



## Product Data

### A/CO<sub>2</sub> Series

Carbon Dioxide Sensor

4 to 20 mA

0 to 10 VDC

## Carbon Dioxide



## Product Description

The A/CO<sub>2</sub> transmitters monitor carbon dioxide (CO<sub>2</sub>) levels in industrial and living environments from 0 to 10,000 ppm. The concentration of CO<sub>2</sub> is a good indication of the indoor air quality (IAQ). All units come with both a 4-20 mA and 0-10 VDC analog output as well as a relay output with an adjustable setpoint and deadband (Hysteresis). An optional LCD display may be added to the room unit while all the duct configurations come standard with the LCD display.

The concentration of CO<sub>2</sub> is measured using a Single Beam Absorption Infrared sensing method. The CO<sub>2</sub> transmitter is also equipped with a patented ABC Logic™ (Automatic Background Calibration) software. The ABC Logic™ software virtually eliminates the need for manual calibration in applications where the indoor CO<sub>2</sub> level drops to outside levels during unoccupied periods. The ABC Logic™ will not work properly in applications where the space is left unoccupied for less than 4 hours a day or where there are industrial sources of CO<sub>2</sub>.

The room transmitter is encased in a white enclosure while the duct sensor is enclosed in a black case that is UL94-5V rated and includes a pitot tube.

All units come with a two year factory warranty.

## Product Specifications

<b>Supply Voltage</b>	18 to 30 VAC, 50/60 Hz Half-Wave Rectified +18 to 42 VDC, Polarity Protected
<b>Power Consumption</b>	1.75 VA average power, 2.75 VA peak power
<b>CO<sub>2</sub> Analog Output Signals</b>	4 to 20 mA (RL max = 500 Ohms) 0 to 10 VDC (100 Ohms output impedance)
<b>Accuracy @ 72°F (22°C)</b>	+/- 40 ppm + 3% of reading
<b>Response Time</b>	0 to 90% < 2 minutes
<b>Operating Temperature</b>	32 to 122°F (0 to 50°C)
<b>Operating RH Range</b>	0 to 95% RH, non-condensing
<b>CO<sub>2</sub> Measurement Range</b>	0 to 2000 ppm (Factory Set), Adjustable to 10,000 ppm
<b>Digital I/O</b>	RS232 Interface for use with optional PC UIP Kit #2072
<b>Relay Output</b>	N/O or N/C 2A max @ 24VAC contact Rating, Factory Set at 1000 ppm with 50 ppm Hysteresis
<b>Calibration Time</b>	5 Years / Zero ppm with a 50 ppm Hysteresis
<b>Sampling Method</b>	Room: Single Beam Infrared Diffusion
<b>Digital Display</b>	0 to 10,000 ppm (Optional)

## Wiring Diagrams available

CO000113 rev 2.pdf

### Attributes:

- LCD Display
- Analog and Relay outputs
- Self calibration system
- CE, FCC part 15 class B California Energy Commission Compliant
- Long life span (15 years typical)

### Applications:

- Schools
- Large Office Buildings
- Auditoriums/Gymnasiums
- Shopping Malls
- Residential
- Theatres

DISPLAYS

TEMPERATURE

RELATIVE HUMIDITY

PRESSURE

CURRENT

AIR QUALITY

ACCESSORIES

