



2100 Oxygen Analyser

The Rapidox 2100 is a high-performance oxygen (O₂) analyser fitted with a robust zirconia sensor, which are common solutions for providing fast and accurate gas analysis over the low ppm oxygen range.



Zirconia oxygen sensors are particularly suitable for monitoring inert atmospheres and aggressive industrial applications within manufacturing processes.

In instances where a zirconia sensor is unsuitable an electrochemical sensor will be used instead. Electrochemical sensors are ideal for monitoring high oxygen applications where VOC's, flammable gases, CO, H₂ or He are present in the gas sample. Users have a choice between a sensor for low ppm measurements of 1ppm to 1%, or for high percent measurements in the 0-100% oxygen range.

Depending on the specification of the analyser, the sensor is normally housed in a remote box that allows gas to flow through a manifold and over the sensor surface. The exact design of the manifold housing depends on the application. A range of optional pressure, vacuum and dew-point fittings allow the Rapidox 2100 to be connected to various apparatus in most applications conveniently and quickly.



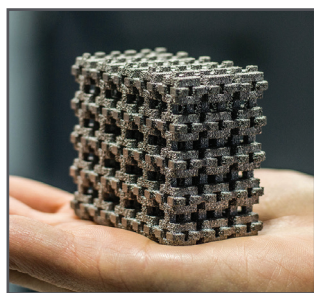
Configuration of the analyser allows for the instrument to be panel mounted or supplied within a wall mountable, IP65 weatherproof housing. The oxygen sensor can then be positioned remotely, up to 26 metres away in either a separate cabinet or as a standalone sensor.


For customers requiring seamless integration into their product or process, the Rapidox 2100 can be supplied as an OEM solution. Please contact Cambridge Sensotec for further information or to discuss your requirements.

Though highly configurable to suit individual customer requirements, the Rapidox 2100 range possesses a number of standard features to enhance functionality.

- Choice of O₂ sensor technology
- Fully configurable software
- Fast and accurate response
- Simple calibration procedure
- Fully programmable outputs
- Data logging
- Type K Thermocouple
- Two programmable alarms
- Operates on worldwide mains voltage
- Password protection


Applications




 Additive Manufacturing

 Gas

 Metal Heat Treatment

 Chemicals

 Glove Boxes

 Research & Development

 Combustion

 Manufacturing

Accessories



1



2



3

1 Calibration Kit

2 Multiplex Sampling System

3 Gas Recovery Bag



4



5



6

4 Wall Mount Cabinet

5 Calibration Service

6 Fittings and Filters

Specification

O ₂ Zirconia Sensor	1 ppm to 30%
O ₂ Electrochemical Sensor	0 to 100%
H ₂ O Sensor	-100°C to +20°C dp. Supplied on 2m cable with sample chamber
Pressure Sensor	0-5 and 0-10 bar gauge standard. Supplied on 2m cable
Thermocouple	Type K, range 0-1250°C, ±1°C
Sensor Cable	2m high temperature PVC sheathed cable. Fully shielded with a quick release plug
Ambient Operating Temperature	5°C to 35°C
Warm-up Time	1-2 minutes
Voltage	90-260 VAC, 50/60Hz
Voltage Outputs	0-5V linear, user programmable
Current Outputs	4-20mA linear, user programmable
Digital Outputs	RS232 (RS485 option available) Data streamed on demand. Modbus RTU/Ethernet
Sample Connections	4mm ID/6mm OD nipple type. Rectus or Swagelok. Front or rear positioning
Calibration	Requires 2 or 3 user selectable gas compositions
Display	16 x 2 character (9mm) back-lit LCD
Analyser Dimensions	Bench: 150mm(H) x 247mm(W) x 250mm(D) Panel: 300 x 4µ (177mm(H) x 300mm(W) Wall: 260mm(H) x 314mm(W) x 129mm(D)
Weight	4kg (Including sensor)
Alarm	Relay circuits. Fully user programmable