

# AquaSensors AnalogPlus Differential ORP sensor - 1.0 inch

## Thermo Scientific™ AquaSensors™ AnalogPlus™ ORP 1.0 Sensor

### Key features

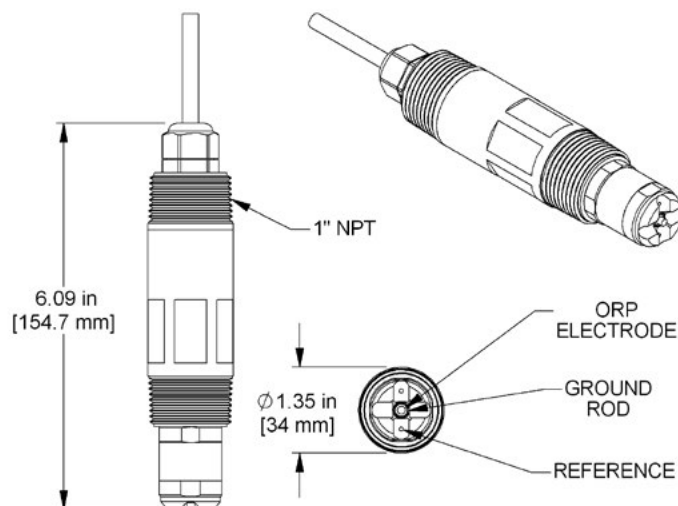
- 1 inch NPT mounting
- Differential ORP sensor designed for continuous use in the most demanding industrial applications
- Replaceable salt bridge extends sensor life
- Offered with NTC300 or PT1000 temperature elements
- Electrode protection options
- Available in choice of materials for a wide range of applications



### Markets and applications

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

### Engineering drawing



AquaSensor AnalogPlus differential ORP sensor – 1.0 in.

## Engineering specifications

1. Differential electrode technique design using two electrodes to compare the process value to a stable internal reference solution. The standard electrode has non-flowing and fouling-resistant characteristics.
2. Hex-shaped wrench flats help ensure that the sensor is mounted with ease. The mounting system is chemical resistant and can be installed in metal fittings without leakage caused by use, including the expansion and retraction of materials during heating and cooling cycles.
3. Both ends of the ORP sensor have 1-inch NPT threads for mounting into a standard 1-inch pipe tee, a 1.5 inch union mounting, or immersion hardware assembly.
4. The built-in sensor electronics are completely encapsulated and O-ring sealed for protection from moisture and humidity.
5. An integrated temperature sensor will automatically compensate measured values for changes in process temperature.
6. A titanium ground electrode (standard) helps eliminate ground loop currents in the measuring electrode.

## 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 help ensure you are using the monitor in a way that will help maximize the benefits of your water analyzer system. For more information, contact your local water quality specialists or visit: [thermofisher.com/water](http://thermofisher.com/water)

## Product specifications

### AquaSensors AnalogPlus ORP 1.0 sensor

	Range: -2100 mV to +2100 mV
<b>Measurement system performance*</b>	Resolution: 0.1 mV
	Accuracy: 0.1% of reading
	Step response time: 90% in 30 seconds
<b>Operational equipment</b>	<b>PEEK sensor head</b>
	Temperature range: -5°C to 95°C
	Maximum pressure: 100 psig @ 95°C
<b>Operational equipment</b>	Maximum flow rate: 10 ft/second
	<b>CPVC sensor head</b>
	Temperature range: -5°C to 75°C
<b>Operational equipment</b>	Maximum pressure: 85 psig @ 75°C
	Maximum flow rate: 10 ft/second
	<b>Construction</b>
Ground Rod: Titanium (standard)	
Membrane: FEP PTFE	
O-rings: Viton™ (other materials available)	
Sensor Material: PEEK™ or CPVC	
<b>Construction</b>	Weight: 0.5 lbs. (PEEK or CPVC)
	<b>Approvals</b> Meets CE requirements

\*Note: Typical at 25°C with 20 feet of cable.



### AquaSensor AV88 universal analyzer

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

**Ordering information**

**AquaSensors AnalogPlus ORP 1.0 sensor**

Description			Cat. No.
ORP sensor 1.0			SP-b-t-x-y-z-u
Body material (b)	2	=	CPVC
	3	=	PEEK
Electrode type (t)	1	=	Platinum
Sensor tip (x)	A	=	Protected
Temperature element (y)	8	=	NTC300
	9	=	PT1000
Ground Rod (z)	E	=	Titanium (standard)
Cable length (u)	1	=	10 feet
	3	=	30 feet

**Ordering information**

**AquaSensors AnalogPlus ORP 1.0 sensor accessories**

Description	Cat. No.
<b>Salt bridge replacements</b>	
PEEK protected	SBS01-1
CPVC protected	SBS03-1
Storage cap with sponge	SBC01
<b>ORP solutions</b>	
ORP storage solution, 60 mL bottle	RCS04
Standard cell solution, 60 mL bottle	RCS01
Standard cell solution, 500 mL bottle	RCS01-500
200 mV calibration, 500 mL bottle	ORPSOL200
600 mV calibration, 500 mL bottle	ORPSOL600
<b>Mounting hardware</b>	
1 Inch tee mounting, CPVC	MH3022
1 Inch tee mounting, 316 SS	MH3011
1.5 Inch union mounting, CPVC	MH3042
1.5 Inch union mounting, 316 SS	MH3041
1.5 Inch ball valve, CPVC, low pressure	MH1112
1.5 Inch ball valve, 316 SS, low pressure	MH1111
1.5 Inch ball valve, CPVC, high pressure	MH1122
1.5 Inch ball valve, 316 SS, high pressure	MH1121
Hand rail mounting assembly, swivel/immersion, PVC	MH1242
1 inch immersion mounting with junction box, PVC (7 foot extension is standard)	MH3083

Consult factory for additional configurations and accessories

Find out more at [thermofisher.com/water](http://thermofisher.com/water)