High-Speed CO₂ Sensor

V. 09/22

- Up to 50 measurements per second
- Patented solid-state LED technology
- Fastest response time



The SprintIR®-R is part of a range of CO₂ sensors designed to deliver unprecedented high-speed measurement capability. The SprintIR®-R will take up to 50 readings per second, making it ideal for applications that require individual measurements at high repetition rates or where the CO₂ concentration is changing rapidly.

The SprintIR®-R is fitted with a standard flow-through adaptor so the CO2 gas can be passed over the optical sensor at high speed. Other customised adaptors are also possible depending on the installation requirements.

The SprintIR®-R uses patented NDIR solid-state LED optical technology enabling the sensor to respond to rapidly changing CO₂ without compromising parametric performance.

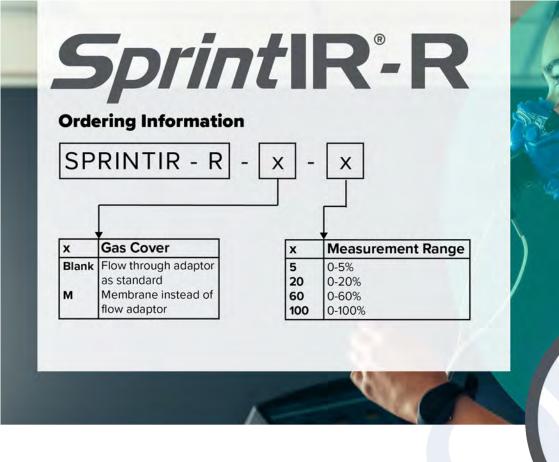
Features

- 50 readings per second
- Optional customised flow adaptors
- Low power CO₂ sensor
- Solid-state LED optical technology
- **UART** data interface
- Built-in auto-zero function

Applications

- Healthcare
- Food Packaging
- Sport Science







Measurement Ranges	0-5%, 0-20%, 0-60%, 0-100%
Accuracy (typ.)	0-60% \pm (70ppm, +5% of reading)
	0-100% ±(300ppm, +5% of reading)
Time to 1st Reading	<0.2 Seconds
Response Time	Flow Dependent
Readings per Second	50
Sample Method	Solid-state LED NDIR Diffusion

Electrical and Mechanical Specifications

Measurement Output	UART
Supply Voltage	3.25V – 5.5V
Power Consumption (typ.)	100mW @3.3V
Dimensions and Weight	Ø24.8mm x 28mm, 7.5g

Operating Conditions

Operating Conditions – Temperature	0°C to 50°C
Operating Conditions - Humidity	0-95% RH, non-condensing
Storage Conditions - Temperature	-40°C to +70°C
Ambient Operating Pressure	500mbar to 2bar
Sensor Lifetime	>15 years
Environmental Compliance	RoHS and REACH