



Automation Components, Inc.

# CO2-010

Carbon Dioxide Sensor (0 to 10VDC output)



Automatic background calibration

Single beam infrared sensing technology

ROOM

A

L: 3.33" W: 1.08" H: 2.70"

DUCT

B

L: 3.05" W: 3.05" H: 5.70"

## CO2-010

The CO2-010 Series monitors carbon dioxide from 0 to 2000 ppm for wall and duct mount applications. They feature a 0 to 10VDC analog output with a patented ABC Logic™ self-calibration system and a 20,000 ohm NTC thermistor for temperature sensing (room units only). The concentration of carbon dioxide is measured using a Single Beam/Non-Dispersive Infrared (NDIR) Absorption sensing method. These units should not be used in environments such as greenhouses, wineries, breweries, or where industrial sources of carbon dioxide are present or in applications where the space is left unoccupied for less than 4 hours a day.

The CO2-010 Series is covered by ACI's Two (2) Year Limited Warranty, which is located in the front of ACI's Sensors & Transmitters catalog or can be found on ACI's web site, which is: [www.workaci.com](http://www.workaci.com).

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## SPECIFICATIONS

Supply Voltage	18 to 30 VAC RMS, 50/60 Hz or 18 to 42VDC
Power Consumption	Duct: Typical, 1.65 W Pek, 0.65 W Avg. @ 42VDC Room: 2.75 VA Peak, 1.75 VA Avg.
Measurement Range	0 to 2000ppm
Output Signal	CO2: Duct: 0 to 10VDC (100 Ohms output impedance) Room: 0 to 10VDC (100 Ohms output impedance) Digital RS-232 communication w/UIP Software Temp: 20K NTC Thermistor (Room units only)
Accuracy	Duct: +/- 40 ppm +3% of Reading @ 72°F (22°C) Room: +/- 75 ppm @ 72°F (22°C)
Non-Linearity	< 1% of FS @ 72°F (22°C)
Stability	< 2% FS over life of sensor (15 Yrs Typical)
Temperature Dependence	0.2% of Full Scale per °C
Pressure Dependence	0.13% of reading per mm Hg
Response Time	Duct: 3 min. typical for 90% Step change Room: 3 to 5 min. typical for 90% Step Change
Operating Temp/ RH Range	32 to 122°F (0 to 50°C) / 0 to 95%, non-condensing
Sensor Coverage Area	7,500 sq. ft. maximum
Sensing Technology	Single beam infrared sensing technology (NDIR)

## ORDERING

BUILD YOUR PART#

EXAMPLE

CO2-010-R

-

L

A

B

STEP 1

A

GAS TYPE

B

DISPLAY

Select configuration,  
and display.

CO2-010-R Room

CO2-010-D Duct

( -- ) No LED Indictaion (STD)

( L ) Green/Yellow/Red LED indication (Available on Room units only)



Room



Duct