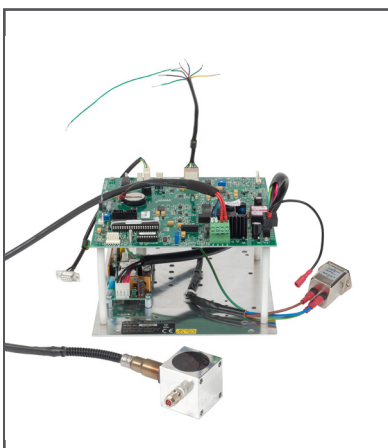
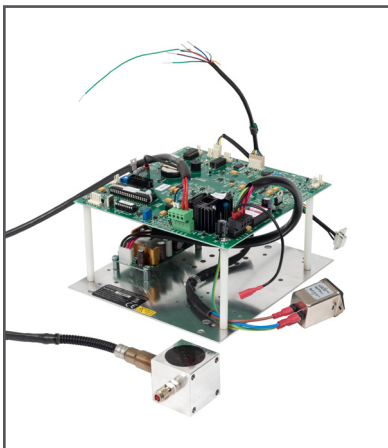


# Rapidox 2100 OEM

The Rapidox 2100 OEM is a high-performance oxygen (O<sub>2</sub>) OEM analyser fitted with a robust remote zirconia sensor on a cable, which is ideal for providing fast and accurate in-situ gas analysis over the full oxygen range 10<sup>-20</sup>ppm to 30% O<sub>2</sub>.



Zirconia oxygen sensors are extremely rugged and particularly suitable for monitoring inert atmospheres and aggressive industrial applications directly within manufacturing processes such as metal 3D printers, soldering ovens and furnaces. High temperature and vacuum applications are also suited to this model. The OEM has auxiliary and temperature (type K) inputs for additional sensors such as pressure, vacuum and dewpoint.

A bespoke configuration and scope of supply service for customers allows for a flexible, seamless and cost effective integration into machinery, products or processes.

The OEM can be supplied with a variety of sensor fittings and cable lengths together with an optional local display or keyboard. It has fully programmable analogue (voltage and current) outputs and alarm relays as well as RS232 / RS485 digital signalling as standard. In addition to the standard Rapidox digital communications protocol and software, Modbus-RTU is included as a standard option. The 2100 OEM is designed specifically for seamless integration to PLC systems.

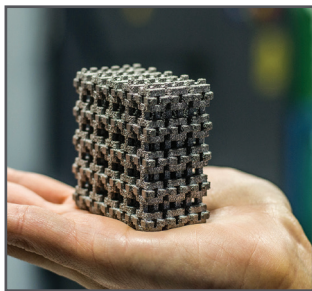
In rare instances where a zirconia sensor is unsuitable a substitute OEM electrochemical sensor may be used instead. Electrochemical sensors are more suitable for gases where VOC's, flammable gases, CO, H<sub>2</sub> or He are present. Both ppm and percent versions are available. Please contact Cambridge Sensotec for further information or to discuss your requirements.

The Rapidox 2100 OEM configuration was created for seamless integration providing fast and accurate in-situ gas analysis.

- Zirconia sensor supplied with bespoke cable
- Password protection
- Simple calibration procedure
- Data logging

- Fully programmable outputs
- Data logging software
- Type K Thermocouple option
- Operates on worldwide mains voltage

## Applications



Additive Manufacturing



Glove Boxes



Research and Development



Chemicals



Inert Gas Blanketing



Combustion



Manufacturing

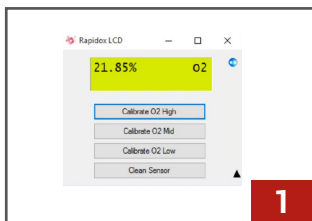


Gas



Metal Heat Treatment

## Accessories



1



2



3

1 Rapidox Software

2 Gas Filter

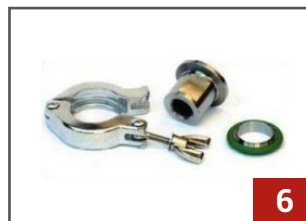
3 Water Trap



4



5



6

4 High Speed RS485

5 Display & Keypad

6 Vacuum Fitting

## Specification

O <sub>2</sub> Sensor Range	10 <sup>-20</sup> ppm to 30% Zirconia version 0-100% Electrochemical version
O <sub>2</sub> Sensor Accuracy & Response	±1% of the actual measured oxygen content OR 0.5ppm (whichever is the greater) 4 seconds for a T90 step change @1L per min flow
O <sub>2</sub> Sensor Life Expectancy	>17,000 hours Zirconia version, five years for the Electrochemical version
Operating Pressure	800 to 1200mbar absolute
Max Gas Pressure	Up to 10 bar gauge (200bar burst pressure)
Max Gas Temperature	650°C
Operating Temperature	5-35°C
Warm-up Time	1-2 minutes at 20°C
Voltage	90-260VAC, 50/60Hz
Power	100W max
Voltage Outputs	0-5V
Current Outputs	4-20mA
Digital Outputs	RS232 & RS485
Calibration	Two or three Gases
Sample Connections	Nipple or swagelok
Circuit Board Dimensions	W250mm X D263mm X H150mm
Weight	<1.2kg
Alarms	2 alarm relay circuits, fully user-configurable