# Sprinting High-Speed CO<sub>2</sub> Sensor Up to 20 measurements per second Patented solid-state LED technology Fast response time



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

The SprintIR®-W 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.

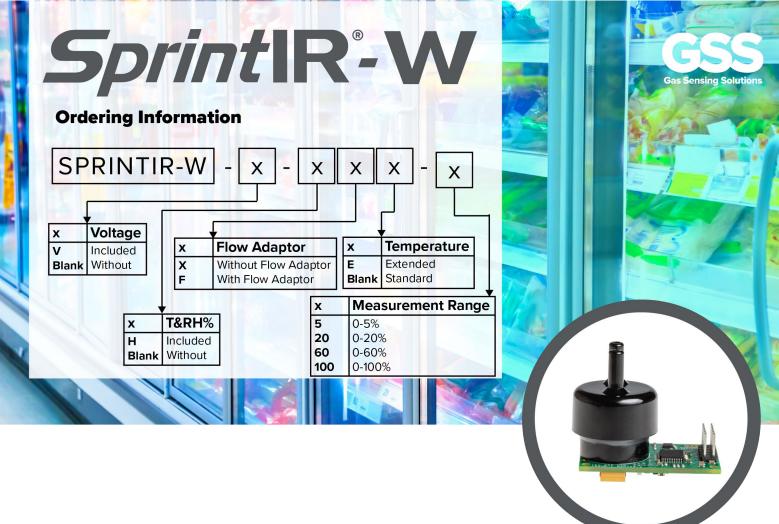
The SprintIR®-W uses patented NDIR solid-state LED optical technology enabling the sensor to respond to rapidly changing CO<sub>2</sub> without compromising parametric performance.

### **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-zero function
- Optional diffusion sampling

## **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 1 <sup>st</sup> Reading | <0.5 Seconds                     |
| Response Time                   | Flow Dependent                   |
| Readings per Second             | 20                               |
| Sample Method                   | Solid-state LED NDIR Diffusion   |

# **Electrical and Mechanical Specifications**

| Measurement Output       | UART                     |
|--------------------------|--------------------------|
| Supply Voltage           | 3.25V – 5.5V             |
| Power Consumption (typ.) | 35mW @3.3V               |
| Dimensions and Weight    | 42.45mm x 25mm x 37mm,7g |

### **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                |
| <b>Environmental Compliance</b>    | RoHS and REACH           |