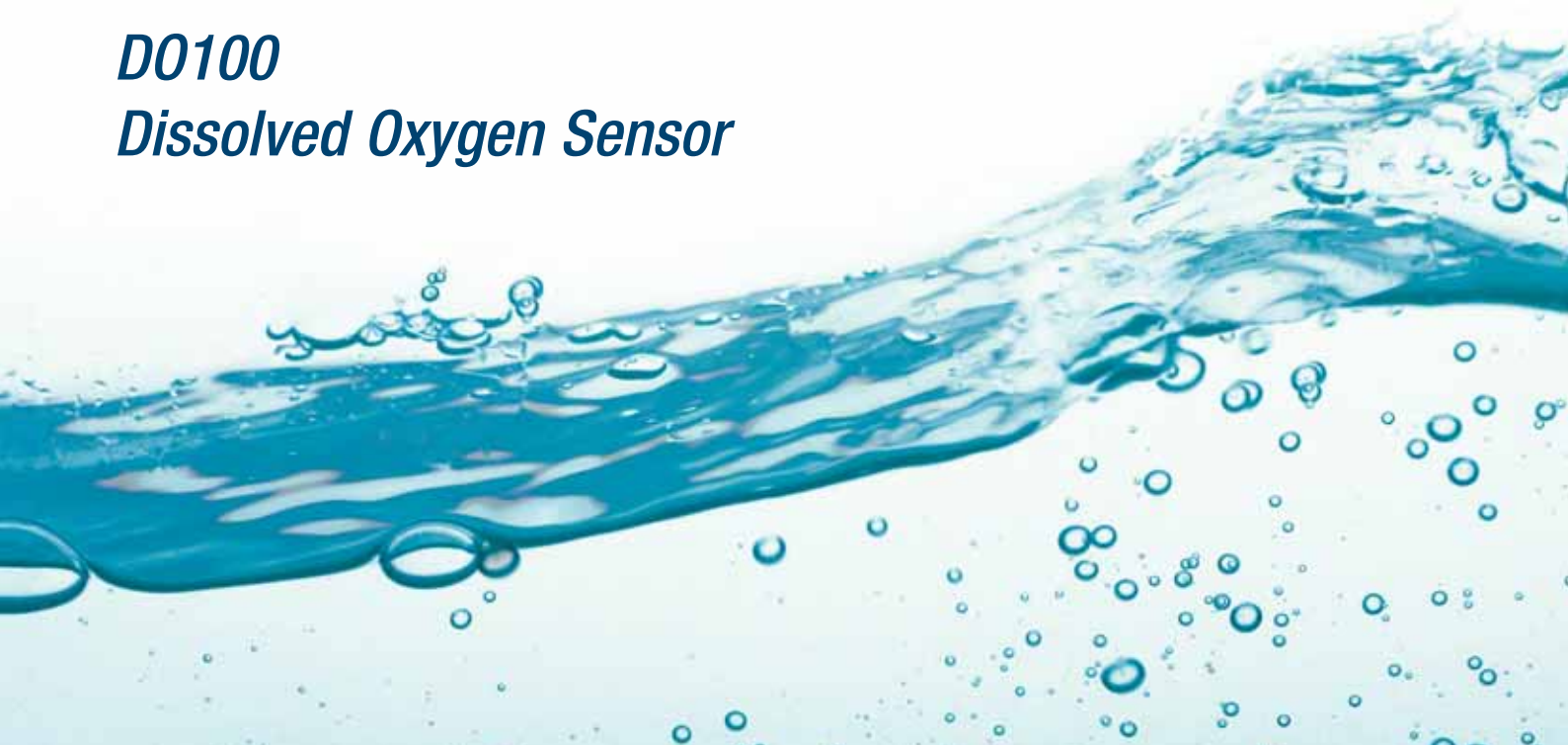




D0100
Dissolved Oxygen Sensor



Dissolved Oxygen Sensors DO100

The Dissolved Oxygen Sensors provide accurate long-term measurements under a wide range of environmental conditions.

