90% in 30 seconds
<b>Operational Environment</b>	<b>PEEK Sensor Head</b> <b>Temperature Range:</b> -5 °C to 95 °C <b>Maximum Pressure:</b> 100 psig @ 95 °C <b>Maximum Flow Rate:</b> 10 ft/second  <b>CPVC Sensor Head</b> <b>Temperature Range:</b> -5 °C to 75 °C <b>Maximum Pressure:</b> 85 psig @ 75 °C <b>Maximum Flow Rate:</b> 10 ft/second
<b>Construction</b>	<b>Process Electrodes:</b> Platinum or gold <b>Ground Rod:</b> Titanium (standard), 316 stainless steel or Hastelloy C <b>Membrane:</b> FEP Teflon® <b>O-rings:</b> Viton® (other materials available) <b>Sensor Head Material:</b> PEEK or CPVC <b>Weight:</b> 0.5 lbs (PEEK or CPVC)
<b>Approvals</b>	Meets CE requirements for heavy industrial use

<sup>†</sup>Note: Typical at 25°C with 20 feet of cable

### AnalogPlus ORP 1.0 Sensor Ordering Information

Part No.	Description
<b>SR-b-t-x-y-z-u</b>	<b>ORP 1.0 Sensor</b>
<b>Body Material (b)</b>	2 = CPVC 3 = PEEK
<b>Electrode Type (t)</b>	1 = Platinum 2 = Gold
<b>Sensor Tip (x)</b>	A = Protected B = Process flat
<b>Temperature Element (y)</b>	8 = NTC300/P99 Analyzer 9 = PT1000/AV88 Analyzer
<b>Ground Rod (z)</b>	D = 316 Stainless Steel E = Titanium (Standard) F = Hastelloy C
<b>Cable Length (u)</b>	1 = 10 feet 2 = 20 feet 3 = 30 feet

### Accessories Ordering Information

Part No.	Description
<b>Local Display Interface</b>	
<b>AV88</b>	Universal Analyzer 1/4 DIN, Outputs, Relays, Digital Communications Options
<b>P99</b>	pH/ORP Analyzer 1/2 DIN, Outputs, Relays
<b>Salt Bridge Replacements</b>	
<b>SBS01</b>	PEEK Protected
<b>SBS02</b>	PEEK Process Flat
<b>SBS03</b>	CPVC Protected
<b>SBS04</b>	CPVC Process Flat
<b>SBC01</b>	Storage Cap With Sponge
<b>ORP Solutions</b>	
<b>RCS04</b>	ORP Storage Solution, 60 mL Bottle
<b>RCS01</b>	Standard Cell Solution, 60 mL Bottle
<b>ORPSOL200</b>	200 mV Calibration, 500 mL Bottle
<b>ORPSOL600</b>	600 mV Calibration, 500 mL Bottle
<b>Mounting Hardware</b>	
<b>MH3022</b>	1 Inch Tee Mounting, CPVC
<b>MH3011</b>	1 Inch Tee Mounting, 316 Stainless Steel
<b>MH3042</b>	1.5 Inch Union Mounting, CPVC
<b>MH3041</b>	1.5 Inch Union Mounting, 316 Stainless Steel
<b>MH1112</b>	1.5 Inch Ball Valve, CPVC, Low Pressure
<b>MH1111</b>	1.5 Inch Ball Valve, 316 SS, Low Pressure
<b>MH1122</b>	1.5 Inch Ball Valve, CPVC, High Pressure
<b>MH1121</b>	1.5 Inch Ball Valve, 316 SS, High Pressure
<b>MH1242</b>	Hand Rail Mounting Assembly, Swivel/Immersion, PVC
<b>MH3083</b>	1 Inch Immersion Mounting with Junction Box, PVC (7 foot extension is standard)

Consult factory for other sensor mounting options.



#### Thermo Scientific AV88 Universal Analyzer

Connects to any AnalogPlus sensor using plug-in module. 2 line display and 7 key navigation.