

1100 Oxygen Analyser

The Rapidox 1100 range is a cost effective, versatile instrument for applications requiring oxygen (O₂) analysis. The oxygen analysers are fitted with either a zirconia or electrochemical gas sensor depending on requirements.



Zirconia oxygen sensors are common solutions for providing fast and accurate gas analysis over the low ppm oxygen range. They 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 1ppm to 30% oxygen range.

The option of one of these three oxygen sensors, in addition to a special 'oxygen clean' version of the high range analyser, offers a measurement solution for almost any application. Configuration of the analyser allows for the instrument to be panel mounted with the gas fittings at either the front or rear.

Other variations of the analyser include a three-channel multiplex version, which allows for three gas streams to be sampled from separate points. Gases can be analysed in sequence or at intervals set from the front keypad controls or software.

The Rapidox 1100 range can also be used to control an external proportional flow control valve (PFC) or a single solenoid relay using a remote signal output (RSO). These are exceptionally useful within inert gas blanketing applications, where the analyser can regulate the level of gas based on the measurement of oxygen via the PFC or RSO control function.



Though highly configurable to suit individual customer requirements, the Rapidox 1100 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
- Pump or ejector option
- Two programmable alarms
- Operates on worldwide mains voltage
- Password protection

Applications



Chemicals



Gas



Medical



Combustion



Glove Boxes



Metal Heat Treatment



Emissions



Inert Gas Blanketing



PCB Production



Food



Manufacturing



Research & Development

Accessories



1



2



3



4



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- 1 Calibration Kit
- 2 Multiplex Sampling System
- 3 Gas Recovery Bag
- 4 Thermal Printer
- 5 Calibration Service
- 6 Gas Filters

Specification

O ₂ Zirconia Sensor	1ppm to 30%
O ₂ Electrochemical Sensors	0ppm to 10,000ppm (0-1%) or 0 to 100%
Ambient Operating Temperature	5°C to 35°C
Warm-up Time	3-5 minutes as standard
Voltage	90-260 VAC, 50/60Hz
Voltage Outputs	0-10V, 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
Display	20 x 4 character OLED display
Analyser Dimensions	Bench: 150mm(H) x 253mm(W) x 272mm(D) Panel: 300 x 4µ (177mm(H) x 300mm(W) Multiplex: 150mm(H) x 263mm(W) x 250mm(D)
Weight	3.5kg (4kg with bezel)
Pump Option	Main type diaphragm pump. Variable speed 0-1.2 litres per minute
Ejector Option	Vacuum ejector fitted, running off inlet pressure
Alarms	Relay circuits, user programmable