SUBMERSIBLE DISSOLVED OXYGEN SENSOR

WITH DATA LOGGING

FEATURES

- Measures Dissolved Oxygen & Temperature
- Over 65,000 records in non-volatile memory
- Fluorescence sensor technology
- No membranes, fill solutions, or cartridges
- No replacement caps required
- Sensor does not need water movement, flow, or frequent cleaning
- Does not require frequent calibration
- 1.66 inch diameter – fits easily in 2-inch wells
- Easy-to-use software
- Programmable warm-up time
- Easy export to spreadsheets and databases
- Compatible with WaveData® Wireless Data Collection Systems
- Can be networked with other AquiStar® Smart Sensors
- RS485 Modbus® interface

DESCRIPTION

The Aquistar® Dissolved Oxygen (DO) sensor represents the next generation in trouble-free oxygen-sensing design. Utilizing fluorescence of a stable, immobilized ruthenium-based film matrix, the sensor employs precision optical transmission and detection to measure oxygen concentration in the fluid outside of the sensor. Measurement is based on photons of light responding to oxygen outside of the sensor, rather than what passes through a sensor membrane. This design eliminates the need to compensate (calibrate) for changes in membrane permeability due to fouling or make up for oxygen consumption by the sensor itself (which required water movement or flow). Unlike alternative optical designs (such as those based on luminescence), this sensor does not have a consumable component; this fluorescence design negates the need to replace photo-bleached caps.

The DO Sensor connects topside to a GDL Control Box, which includes a 12 VDC power supply that powers both the control box and the sensor. The control box has a communications port for connecting to a computer running INW's free Aqua4Plus control software. This easy-to-use program allows you to view the sensor status, monitor real time data, create flexible and powerful test sequences, as well as display data in tabular or graphic format and export to spreadsheets and databases.

This sensor is fast, accurate, and precise to very low oxygen levels (0.01 ppm) and is the right technology for the demands of down-hole groundwater and surface water environmental monitoring.

Instrumentation Northwest, Inc.

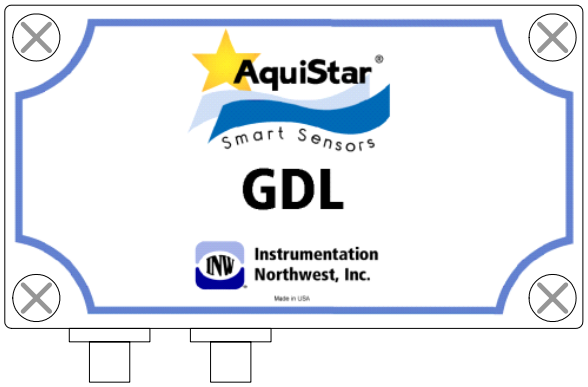
1-800-776-9355

http://www.inwusa.com

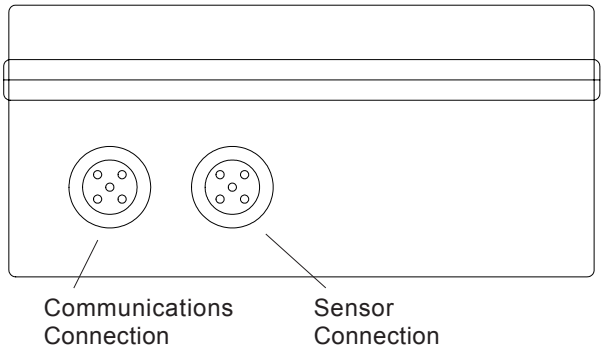
SUBMERSIBLE DISSOLVED OXYGEN SENSOR

GDL CONTROL BOX

Top view



Front view



HOW TO ORDER

- Determine cable length.
- Select options. (Contact INW for a full list of accessories.)

DISSOLVED OXYGEN SENSOR	
4N944	Sensor with no cable or connector
4N948	Sensor w/ 50' cable & connector
4N949	Sensor w/ 100' cable & connector
4N950	Sensor w/ 200' cable & connector

ACCESSORIES	
4N983	GDL control box for D.O. sensor
6E583	Custom cable - per foot
3B841	D.O. cable connector - male
3B847	Communication kit (RS485/RS232 adapter, Interface cable, Aqua4Plus Software media kit)
3B830	RS485/RS232 adapter
3B385	Interface cable

Information in this document is subject to change without notice.

DIMENSIONS & SPECIFICATIONS

SENSOR

Measuring Range	0 - 25 ppm
Accuracy	1% of reading or 0.02 ppm, whichever is greater
Sensitivity / Resolution	0.01 ppm below 4.00, 0.1 ppm above 4.0
Stability	0.01 ppm
Repeatability	0.01 ppm
Sensor Drift	Less than 1% per year
Temperature Range	0 to 60 degrees C
Response Time	95% in less than 60 seconds
Output	RS485 Modbus®
Ambient Temperature	Minus 20° C to 70° C
Ambient Humidity	0 to 100%
Wetted Materials	Epoxy, polyurethane, and PVC
Maximum Pressure	100 PSI
Sensor Diameter	1.66 inches

CONTROL BOX

Enclosure Material	Polycarbonate (1P67)
Enclosure Dimensions	5.5" x 3.1" x 2.6" (excluding connectors)
Power Supply	12 VDC (8 AA cells)
Connectors	1 - communication port 1 - sensor port

Instrumentation Northwest, Inc.

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