



# GS-CDR02KXECON Series

Room Carbon Dioxide Transmitter



## Overview

The GS-CDR02KXECON CO<sub>2</sub> sensor uses a highly accurate and reliable Non-Dispersive Infrared (NDIR) sensor in an attractive, low-profile enclosure to monitor ambient CO<sub>2</sub> levels for room applications. The compact dual wavelength CO<sub>2</sub> sensor achieves excellent performance characteristics, including high accuracy and low power consumption to ensure stable long term operation. The CO<sub>2</sub> sensor features user selectable 4-20 mA or 0-5 Vdc or 0-10 Vdc for simple integration into any building automation system. The device is also available with an optional resistive temperature sensor.

## Applications

- Used for demand controlled ventilation (DCV)
- Used for monitoring air quality

## Features & Benefits

- Very Economical
- Thermistor Option
- Durable
- Accurate carbon dioxide monitoring for increased comfort

## Model Selection

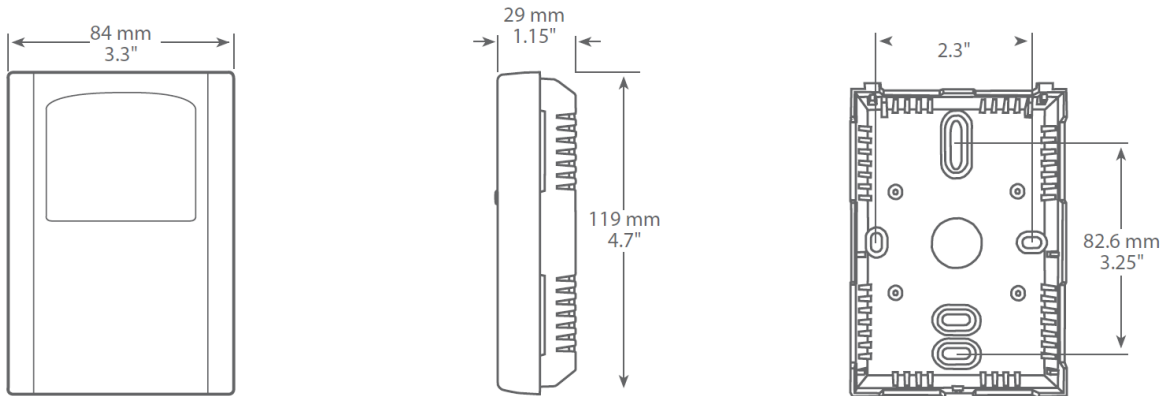
GS-CDR02KXECON	Room CO <sub>2</sub> detector, Economical, Dual Wavelength NDIR, 0-2000 ppm, analog outputs
GS-CDR02KTECON	Room CO <sub>2</sub> detector, Economical, Dual Wavelength NDIR, 0-2000 ppm, analog outputs, c/w 10k type 2 temperature sensor

**Note:** This CO<sub>2</sub> sensor incorporates a Self Calibration feature to correct CO<sub>2</sub> sensor drift and is recommended for applications where the CO<sub>2</sub> level will be close to normal (400 ppm) at least one hour per day. If the monitored space is occupied 24 hours or consistently maintains higher levels of CO<sub>2</sub> level, the GS-CDR Series is recommended.

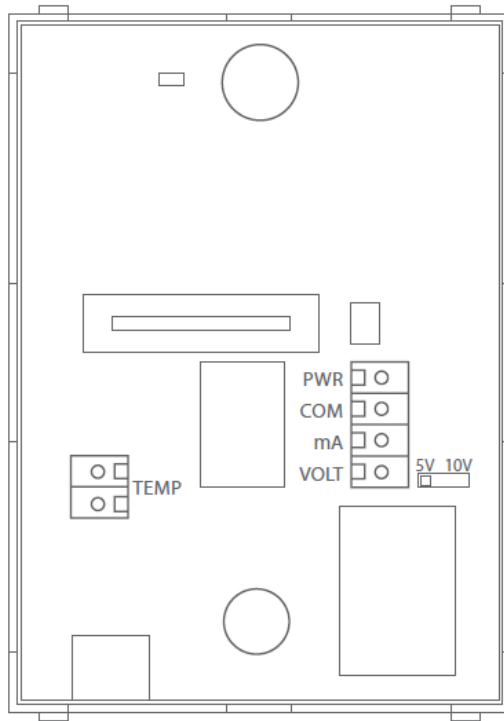
## Specifications

CO <sub>2</sub> Sensor	Dual wavelength Non-Dispersive Infrared (NDIR)
Range	0-2000 ppm
Accuracy	±(30ppm +3% of reading)
Temperature dependency	±2.5 ppm/°C
Response time	20 seconds (T63)
Warm-up time	1 minute
Sensor coverage area	100m <sup>2</sup> (1000ft <sup>2</sup> ) typical
Sensor life span	>15 Years
Power supply	24 Vac/dc ±15% (non-isolated half-wave rectified)
Consumption	80 mA max @ 24 Vdc, 160 mA max @ 24 Vac
Protection circuitry	Reverse voltage and transient protected
Optional signals	4-20 mA, 0-5 Vdc, 0-10 Vdc (field selectable)
Drive capability @ 24 Vdc	Current: 600Ω maximum; Voltage: 10 KΩ minimum
Operating conditions	0 to 50°C (32 to 122°F), 0-90 %RH non-condensing
Storage conditions	-30 to 70°C (-22 to 158°F), 0-85 %RH non-condensing
Optional temperature sensor	Various thermistors or RTD's as a 2 wire resistance output
Wiring connections	Screw terminal block (14 to 22 AWG)
Enclosure	ABS, UL94-V0, IP30 (NEMA 1)
Approvals	CE, RoHS
Country of origin	Canada

## Dimensions



# Wiring Information



Terminal	Function
PWR	+24 Vac/Vdc
COM	Common
mA	Current Output
VOLT	Voltage Output
TEMP	Resistance Output
Sensor	Resistance Output

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