

ExplorIR[®]-M

- Miniature footprint CO₂ Sensor
- Ideal for battery-powered applications
- Fit and forget, fully autonomous operation
- Long life, >15 years



About the ExplorIR[®]-M

ExplorIR[®]-M is a miniature CO₂ sensor, capable of measuring up to 100% concentration. Its compact and robust design enables easy integration into gas monitoring and detection systems.

ExplorIR[®]-M is specifically designed for applications that require the sensor to operate reliably in extreme environmental conditions, especially where the pressure, temperature or vibration regime is particularly harsh.

The sensor is designed to take 2 readings per second, making it ideal for applications where gas concentrations are rapidly changing.

The ExplorIR[®]-M uses GSS patented solid-state optical technology, which enables the sensor to provide high accuracy CO₂ measurement capability over an extended lifetime.

Features

- Measures up to 100% CO₂ concentration
- Low power CO₂ sensor
- Solid-state LED optical technology
- Vibration and shock resistant
- UART interface
- Built-in auto-zero function

Applications

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

Ordering Information

EXPLORIR-M - X - X

x	Temperature
E	Extended
Blank	Standard

x	Measurement Range
5	0-5%
20	0-20%
60	0-60%
100	0-100%

<https://www.gassensing.co.uk/product/explorir-co2-sensor/>



CO₂ 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 st 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	ø20.9mm x 18.1mm, 4g

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