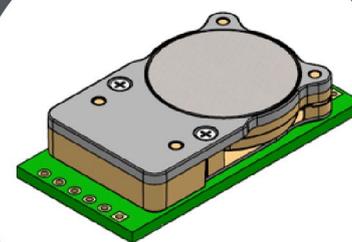


# Co2IR<sup>®</sup>-LP3

- Ultra-low power CO<sub>2</sub> sensor
- Small form factor, multiple fixturing options
- Analogue or digital CO<sub>2</sub> measurement output
- User programmable CO<sub>2</sub> level alarm
- Ideal for battery-powered portable applications
- Fit and forget, fully autonomous operation
- Long life, >15 years

**GSS**  
Gas Sensing Solutions



## About the Co2IR<sup>®</sup>-LP3

The Co2IR<sup>®</sup>-LP3 CO<sub>2</sub> sensor uses proprietary solid-state LED technology to achieve unrivalled low-power consumption, making it suitable for a range of applications including battery-powered and wirelessly connected devices.

The Co2IR<sup>®</sup>-LP3 provides the user with extensive flexibility, a choice of UART or I<sup>2</sup>C control interfaces, digital and analogue CO<sub>2</sub> measurements, and a fail-safe digital alarm level monitor.

The Co2IR<sup>®</sup>-LP3 includes on-board power management, allowing the user to control sensor power consumption during measurements and when the sensor is inactive. The user can reduce active current consumption to <1μA without switching off the sensor.

The low height form factor, small footprint and flexible mounting options make the Co2IR<sup>®</sup>-LP3 ideal for applications where space is at a premium. The Co2IR<sup>®</sup>-LP3 is designed to run fully autonomously with automatic self-checking and auto-zeroing, enabling the sensor to operate for long periods with no user intervention.

## Features

- Ultra-low power CO<sub>2</sub> sensor
- 30ppm (typ.) measurement accuracy
- Solid state LED optical technology
- UART or I<sup>2</sup>C control and data interface
- Analogue and Digital CO<sub>2</sub> outputs
- User programmable CO<sub>2</sub> alarm
- Built-in auto-zero function

## Applications

- Indoor Air Quality (IAQ)
- IoT and Smart Technology wireless equipment
- Air Quality and HVAC Systems
- Building Management Systems (BMS)
- Demand-Controlled Ventilation (DCV) systems

# CO<sub>2</sub>IR<sup>®</sup>-LP3

## Ordering Information

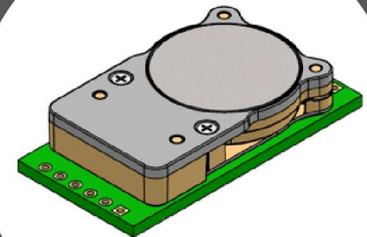
COZIR-LP3

-

X

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

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

<b>Measurement Ranges</b>	0-2000ppm, 0-5000ppm, 0-10000ppm (0-1%)
<b>Accuracy (typ.)</b>	±(30ppm, +3% of reading)
<b>Time to 1<sup>st</sup> Reading</b>	0.8 seconds minimum
<b>Response Time</b>	<30 Seconds (Diffusion Limited)
<b>Sample Method</b>	Solid-state LED NDIR Diffusion

## Electrical and Mechanical Specifications

<b>Measurement Output</b>	Analogue or Digital (UART and I <sup>2</sup> C)
<b>Supply Voltage</b>	3.25V – 5.5V
<b>Power Consumption (typ.)</b>	<3.5mW active, 3μW in low power mode
<b>Dimensions and Weight</b>	38.62mm x 19.5mm x 9.3mm, ~2.5g

## Operating Conditions

<b>Operating Conditions – Temperature</b>	0°C to 50°C
<b>Operating Conditions - Humidity</b>	0-95% RH, non-condensing
<b>Storage Conditions - Temperature</b>	-40°C to +70°C
<b>Ambient Operating Pressure</b>	500mbar to 2bar
<b>Sensor Lifetime</b>	>15 years
<b>Environmental Compliance</b>	RoHS and REACH