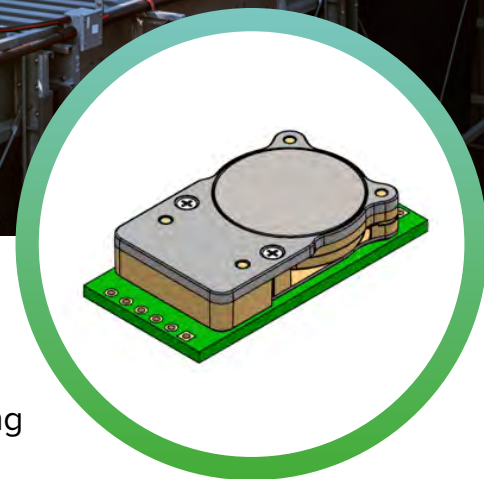


# CoZIR<sup>®</sup>-LP3

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



## About the CoZIR<sup>®</sup>-LP3

The CoZIR<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 CoZIR<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 CoZIR<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 CoZIR<sup>®</sup>-LP3 ideal for applications where space is at a premium.

The CoZIR<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, <3.5mW average
- 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> measurement outputs
- On-board power management, <3μW quiescent
- User programmable CO<sub>2</sub> level alarm
- Built-in auto-zero function

## Applications

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

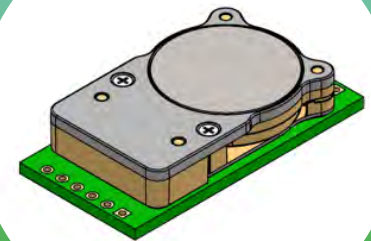
# CO<sub>2</sub>IR<sup>®</sup>-LP3

## Ordering Information

COZIR-LP3 - X

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

<https://www.gassensing.co.uk/product/cozir-lp3/>



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

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

## Electrical and Mechanical Specifications

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

## Operating Conditions

Operating Conditions - Temperature	0°C to 50°C
Operating Conditions - Humidity	0-95% RH, non-condensing
Storage Conditions - Temperature	-40°C to +70°C
Operating Pressure	500mbar - 2bar
Sensor Lifetime	>15 years
Environmental Compliance	RoHS3 and REACH

Product Flyer- Document Version: 27/08/2020-005