# SprintlR®-6S





# High-Speed CO<sub>2</sub> sensor

## Up to 20 measurements per second

The SprintIR®-6S is part of a range of CO<sub>2</sub> sensors designed to deliver unprecedented high-speed measurement capability.

The SprintIR®-6S will take up to 20 readings per second, making it ideal for applications that require individual measurements at high repetition rates or where the  $CO_2$  concentration is changing rapidly.

#### About SprintIR®-6S

The SprintlR $^{\odot}$ -6S is fitted with a standard flow-through adaptor so the CO<sub>2</sub> gas can be passed over the optical sensor at high speed. Other customised adaptors are also possible depending on the installation requirements.

The SprintIR®-6S uses patented NDIR solid-state LED optical technology enabling the sensor to respond to rapidly changing  $CO_2$  without compromising parametric performance.

#### **Features**

- 20 readings per second
- Optional customised flow adaptors
- Low-power CO<sub>2</sub> sensor

- Solid-state LED optical technology
- UART data interface
- Built-in auto-calibration

#### **Applications**

- Healthcare
- Food Packaging
- Sport Science
- CO<sub>2</sub> Fire Suppression Deployment





#### CO<sub>2</sub> Sensor Specifications

Measurement Ranges	0-5%, 0-20%, 0-60%, 0-100%	
Accuracy (typ.)	0-60% ±(70ppm +5% of reading) 0-100% ±(300ppm +5% of reading)	
Time to 1st Reading	<0.5 seconds	
Response Time	Flow dependent	
Readings per Second	20	
Sample Method	Solid-state LED NDIR Diffusion	

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# SprintlR®-6S



# SprintlR® Series

## Further models from our series



SprintlR®-R High-Speed CO<sub>2</sub> Sensor



SprintIR®-W High-Speed CO<sub>2</sub> Sensor

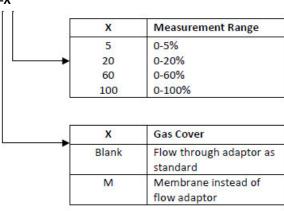
Electrical and Mechanical Specifications				
Measurement Output	UART			
Supply Voltage	3.25V - 5.5V			
Power Consumption (typ.)	35mW @ 3.3V			
Dimensions and Weight	ø23.8mm x 24mm, 7.5g			

#### **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
Pressure Dependence	500mbar - 2bar
Sensor Lifetime	>15 years
Environmental Compliance	RoHS and REACH

#### Ordering Information

#### **SPRINTIR-6S-X-X**



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# SprintlR®-6S



## Discover also our further product series

# CozlR® Series



Ultra-Low-Power CO<sub>2</sub> sensors

# ExplorIR® Series



Small footprint CO<sub>2</sub> Sensors



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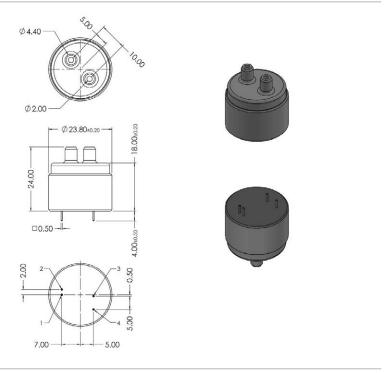
60-62 Grayshill Road

Westfield North Courtyard Cumbernauld, United Kingdom, G68 9HQ

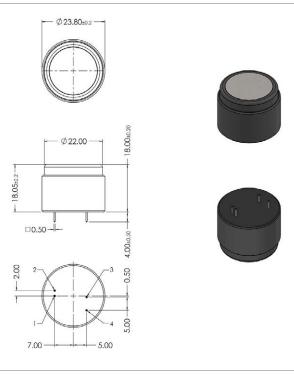
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### Dimension Drawing - SprintlR® - 6S



#### Dimension Drawing - SprintlR®-6S with membrane cover



### Pin-Out Despription - SprintIR®-6S

Pin	Name	Туре	Description
1	Rx_In	Digital Input	UART Receive Input
2	Tx_Out	Digital Output	UART Transmit Output
3	GND	Supply	Sensor ground
4	VDD	Supply	Sensor supply voltage



