



## STs Series Dissolved Oxygen

The STs Series Dissolved Oxygen water quality sensor makes **your job easier** by providing years of trustworthy dissolved oxygen and temperature data via noise-resistant 4–20 mA signals. A large anode with a tough Teflon™ membrane allows the electrode to provide **accurate measurements for 2+ years** before electrode replacement is required. Replacement is quick and easy with pHionics patented pHiConn™ connector system. In addition, pHionics noise-reduction technology prevents ground loops and other forms of electrical interference to **ensure a reliable output**.

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

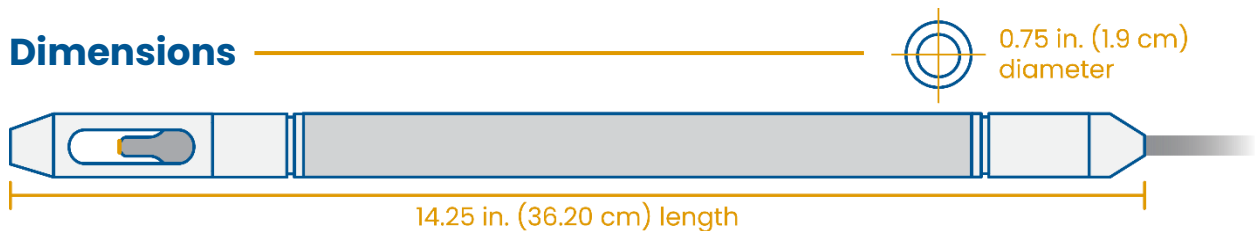
### Highlighted Features

- Galvanic electrode with Teflon™ membrane measuring 0–20 mg/L or percent saturation
- Secondary 0–50°C temperature sensor
- Isolated to prevent electrical interference and protect connected devices
- Durable, chemical-resistant housing and cable
- Fully submersible
- Low power 4–20 mA signals

### Applications

- Industrial Effluent Monitoring
- Wastewater Treatment
- Environmental Monitoring
- Aquaculture

### Dimensions



## Specifications

### Dissolved Oxygen Sensor

<b>Output</b>	4-20 mA
<b>Dissolved Oxygen Range</b>	0-20 mg/L (ppm)
<b>Electrode Type</b>	Galvanic cell with Teflon™ membrane
<b>Minimum Flow Rate</b>	1.5 ft (0.457 m) per second
<b>Transmitter Type</b>	2-wire
<b>Automatic Temperature Compensation</b>	2% per °C
<b>Isolation</b>	600 VDC
<b>Operational Temperature Range</b>	0-70°C
<b>Power Supply Voltage</b>	8-40 VDC
<b>Response time</b>	95% < 180 seconds
<b>Submersion Pressure Range</b>	0-70 psi
<b>Wetted Materials</b>	316 Stainless Steel, Delrin®, Viton™, Teflon®, epoxy
<b>Length</b>	14.25 in (36.20 cm)
<b>Width</b>	0.750 in (1.9 cm) maximum
<b>Weight (No cable)</b>	0.50 lbs (0.227 kg)
<b>Linearity</b>	± 0.5% of full scale*
<b>Accuracy</b>	± 2.0% of full scale*
<b>Sensitivity</b>	± 0.05% of full scale
<b>Stability</b>	± 2.0% of full scale

\*After proper calibration

### Temperature Sensor

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

### Cable

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

Delrin® and Kevlar® are registered trademarks of DuPont™. Viton™ is a trademark of Chemours™.



### For Orders or Questions:

[www.pHionics.com](http://www.pHionics.com)

+1 (775) 339-0565  
sales@pHionics.com