

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 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

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

Applications

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



ExplorIR[®]-M

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%

www.sstsensing.com/product/explorir-m-ndir-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 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 to 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	-30°C to +70°C
Pressure Dependence	500mbar - 10bar
Sensor Lifetime	>15 years
Environmental Compliance	RoHS and REACH