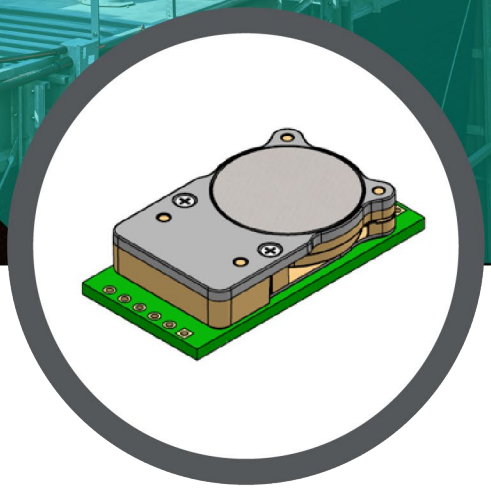
CozIR®-LP3

- Ultra-low power CO_2 sensor
- Small form factor, multiple fixturing options
- Analogue or digital CO_2 measurement output
- User programmable CO_2 level alarm
- Ideal for battery-powered portable applications
- Fit and forget, fully autonomous operation
- Long life, >15 years



About the CozIR®-LP3

The CozIR®-LP3 CO_2 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®-LP3 provides the user with extensive flexibility, a choice of UART or I^2C control interfaces, digital and analogue CO_2 measurements, and a fail-safe digital alarm level monitor.

The CozIR®-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®-LP3 ideal for applications where space is at a premium. The CozIR®-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_2 sensor
- 30ppm (typ.) measurement accuracy
- Solid state LED optical technology
- UART or I^2C control and data interface
- Analogue and Digital CO_2 outputs
- User programmable CO_2 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

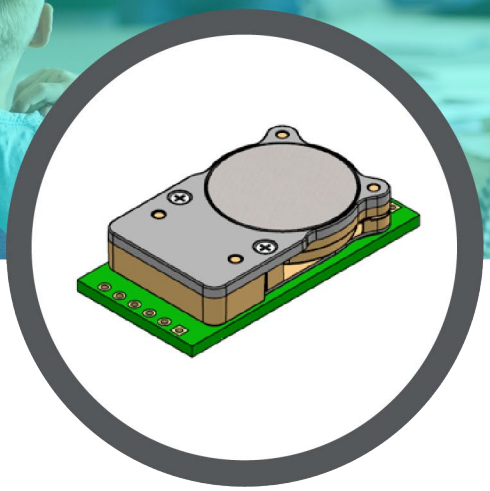
COZIR®-LP3

GSS
Gas Sensing Solutions

Ordering Information

COZIR-LP3 - x

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



CO_2 Sensor Specifications

Measurement Ranges	0-2000ppm, 0-5000ppm, 0-10000ppm (0-1%)
Accuracy (typ.)	±(30ppm, +3% of reading)
Time to 1st Reading	0.8 seconds minimum
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^2C)
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
Ambient Operating Pressure	500mbar to 2bar
Sensor Lifetime	>15 years
Environmental Compliance	RoHS and REACH