

CoZIR[®]-LP²

GSS
Gas Sensing Solutions

- Ultra-low power CO₂ sensor
- User-defined power consumption
- Ideal for battery-powered wireless operation
- Fit and forget, fully autonomous operation
- Long life, >15 years



About the CoZIR[®]-LP2

The CoZIR[®]-LP2 is an ultra-low power NDIR CO₂ sensor using state-of-the-art solid-state LED optical technology. The low-power LEDs are manufactured in-house, giving GSS complete control of the CO₂ sensor signal chain.

The CoZIR[®]-LP2 allows users to reduce power consumption whilst maintaining high CO₂ measurement accuracy. The sensor incorporates a number of power saving modes, capable of reducing active and quiescent current consumption to unrivalled low levels.

The CoZIR[®]-LP2 also features a built-in auto-zero 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 or I²C control and 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[®]-LP²

Ordering Information

COZIR-LP2

- X

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



CO₂ Sensor Specifications

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

Electrical and Mechanical Specifications

Measurement Output	UART and I ² C
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	-40°C to +70°C
Ambient Operating Pressure	500mbar to 2bar
Sensor Lifetime	>15 years
Environmental Compliance	RoHS and REACH