

# Remote Mount CO<sub>2</sub> Sensor, with Field-Selectable Outputs

## Suitable For Outside Air Measurement Applications



### DESCRIPTION

The CRLXX remote mount carbon dioxide sensor is designed for use in HVAC control applications. Inside buildings, people are the major source of CO<sub>2</sub>. By controlling fresh air based on CO<sub>2</sub> levels, energy can be saved and tenant comfort improved.

The CRLXX ensures that adequate ventilation is provided, while maximizing energy savings by ventilating at the optimum level.

### APPLICATIONS

- Controlling HVAC in response to occupancy
- Improving tenant comfort
- Facilitating compliance with ASHRAE 62.1 standard for air quality
- Direct measuring of outside air or sample from other remote area

### FEATURES

- Microprocessor-based design reduces long-term drift and calibration requirements
- Non-dispersive infrared technology (NDIR) repeatable to  $\pm 20$  ppm 0-2000 ppm range...high accuracy measurements
- Innovative self-calibration algorithm...reliable accuracy over time
- 5-year calibration interval (recommended)
- Low ambient sensitivity
- Field-selectable 4-20mA/0-5V/0-10V output...system flexibility
- Comes complete with AA50 3 ft long duct pickup and filtered sample tube assembly...easy to install
- LCD display for visibility
- Alarm relay output to trigger HVAC equipment at predetermined level

### SPECIFICATIONS



<b>Input Power</b>	20 to 30VDC/24VAC; 100mA maximum
<b>Analog Output</b>	4-20mA (clipped & capped)/0-5VDC/0-10VDC (selectable)
<b>Operating Temperature Range*</b>	0° to 50°C (32° to 122°F)
<b>Operating Humidity Range</b>	0 to 95% RH noncondensing
<b>Housing Material</b>	High impact ABS plastic
<i>CO<sub>2</sub> Transmitter:</i>	
<b>Sensor Type</b>	Non-dispersive infrared (NDIR), diffusion sampling
<b>Output Range</b>	0-2000/5000 ppm (programmable)
<b>Accuracy</b>	$\pm 30$ ppm $\pm 2\%$ of measured value**
<b>Repeatability</b>	$\pm 20$ ppm $\pm 1\%$ of measured value
<b>Response Time***</b>	<60 seconds for 90% step change

EMC Conformance: EN 61000-6-3:2001 Class B, EN 61000-6-1:2001, EN 61000-3-2:2000, EN 61000-3-3:2001, EMC Test Methods: CISPR 22:1997 (Amended A1:2000, A2:2002) Class B, IEC 61000-4-2:2002, IEC 61000-4-3:2006, IEC 61000-4-4:2004, IEC 61000-4-5:2001, IEC 61000-4-6:2004, IEC 61000-4-8:2001, IEC 61000-4-11:2004.

EMC Special Note: Connect this product to a DC distribution network or an AC/DC power adaptor with proper SURGE PROTECTION (EN 61000-6-1:2001 specification requirements).

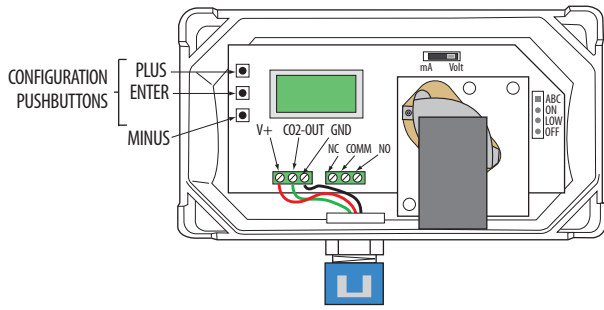
\* When directly measuring outside air, ensure the temperature of the air as it reaches the sensor is between 0° and 50°C.

\*\* Measured at NTP

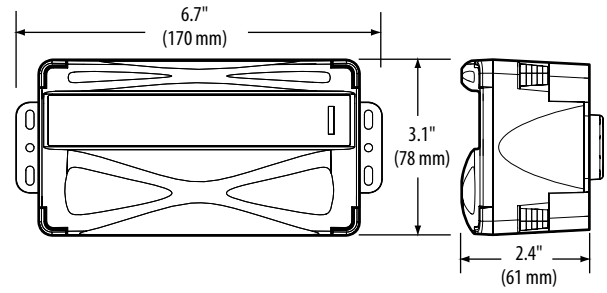
\*\*\* Response time when used with 3ft long sampling tube, Veris part number AA50.

Note: Rough handling and transportation may cause a temporary reduction of CO<sub>2</sub> sensor accuracy. With time, the ABC function will tune the readings back to the correct accuracy range. The default tuning speed is limited to 30 ppm per week.

## APPLICATION/WIRING DIAGRAM



## DIMENSIONAL DRAWING



## ORDERING INFORMATION

MODEL	DESCRIPTION
<b>CRLSXX</b>	Remote Mount CO <sub>2</sub> Sensor

## ACCESSORIES

- Remote sample pickup kit (AA50)
- Calibration kits and gases (AA01, AA26, AA27, AA28, AA29)
- Handheld air quality testers (1010, 1008, 770)

