

CoZIR[®]-LP

- **Ultra-Low-Power CO₂ sensor**
- **Ideal for battery-powered operation**
- **Fit and forget, fully autonomous operation**
- **Long life, >15 years**



About the CozIR[®]-LP

The CozIR[®]-LP is part of a new generation of ambient CO₂ sensors optimised for low-power applications. The CozIR[®]-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 CO₂ measurement capability.

The sensor is designed for measuring ambient levels of CO₂ from 0-1%. The CozIR[®]-LP also features a built-in auto-calibration function that maintains CO₂ measurement accuracy over the lifetime of the product.

Features

- Ultra-low power CO₂ sensor
- 30ppm (typ.) measurement accuracy
- Solid state LED optical technology
- UART data interface
- Built-in auto-calibration
- 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
- Transport
- In-Cabin Air Quality

Ordering Information

COZIR-LP - X

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

<https://www.gassensing.co.uk/product/cozir-lp-co2-sensor/>



CO₂ Sensor Specifications

Measurement Ranges	0-2000ppm, 0-5000ppm, 0- 10000ppm (0-1%)
Accuracy (typ.)	±(30ppm +3% of reading)
Time to 1st Reading	<1.2 seconds
Response Time	<30 seconds (Diffusion limited)
Sample Method	Solid-state LED NDIR Diffusion

Electrical and Mechanical Specifications

Measurement Output	UART
Supply Voltage	3.25V - 5.5V
Power Consumption (typ.)	<3.5mW @ 3.3V
Dimensions and Weight	31mm x 19.5mm x 8.7mm, 2.5g

Operating Conditions

Operating Conditions - Temperature	0°C to 50°C
Operating Conditions - Humidity	0-95% RH, non-condensing
Storage Conditions - Temperature	-30°C to +70°C
Pressure Dependence	500mbar - 1500mbar
Sensor Lifetime	>15 years
Environmental Compliance	RoHS and REACH