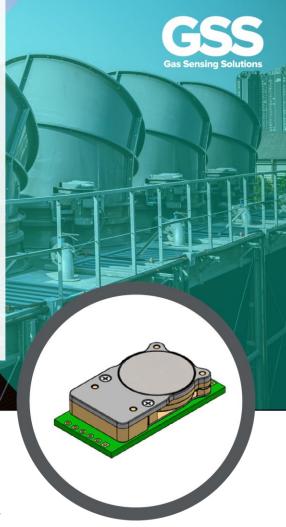
CZIR°-LP3

- Ultra-low power CO₂ sensor
- Small form factor, multiple fixturing options
- Analogue or digital CO₂ measurement output
- User programmable CO₂ 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 CO2 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 I²C control interfaces, digital and analogue CO₂ 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 $<1\mu$ A without switching off the sensor.

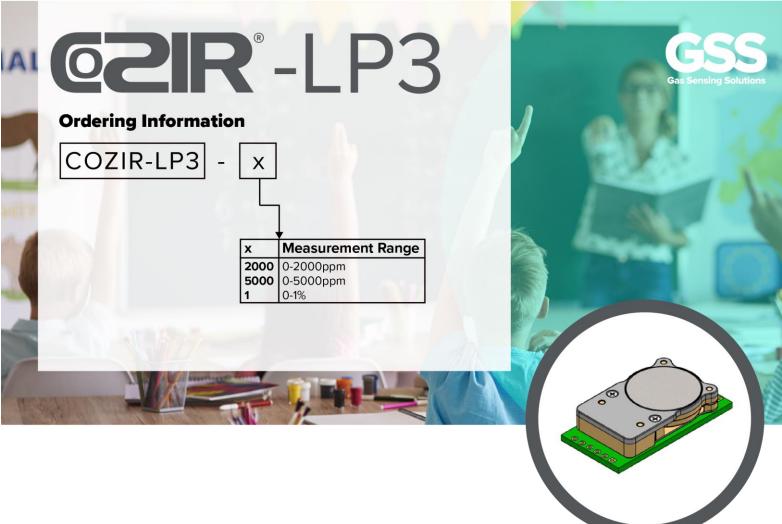
The low height form factor, small footprint and flexible mounting options make the CozIR®-LP3 ideal for applications where space is at a premium. The CozIR®-LP3 is designed to run fully autonomously with automatic self-checking and auto-zeroing, enabling the sensor to operate for long periods with no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

Features

- Ultra-low power CO₂ sensor
- 30ppm (typ.) measurement accuracy
- Solid state LED optical technology
- UART or I²C control and data interface
- Analogue and Digital CO₂ outputs
- User programmable CO₂ 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



CO₂ Sensor Specifications

| Measurement Ranges | 0-2000ppm, 0-5000ppm, 0-10000ppm (0-1%) |
|---------------------------------|---|
| Accuracy (typ.) | ±(30ppm, +3% of reading) |
| Time to 1 st Reading | <1.2 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 ² 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 |
| Ambient Operating Pressure | 500mbar to 2bar |
| Sensor Lifetime | >15 years |
| Environmental Compliance | RoHS and REACH |