



# ORP1000 Oxygen Reduction Potential Sensor

Water Quality Monitoring





# **Description**

The Greenspan ORP1000 sensor provides a reliable and cost effective solution for monitoring of Oxidation Reduction Potential, (REDOX) in a wide variety of environmental and water monitoring applications. The sensor utilises a robust Platinum electrode together with optical isolation and advanced signal conditioning to ensure long term accurate data.

The sensor operates on low power supply and provides a calibrated 4-20mA output. The sensor is fitted with a moulded polyurethane cable as standard. Other cable options may be available.

The sensor is ideal for use in all environmental water monitoring applications, including tidal and estuary monitoring. It can also be used for monitoring water treatment and reticulation systems and for ozone or chlorine control. A durable acetal body with double O ring design ensures suitability for hash environment applications.

The ORP1000 sensor is easy to install and provides a reliable solution to long term monitoring. For more information please contact your nearest sales office.

## Features

- Innovative, optically isolated signal conditioning
- Field proven platinum electrode
- Optically isolated signal conditioning electronics
- Low power energy requirements
- Wide operating temperature range.

### **Benefits**

- Rugged electrode design provides unparalleled remote operations
- Operation on remote power source for long periods
- High reliability means critical measurements are not lost through sensor down time
- Minimal field servicing and reduced field visits
- Long term unattended operation.

## Applications

- Monitoring of streams and rivers, lakes and urban waterways
- Water and wastewater treatment monitoring
- Groundwater analysis and monitoring
- Industrial water process monitoring.





# **ORP1000 Specification**

Measurement technique	Platinum electrode with internal reference
Sensor range (factory calibrated)	-1000mV - +1000mV
Sensor output	Analogue 4-20mA
Accuracy	+/-20mV (+/- 0.2mA)
Cable type	Polyurethane sheathed cable, OD 8mm, with 3mm vent tube, moulded entry, bare wire connection
Cable lengths	10, 20, 30, 50, 100, 150 m (32, 65, 100, 165, 325, 490 ft)
Power supply	9-30 VDC (at sensor)
Reverse polarity protection	Yes
Surge current protected	To 2kV
Warm up time to stable reading	2 sec
Current consumption	10mA to 30mA while turned on
Operating temperature	0-50°C
Storage temperature	-5°C - +60°C
Depth rating (water column)	100m
Weight	500g plus cable weight (665g per 10m length)
Dimensions (L x OD)	384.20mm x 47mm (15.13" x 1.85")
Wetted materials	UPVC, acetal,316 passivated stainless steel, polyurethane, viton



## **Optional Extras and Accessories**

Please consult your Greenspan sales representative to confirm any optional extras or accessories.

#### How to Order

The following information will be required:

- Moulded cable length (m)
- Any other accessories\*

\* Consult your Greenspan sales representative for further details.



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