

STs Series ORP (redox)

The STs Series ORP water quality sensor makes **your job easier** by providing years of trustworthy ORP and temperature data via noise-resistant 4-20 mA signals. It does so with a large double junction reference electrode for stable measurements over **long periods of unmanned operation**. In addition, pHionics noise-reduction technology prevents ground loops and other forms of electrical interference for **consistently accurate measurements**.

A narrow diameter (0.75" or 1.9 cm) and fully sealed, submersible design lets the sensor **go anywhere** you need to collect data. The durable, chemical-resistant housing and Kevlar®-reinforced cable ensure **many years (10+) of operation**, even in polluted environments.

Highlighted Features

- Large double junction electrode with platinum sensing element measuring -1000 to +1000 mV oxidation-reduction potential (ORP)
- Secondary 0-50°C temperature sensor
- Narrow diameter (0.75 inches or 1.9 cm)
- Isolated to prevent electrical interference and protect connected devices
- Durable, chemical-resistant housing and cable
- Fully submersible
- Low power 4-20 mA signals

Ranges available: -

- -1000 to +1000 mV
- -500 to +500 mV
- -1000 to +0 mV
- +0 to +1000 mV

Applications

- Groundwater Monitoring
 - Agricultural Runoff
 - Mining Pollution
- Industrial Effluent Monitoring

- Wastewater Treatment
- Environmental Remediation
- Aquaculture
- Chlorine Level Monitoring

Dimensions



0.75 in. (1.9 cm) diameter



14.25 in. (36.20 cm) length

Specifications

ORP Sensor

ON Sensor	
Output	4-20 mA
ORP (redox) Range	-1000 to +1000 mV (multiple ranges available)
Operating Temperature	0-70°C
Submersion Pressure Range	0-70 psi
Electrode Type	Platinum sensing element, silver/silver chloride gel-filled reference
Transmitter Type	2-wire
Automatic Temperature Compensation	None
Isolation	600 VDC
Power Supply Voltage	8-40 VDC
Warm-up Time	2 seconds
Response time	95% < 20 seconds
Wetted Materials	316 Stainless Steel, PVDF, Viton™, glass
Length	14.25 in (36.20 cm)
Width	0.750 in (1.9 cm) maximum
Weight (No cable)	0.50 lbs (0.227 kg)
Linearity	± 4 mV
Accuracy	± 4 mV*
Sensitivity	± 1 mV
Stability	± 2 mV
Repeatability	± 10 mV

*After proper calibration

Temperature Sensor

Output	4-20 mA
Temperature Range	0-50°C
Accuracy	+/- 1°C
Linearity	+/- 0.5°C
Power Supply Voltage	7-40 VDC

Cable

Cable Material	Polyurethane
Туре	4 conductor, Kevlar® reinforced, water blocked, shielded, twisted-pair wiring
Maximum Distance	3 miles
Resistance per 1000 ft (304.8 m)	26 Ohms
Replaceable?	Yes

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For Orders or Questions:

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