ExplorIR®-W

- Flexible, small form-factor CO_2 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_2 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_2 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_2 measurement performance over the lifetime of the sensor.

Features

- Measures up to 100% CO_2 concentration
- Low power CO_2 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

ExplorIR®-W

GSS
Gas Sensing Solutions

Ordering Information

EXPLORIR - W - x - x x x - x

x	Flow Adaptor
X	Without Flow Adaptor
F	With Flow Adaptor

x	Voltage
V	Included
Blank	Without

x	Measurement Range
2000	0-2000ppm
5000	0-5000ppm
1	0-1%

x	Temperature
E	Extended
Blank	Standard

x	T&RH%
H	Included
Blank	Without

CO_2 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	<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
Environmental Compliance	RoHS and REACH