



2100E Oxygen Analyser

The Rapidox 2100E is a high-performance oxygen (O₂) analyser fitted with a robust electrochemical sensor for high percent measurements in the 0-100% oxygen range.



Electrochemical oxygen sensors are an ideal alternative to zirconia sensors when monitoring high oxygen applications or where VOC's, flammable gases, CO, H₂ or He are present in the gas sample. Unlike cheaper electrochemical oxygen sensors, the Rapidox sensor uses a quality Japanese sensor made with an acid electrolyte, meaning that it is compatible with common acid gases such as CO₂ and SO₂.

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 dewpoint fittings allow the Rapidox 2100E to be connected to various apparatus in most applications conveniently and quickly.



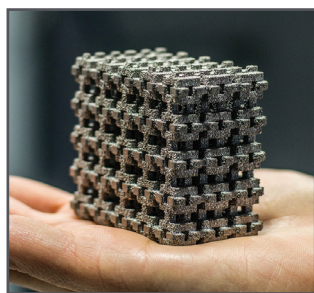
The instrument can be panel mounted or supplied within a wall mountable, IP65 weatherproof housing. The oxygen sensor can then be positioned remotely, up to 25 metres away in either a separate cabinet or as a standalone sensor. There are options for the sensor cable to be connected from the front or rear of the instrument depending on personal taste. A printer can be attached to the instrument using the serial port for permanent record keeping of results. All Rapidox analysers come with full Windows software that allows for remote configuration and monitoring of readings, as well as a full data-logging package that includes live-time graphing of each sensor channel. A vast array of special fittings, filters and manifolds are available for both oxygen and auxiliary sensors to make this a completely versatile instrument that can be installed almost anywhere.


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.

- Low maintenance electrochemical sensor
- 0-100% range
- Fully configurable software
- Fast and accurate response
- Simple calibration procedure

- Data logging
- 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 Sensor Range | 0-30% |
| O ₂ Sensor Accuracy & Response | ±1% of full scale. Approximately 20 secs for a 90% response |
| O ₂ Sensor Life Expectancy | 3-5 years |
| Oxygen Sensor Cable | 2m high temperature sheathed cable as standard. Fully shielded with a quick release plug. Extension cables available up to 25m total length |
| H ₂ O Sensor | -100°C to +20°C dp. Supplied on 2m cable with sample chamber |
| Ambient Operating Temperature | 5°C to 35°C |
| Max Working Pressure & Min Working Pressure | 1200mbar absolute. 800mbar absolute |
| Warm-up Time | 5 minutes |
| Supply Voltage | 90-260 VAC, 50/60Hz |
| Power Consumption | 30W (max) |
| Voltage Outputs | 0-5V (user-configurable) into minimum 5kΩ |
| Current Outputs | 4-20mA current loop (user-configurable) into maximum 500Ω |
| Digital Outputs | RS232 (RS485 option available): data streamed on demand/ Modbus RTU / Ethernet |
| Sample Connections | 4mm ID / 6mm OD nipple type connected to metal manifold. Rectus or Swagelok options. Front or rear positioning |
| Calibration | Requires 2 user selectable gas compositions |
| Display | 16 x 2 character (9mm) back-lit LCD |
| Analyser Dimensions | 250mm X 263mm X 150mm (without optional handle kit fitted) Panel Mount 300mm wide X 4U high |
| Weight | 3.5kg |
| Alarms High and Low | Relay circuits. Fully user programmable |
| Fuse | T2A H250V 5 x 20mm glass |