



ODO3000
Sensor



Description

The Greenspan ODO3000 is a complete self contained Dissolved Oxygen measurement and data logging system for environmental applications. The advanced electronics and solid state, optical sensors ensure long term reliable and accurate operation.

The internal data logger provides long term unattended data collection at remote sites, as well as options for remote telemetry connection.

The sensor can be fitted with an external cable, or with an on board battery pack for true stand alone operation. Other cable options can provide serial output in SDI12 format for connection to external data loggers or process controller.

The sensor is ideal for use in environmental water monitoring applications, including tidal and estuary monitoring and process water discharge monitoring. A durable acetal body with double O ring design ensures suitability for the harshest environment applications.

The ODO3000 sensor is easy to configure and provides a reliable solution for long term monitoring. For more information please contact your nearest sales office.

Features

- Fluorescence DO sensor technology
- No membranes, fill solutions, or cartridges
- Not damaged by exposure to sunlight
- 'Fast response' to 'Rapid do' changes
- Low power energy requirements
- Telemetry communication options.

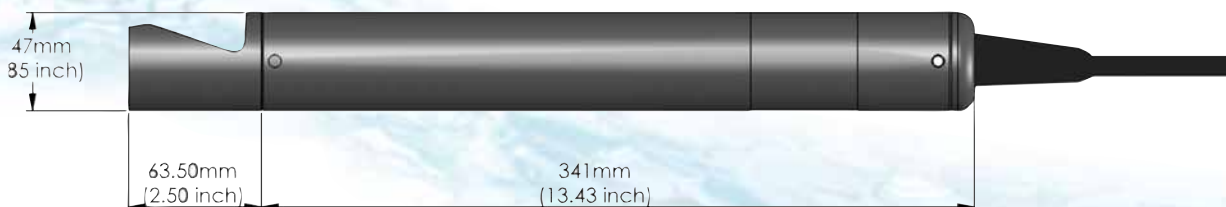
Benefits

- High reliability and minimal field servicing means lower costs
- Operation for up to 12 months at remote site.
- Internal data logger means no wiring, easy configuration and lower cost
- Easy data collection using a PC with Windows software
- Automated polling and data collection and display via Smartcom software.

Applications

- Monitoring of streams and rivers, lakes and urban waterways
- Water quality studies and catchment management
- Water supply storages including stratification studies
- Water and wastewater treatment monitoring
- Groundwater analysis and monitoring
- Tidal, estuary and oceanographic monitoring
- Industrial process and licence discharge water monitoring

Dimensions



ODO3000 Specification

Measurement technique	Oxygen fluorescence detection method
Sensor range (factory calibrated)	0-200% saturation (0-20ppm)
Sensor outputs	Internal data logger – serial output via software Optional adaptor provides SDI12 serial output (3 wire)
Resolution	Dissolved oxygen 0.1 %, temperature 0.05°C
Accuracy	Oxygen 1% of reading or 0.02ppm whichever is greater Temperature +/- 0.2°C Battery volts +/- 0.5V
Response time	95% of DO change within 60 seconds
Cable type	Polyurethane sheathed cable, OD 8mm, with 3mm vent tube, moulded entry, bare wire connection
Cable lengths	10, 20, 30, 50, 100, 150m (32, 65, 100, 165, 325, 490 ft)
Power supply	8 to 16 Vdc External supply or On Board Battery Pack (option)
Reverse polarity protection	Yes
Surge current protected	To 2kV
Warm up time to stable reading	2 sec
Current consumption	Sleep 0.5mA, Logging 10mA, Communicating 30mA
On-board battery pack (option)	Housing screws to sensor size (L x OD) 250mm x 47mm
Battery capacity	9 x Lithium AA (3.6Volt) – total capacity 5.2Ah @ 10.8v
Typical field life (Battery pack)	Over 6 months remote operation @ 30 min logging.
Internal data logger	Non-volatile, battery backed RAM with real time clock
Memory size	2Mb capacity, with user selectable wrap function
Measuring units	User definable
Data storage	250,000 readings (typically 5 minute data for >12 months)
Logging frequency	User selectable from 1 second up to once per day
Averaging alarms,	User selectable via supplied Smartcom software
Operating temperature	0-50°C
Storage temperature	-5 to 60°C
Depth rating (water column)	100m
Weight	800g plus cable weight (665g per 10m length)
Dimensions (L x OD)	404.5mm x 47mm (15.93" x 1.85"), 619.5 mm x 47mm (24.39" x 1.85") with battery housing
Wetted materials	UPVC, acetal, 316 passivated stainless steel, polyurethane, viton

Optional Extras and Accessories

- Moulded cable (specify required length above)
- On-board battery pack (includes housing and battery pack)
- SDI12 Adaptor (connects to end of sensor cable for serial output to logger.

How to Order

The following information will be required:

- Model ODO3000
- Moulded cable length (m)
- Please specify any other options.



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