



# 1100A Carbon Dioxide Gas Analyser



The Rapidox 1100A is a cost-effective carbon dioxide (CO<sub>2</sub>) gas analyser fitted with a durable infra-red (IR) sensor. Specifically designed to analyse CO<sub>2</sub> with a choice of sensors for either low ppm or high percent measurements, the Rapidox 1100A is ideal for applications such as gas & metals production, food & beverage, syngas & biogas, welding or emissions.

The IR CO<sub>2</sub> sensor is fully pressure and temperature corrected for accuracy and stability. The sensor has a long life expectancy in excess of five years continuous operation.

A special biogas version of this sensor is available for applications where carbon dioxide is mixed with high levels of methane. A special argon gas version of this sensor is available for applications where carbon dioxide is mixed with argon.

Configuration of the analyser allows for the instrument to be panel mounted with the gas fittings at either the front or rear.



Though highly configurable to suit individual customer requirements, the Rapidox 1100 range possesses a number of standard features to enhance functionality.

- Long life infra-red sensor
- 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



Combustion



Gas



Metal Heat Treatment



Emissions



Manufacturing



Research & Development

## Accessories



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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

|                                |  |
|--------------------------------|--|
| CO2 Sensor Range               | 0-500ppm, 0-1000ppm, 0-2000ppm, 0-3000ppm, 0-5,000ppm, 0-1%, 0-3%, 0-5%, 0-10%, 0-30% or 0-100%                        |
| CO2 Sensor Accuracy & Response | ±2% of full scale (±3% for 0-500 and 0-1000ppm version) Approximately 20 sec for a 90% response                        |
| CO2 Sensor Life Expectancy     | >5 years   |
| Ambient Operating Pressure     | 800-1200mbar absolute  |
| Ambient Operating Temperature  | 5°C to 35°C  |
| Max. Sample Gas Pressure       | 500-1500mbar absolute  |
| Max Gas Temperature            | 50°C   |
| Warm-up Time                   | 3-5 minutes standard   |
| Voltage                        | 90-260 VAC, 50/60Hz  |
| Voltage Outputs                | 0-10V linear, user programmable  |
| Current Outputs                | 4-20mA linear, user programmable   |
| Digital Outputs                | RS232 (RS485 option available) Data streamed on demand. Modbus RTU/Ethernet  |
| Calibration                    | Requires 2 user selectable gas compositions. Normally zero and span  |
| Sample Connections             | 4mm ID/6mm OD nipple type. Rectus or Swagelok. Front or rear positioning   |
| Display                        | 16 x 2 character (9mm) back-lit LCD  |
| 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                    | Mains type diaphragm pump. Variable speed 0-1.2 litres per minute  |
| Ejector Option                 | Vacuum ejector fitted, running off inlet pressure  |
| Alarms                         | Relay circuits. Fully user programmable  |