The patented Australian CSIRO diffusion cell technology developed by Greenspan Analytical, provides a simple, effective and robust means of obtaining continuous in-situ dissolved oxygen measurements with minimum maintenance requirements.

Accuracy

A combination of innovative membrane and sensor technology characterise the design of the Greenspan Analytical Dissolved Oxygen Sensor. The new generation chemical sensor provides inherently greater stability than conventional polarographic technology. Compared to conventional membrane designs, the large surface area of the Greenspan Analytical diffusion membrane substantially reduces errors caused by surface contamination. Signal conditioning electronics are designed with temperature compensation to provide true output in ppm of dissolved oxygen or percent saturation.

Range	0 - 20 ppm or 0 - 200% Sat
Linearity	+/- 0.2 ppm or +/- 1% FS
Response Time	T90 40 mins
Accuracy	
Atmospheric pressure	+/- 0.3 ppm (@25°C)
Supply Voltage	10 - 14V
Dimensions	L= 510mm O.D.= 47mm

Integrated Installation and Technical Support

The correct choice of sensor is essential to the long-term success of an installation. Professional commissioning and dedicated technical support is equally important. We offer the reassurance of integrated expert field advice via Greenspan Technical Services.

Greenspan is intimately familiar with our complete range of sensors and analysers, with numerous successful installations throughout the world.

Greenspan Analytical and Greenspan TS can offer customers real value by packaging the supply of instruments with installation, commissioning, technical support and even data acquisition into a complete 'turnkey' solution.

Key Benefit

Membrane specifically designed for long-term deployment with minimal user intervention for cleaning and maintenance.

Product Features

- Sensor design requires no moving parts, ensuring long term reliable field operation and low power consumption.
- New generation chemical sensor provides excellent linearity and repeatability.
- Sensor output includes supplementary water temperature reading.
- A response time (T90) of 40 minutes is achievable by the sensor when deployed in reasonable flow.

How to Order

The following information will be required:

- Model DO100
- Cable length (m)
- Specify battery pack or any other options.

DO100 Specifications

Dissolved oxygen range	0-20ppm or 0-200% saturated
Temperature range	0-55°C
Dissolved oxygen linearity	0.2 ppm or ±1% FS
Dissolved oxygen accuracy	+/- 0.3 ppm (@25°C)
Temperature accuracy	+1°C
Output	DO 4-20mA / Temperature 4-20mA RS232
Supply voltage	10 - 14V
	Reverse polarity protected
	Surge protected to 2kV
Warm up time to stable reading	1 sec
Response time (T90)	40 mins
Dimensions	Length 510mm OD 47mm (Stainless Steel or Delrin)
Weight	1.66kg (Stainless Steel) 850g (Delrin)
Sensor type	Galvanic Cell
Wetted materials	316 Stainless Steel, Delrin Silicon Diffusion Membrane

Applications

- Ground water monitoring
- Tidal and estuarine studies
- Effluent monitoring
- River and stream measurements

Accessories

SL300 Data Logger

The SL300 Smart Logger is a stand-alone, four-channel data logger. The logger is based upon the same type of logger used in all Greenspan 300 series Smart Sensors. SmartCom software allows for setup, logging and data recovery.

Three input channels accept a standard 4-20mA output from a sensor and a rain gauge channel (input 4) is available that accepts a switch closure type input.



- 512K to 1Mbyte of battery backed data storage, providing approximately 42,600 to 83,000 date and time stamped readings for a single channel.
- Real time clock accurate to 5 seconds a month
- Sampling interval 5 sec to 1 Hour
- Record interval 5 sec to 24 Hours
- Sensor Turn On Time is 2 seconds
- 16 Bit analogue to digital converter
- ASCII data output
- Alarm functions for high and low levels, battery levels, sampler and memory full
- Ability to upgrade firmware in the field
- Mobile phone alarm output and four telephone numbers
- Up to four input channels
- Range of logging options: event logging, averaging and time
- Intelligent interface software SmartCom for Windows for PCs
- Graph, view and convert utility Aquagraph, accessible from SmartCom.
- Reverse polarity and transient protection
- Power consumption - 35mA



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