PROCESS WATER ANALYSIS

# AquaSensors AnalogPlus Differential ORP sensor - 1.0 inch

#### Thermo Scientific<sup>™</sup> AquaSensors<sup>™</sup> AnalogPlus<sup>™</sup> ORP 1.0 Sensor

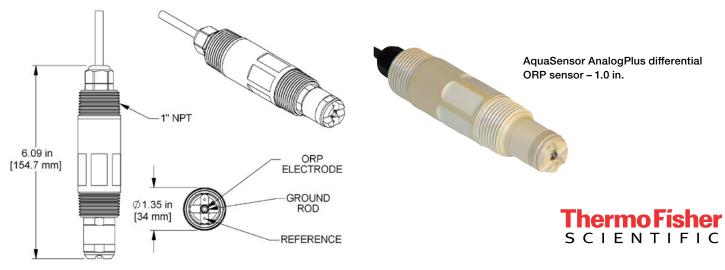
#### **Key features**

- 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

#### **Engineering specifications**

- 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.
- 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.

#### **Product specifications**

AquaSensors AnalogPlus ORP 1.0 sensor					
Measurement system performance*	Range: -2100 mV to +2100 mV				
	Resolution: 0.1 mV				
	Accuracy: 0.1% of reading				
	Step response time: 90% in 30 seconds				
Operational equipment	PEEK sensor head				
	Temperature range: -5°C to 95°C				
	Maximum pressure: 100 psig @ 95°C				
	Maximum flow rate: 10 ft/second				
	CPVC sensor head				
	Temperature range: -5°C to 75°C				
	Maximum pressure: 85 psig @ 75°C				
	Maximum fow rate: 10 ft/second				
Construction	Process Electrodes: Platinum				
	Ground Rod: Titanium (standard)				
	Membrane: FEP PTFE				
	O-rings: Viton™ (other materials available)				
	Sensor Material: PEEK™ or CPVC				
	Weight: 0.5 lbs. (PEEK or CPVC)				
Approvals	Meets CE requirements				

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

### 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** 



#### AquaSensor AV88 universal analyzer

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

## thermo scientific

#### **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 3	=	CPVC PEEK		
Electrode type (t)	1	=	Platinum		
Sensor tip (x)	А	=	Protected		
Temperature element (y)	8 9	=	NTC300 PT1000		
Ground Rod (z)	Е	=	Titanium (standard)		
Cable length (u)	1 3	=	10 feet 30 feet		

#### **Ordering information**

AquaSensors AnalogPlus ORP 1.0 sensor accessories					
Description	Cat. No.				
Salt bridge replacements					
PEEK protected	SBS01-1				
CPVC protected	SBS03-1				
Storage cap with sponge	SBC01				
ORP solutions					
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				
Mounting hardware					
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 ressure	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



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