



Rapidox 1100 OEM

The Rapidox 1100 OEM is a cost-effective oxygen (O₂) sampling gas analyser fitted with a zirconia oxygen gas sensor and sample pump.



Specifically designed to measure ppm measurements in the 0-30% oxygen range at ambient temperature, the gas sample is pumped through the sensor via a tube allowing the unit to be located some distance from the measurement point.

Zirconia oxygen sensors are an excellent solution for providing fast and accurate gas analysis over the low ppm oxygen range. They are extremely rugged and particularly suitable for monitoring inert atmospheres and aggressive industrial applications within manufacturing processes such as metal 3D printers, soldering ovens and furnaces.

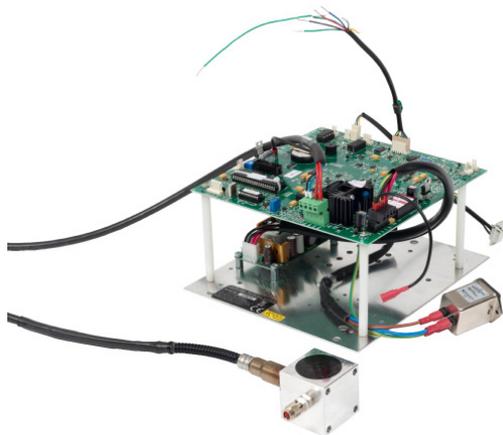
A bespoke configuration and scope of supply service for customer allows for a flexible, seamless and cost effective integration into machinery, products or processes.

The OEM can be supplied with an optional local display or keyboard and 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 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, H₂ or He are present in the gas sample. Both ppm and percent versions are available. Please contact Cambridge Sensotec for further information or to discuss your requirements. Finally, the Rapidox 1100 OEM also complies with EMC Directive 2004 / 108 / EC. UL/ETL Certification Number: UL-61010-1.

The Rapidox 1100 OEM is a cost effective oxygen (O₂) sampling gas analyser configuration created for seamless integration into products or processes.

- Low maintenance zirconia sensor
- Fully configurable software
- Fast and accurate response
- Simple calibration procedure
- Data logging software
- Fully programmable outputs
- Pump or ejector option
- Supplied with switchmode power supply



Applications



Chemicals



Gas



Medical



Combustion



Glove Boxes



Metal Heat Treatment



Emissions



Inert Gas Blanketing

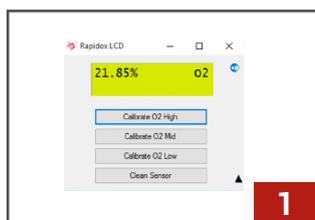


Food



Manufacturing

Accessories



1



2



3

1 Rapidox Software

2 Gas Filter

3 Chemical Filter



4



5



6

4 Water Trap

5 Display & Keyboard

6 High Speed RS485

Specification

O ₂ Sensor Range	0.5ppm to 30% Zirconia version 0-100% Electrochemical version
O ₂ 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 ₂ Sensor Life Expectancy	>17,000 hours Zirconia version, five years for the Electrochemical version
Operating Pressure	800 to 1200mbar absolute
Max Gas Pressure	±1000mbar (assuming an unrestricted outlet to room air)
Max Gas Temperature	60°C
Operating Temperature	5-35°C
Warm-up Time	5 minutes at 20°C
Supply Voltage	90-260 VAC, 50/60Hz
Power	100W max
Voltage Outputs	0-10V
Current Outputs	4-20mA
Digital Outputs	RS232 & RS485
Calibration	Two or three Gases
Sample Connections	Customer supplied
Circuit Board Dimensions	W250mm X D263mm X H150mm
Weight	<1.5kg
Pump Option	0-1.2 litres per min
Ejector Option	Requires 2bar compressed air supply
Alarms	2 alarm relay circuits, fully user-configurable