STs Series Dissolved Oxygen

The STs Series Dissolved Oxygen (DO) water quality sensor **makes your job easier** by providing years of trustworthy DO and temperature data via noise-resistant 4-20 mA signals. This sensor uses a galvanic electrode with a membrane that is very easy to replace in just a few minutes. In addition, pHionics noise reduction technology prevents ground loops and other forms of electrical interference to **ensure a reliable output** in all environments.

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

- Galvanic electrode 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

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Specifications

Dissolved Oxygen Sensor

Output	4-20 mA
Dissolved Oxygen Range	0-20 mg/L (ppm)
Electrode Type	Galvanic cell with replaceable membrane
Minimum Flow Rate	1.5 ft (0.457 m) per second
Transmitter Type	2-wire
Automatic Temperature Compensation	Yes
Isolation	600 VDC
Operational Temperature Range	0-70°C
Power Supply Voltage	8-40 VDC
Response time	95% < 180 seconds
Submersion Pressure Range	0-70 psi
Wetted Materials	316 Stainless Steel, PVDF, Viton™, Teflon®, silicone
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	± 0.5% of full scale*
Accuracy	± 2.0% of full scale*
Sensitivity	± 0.05% of full scale
Stability	± 2.0% of full scale

*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
Type	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

Kevlar® is a registered trademark of DuPont™. Viton™ is a trademark of Chemours™.

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