



## Miniature footprint CO<sub>2</sub> Sensor

### Fit and forget, fully autonomous operation

ExplorIR<sup>®</sup>-M is a miniature CO<sub>2</sub> sensor, capable of measuring up to 100% concentration.

Its compact and robust design enables easy integration into gas monitoring and detection systems.

#### About ExplorIR<sup>®</sup>- M

ExplorIR<sup>®</sup>-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<sup>®</sup>-M uses GSS patented solid-state optical technology, which enables the sensor to provide high accuracy CO<sub>2</sub> measurement capability over an extended lifetime.

#### Features

- Measure up to 100% CO<sub>2</sub> concentration
- Low power CO<sub>2</sub> 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



#### 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 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	ø20.9mm x 18.1mm, 4g

Rev.I\_062020\_ExplorIR-M\_engl • Subject to change



## ExplorIR<sup>®</sup> Series

Further models from our series



ExplorIR<sup>®</sup> - W  
Flexible, small form-factor  
CO<sub>2</sub> sensor



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### 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
Pressure Dependence	500mbar - 10bar
Sensor Lifetime	>15 years
Environmental Compliance	RoHS and REACH

### Ordering Information

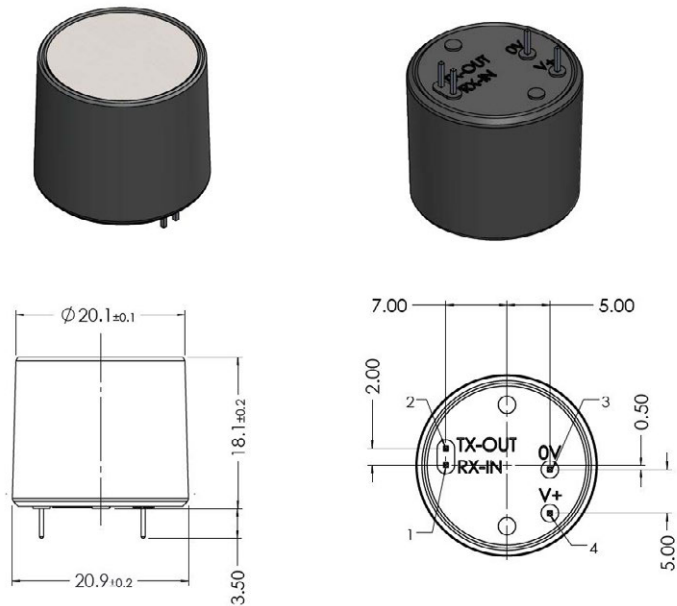
#### EXPLORIR-M-X-X

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

X	Temperature Range
E	Extended
Blank	Standard

### Dimension Drawing - ExplorIR<sup>®</sup> - M



### Pin-Out Description - ExplorIR<sup>®</sup> - W

Pin	Name	Type	Description
1	GND	Supply	Sensor ground
2	NC	Unused	Do Not Connect
3	VDD	Supply	Sensor supply voltage
4	GND	Supply	Sensor ground

