

COZIR™ LP

Low Power, Low Profile Carbon Dioxide Sensor

COZIR LP is a low profile, low power, high performance CO2 sensor. Operating at a 2Hz update rate while only consuming 3mW⁵, its world leading power consumption make it ideally suited for battery operation and portable instruments. Based on proven GSS IR LED and Detector technology and innovative optical designs. **COZIR LP** is a third generation product from Gas Sensing Solutions Ltd - leaders in IR LED CO2 sensing.

With measurement ranges of 0-2000ppm, 0-5000ppm and 0-1% the **COZIR LP** Sensor is suitable for applications such as **Building Control** and **Indoor Air Quality**.

- Ultra-low Power 3mW
- Measurement ranges from 0 to 1%
- 3.3V supply
- Peak current only 33mA
- Commands set and electrical interface compatible with GSS COZIR sensor range.

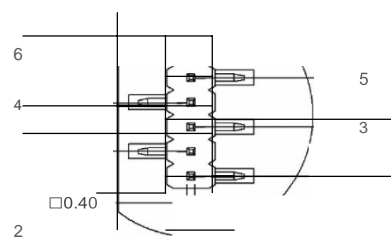
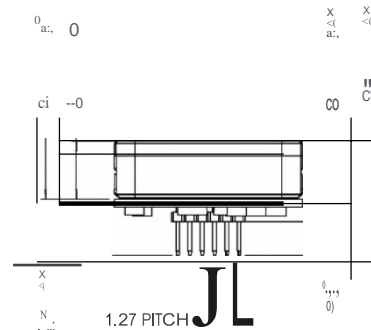
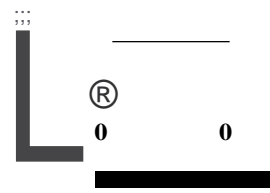
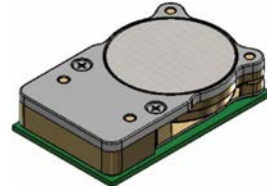
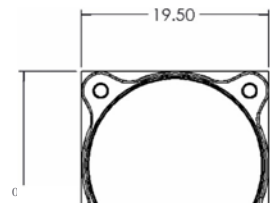


COZIR™ LP CO2 Sensor

Specifications

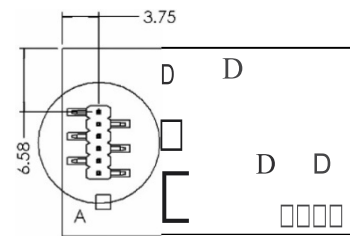
General Performance	
Start up time	First reading 1.2s after power on ²
Operating Conditions	0°C to 50°C (Standard) -25°C to 55°C (Extended range) 0 to 95% RH, non-condensing
Recommended Storage	-30°(to +70°(
CO2 Measurement	
Sensing Method	Non-dispersive infrared (NDIR) absorption Patented Gold-plated optics Proprietary GSS Solid-state source and detector
Sample Method	Diffusion
Measurement Range	
Accuracy	±50 ppm +/- 3% of reading ¹
Calibration	Autocali bration ⁶
Non Linearity	< 1% of FS
Pressure Dependence	0.13% of reading per mm Hg in normal atmospheric conditions.
Operating Pressure Range	950 mbar to 1050 mbar ³
Response Time	2- 3 mins (Configurable via filter type and application) ³ Reading refreshed twice per second.

Electrical/ Mechanical	
Power Input	3.25 to 5.SV. (3.3V recommended). Peak Current 33mA5. Average Current <lmA5.
Connector	6-wav 1.27mm header
Power Consumption	3 mW ⁵
Interface	UART
Weight	Sg
Dimensions	31mm x 19.5mm x 8mm ⁷



DETAIL A
SCA LE 4: 1

FUNCTION	PIN#
GND	1
Vsupply	2
Rx IN	3
Tx OUT	4
N/C	5
N/C	6



Note 1: All measurements are at STP unless otherwise stated.

Note 2: There is no sensor warm-up as the sensor has no heated parts. Longer integration time will reduce measurement noise.

Note 3: External Pressure calibration required.

Note 4: User Configurable Filter Response.

Note 5: Power measurements with sensor operated in polling mode.

Note 6: Autocalibration is enabled by default on COZIR-LP. For correct operation, the sensor must experience concentrations close to fresh air. For details request the application note "COZIR Autocalibration".

Note 7: Excludes height of connector pins.

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