



- Flexible, small form-factor CO<sub>2</sub> sensor
- Ideal for battery-powered applications
- Fit and forget, fully autonomous operation
- Long life, >15 years



## **About the ExplorIR®-W**

The ExplorIR®-W is a small footprint low power CO<sub>2</sub> sensor designed for applications where space is at a premium. The combination of small size, low power and high accuracy makes this sensor suitable for portable, battery powered personal safety equipment.

The ExplorIR®-W has a very wide dynamic range and is capable of measuring CO<sub>2</sub> gas concentrations up to 100%, without compromising measurement accuracy or responsiveness.

The sensor is designed to take 2 readings per second, making it ideal for applications where gas concentrations are rapidly changing. The ExplorIR®-W uses patented NDIR solid-state LED optical technology that delivers consistent and accurate CO<sub>2</sub> measurement performance over the lifetime of the sensor.

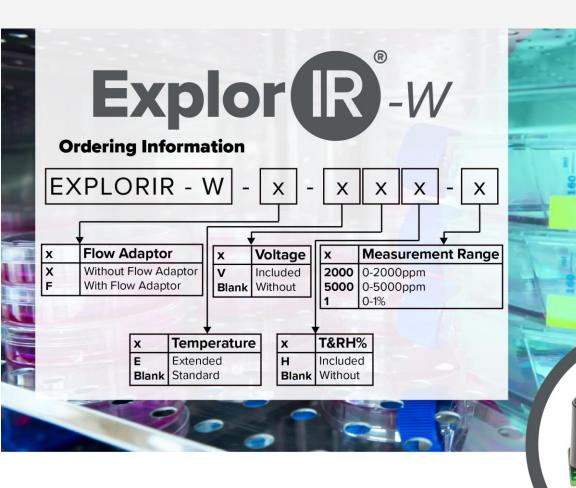
#### **Features**

- Measures up to 100% CO<sub>2</sub> concentration
- Low power CO<sub>2</sub> sensor
- Solid state LED optical technology
- Vibration and shock resistant
- Optional temperature and relative humidity sensor
- UART data interface
- Built-in auto-zeroing
- Optional flow through adaptor
- Optional voltage output

#### **Applications**

- Industrial Safety
- Incubators
- Transportation
- Refrigeration
- Horticulture and Agriculture





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

Measurement Ranges	0-5%, 0-20%, 0-60%, 0-100%
Accuracy (typ.)	$0-60\% \pm (70 \text{ppm}, +5\% \text{ of reading})$
	$0-100\% \pm (300ppm, +5\% \text{ of reading})$
Time to 1 <sup>st</sup> Reading	<1.2 Seconds
Response Time	<30 Seconds (Diffusion Limited)
Readings per Second	2
Sample Method	Solid-state LED NDIR Diffusion

## **Electrical and Mechanical Specifications**

Measurement Output	UART
Supply Voltage	3.25V – 5.5V
Power Consumption (typ.)	<3.5mW @ 3.3V
Dimensions and Weight	40mm x 25mm x 23mm, 8g

#### **Operating Conditions**

Operating Conditions – Temperature	0°C to 50°C (Standard)
	-25°C to 55°C (Extended)
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

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