

Technical Specification

Oxidation Reduction Potential Sensors - ORP100 & ORP300

**Description**

The Greenspan Analytical ORP Sensors are versatile instruments offering superior features to provide un-paralleled reliability while tolerating rough treatment in the tough environments where they are deployed.

**Range Benefits**

- Optically isolated signal conditioning electronics ensure true and accurate readings at all times.
- Built in temperature compensation removes temperature related errors.
- Field proven platinum electrode provides long-term stability.
- Optical isolation of signal conditioning electronics enables operation in combination with other sensors without compromising performance.
- The low power energy saving design enables long-term operation in remote data logging applications.

- All sensors are packaged in Delrin (plastic) bodies, which can sustain harsh environmental conditions or as an option, passivated 316 Stainless Steel.

**ORP100 Features**

- Current (4-20mA / 3 wire) output
- Electrode constructed from robust Platinum for long-term field deployment.

**ORP300 Features**

- Built in data logger for storage of measured parameters, capable of holding 42,600 records or a reading every 15 minutes for 15 months.
- Logging parameters and schedules are set up using Greenspan Analytical's easy to use Smartcom software package, which runs on IBM compatible PCs.
- Data can be reviewed in tabular or graphical format by using Greenspan Analytical's AquaGraph software package.
- Automatic transfer of data to a central office can be simply achieved by attaching a data modem.
- Improved linearity and accuracy through the use of microprocessor based compensation.

**With all the features of a conventional data acquisition system in one compact package, the Greenspan Analytical 300 Series intelligent sensors provide the most cost-effective solution available today where combined measurement and data collection functions are required.**



Specification	Model ORP100	Model ORP300
Standard range	±1000mV	Same as ORP100
Operational parameters	0 - 40°C	Same as ORP100
Linearity	±10mV	Same as ORP100
Accuracy	± 2% of span	Same as ORP100
Supply voltage 1	0 - 14V	Same as ORP100
Warm up / reading time	2 seconds	Same as ORP100
Electrode type	Platinum, silver / silver-chloride	Same as ORP100
Dimensions	Length 435mm OD 47mm	Same as ORP100
Weight	1.48kg (Stainless Steel) 680g (Delrin)	Same as ORP100
Memory	N/A	0.5Mb Upgradeable to 1Mb
Output	4 - 20 mA	RS232
Software supplied	N/A	AQUAGRAPH, SMARTCOM
Wetted material	316 Stainless Steel or Delrin	
Standard cable lengths	1m, 3m, 5m, 10m, 15m, 20m, 30m, 50m, 100m & 200m Non-standard cable lengths available on request.	

### Applications

- Borehole and pipeline monitoring
- River and stream measurements
- Effluent monitoring



### 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. Greenspan Analytical offers the reassurance of integrated expert field advice, via its affiliation with sister technical services company Greenspan.

Logging parameters and schedules are set up using Greenspan Analytical's easy to use graphical software package, Smartcom, which runs on IBM compatible PCs.

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

Graphical representation of data can be made using Greenspan Analytical's AquaGraph software. The software makes graphing your data simple and allows data to be exported in different formats.

Greenspan Analytical and Greenspan 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.