

# CoZIR<sup>®</sup>-LP

**GSS**  
Gas Sensing Solutions

- Ultra-low power CO<sub>2</sub> sensor
- Ideal for battery-powered wireless operation
- Fit and forget, fully autonomous operation
- Long life, >15 years



## About the CoZIR<sup>®</sup>-LP

The CoZIR<sup>®</sup>-LP is part of a new generation of ambient CO<sub>2</sub> sensors optimised for low-power applications. The CoZIR<sup>®</sup>-LP uses NDIR solid-state LED optical technology to create a sensor with a small footprint and ultra-low-power consumption.

This makes it ideal for a new generation of portable and battery powered ambient measurement applications that require highly accurate CO<sub>2</sub> measurement capability.

The CoZIR<sup>®</sup>-LP sensor is designed for measuring ambient levels of CO<sub>2</sub> from 0-1%. The sensor also features a built-in auto-zero function that maintains CO<sub>2</sub> measurement accuracy over the lifetime of the product.

## Features

- Ultra-low power CO<sub>2</sub> sensor
- 30ppm (typ.) measurement accuracy
- Solid-state LED optical technology
- UART data interface
- Built-in auto-zero function
- California Building Standards Code, Title 24 compliant

## 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

# CO2IR<sup>®</sup>-LP

## Ordering Information

COZIR-LP - 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> | <1.2 Seconds                            |
| <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>       | UART                        |
| <b>Supply Voltage</b>           | 3.25V – 5.5V                |
| <b>Power Consumption (typ.)</b> | <3.5mW @ 3.3V               |
| <b>Dimensions and Weight</b>    | 31mm x 19.5mm x 8.7mm, 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           |