# **CRLSXX**

Suitable for Outside Air Measurement Applications



The CRLSXX remote mount carbon dioxide sensor is designed for use in HVAC control applications. Inside buildings, people are the major source of  $\mathrm{CO}_2$ . By controlling fresh air based on  $\mathrm{CO}_2$  levels, energy can be saved and tenant comfort improved.

The remote capability of the CRLSXX provides flexibility for unique applications.

## **NDIR**

Non-dispersive infrared technology (NDIR) repeatable to ±20 ppm ±1% of measured value…high accuracy

# Sensitivity

Low ambient sensitivity

# Microprocessor based

Microprocessor-based design reduces long-term drift and calibration requirements

# Self-calibrating

Innovative self-calibration algorithm...easy to maintain. 5-year calibration interval (recommended)

## LCD

LCD display for visibility

# Field-selectable

Field-selectable 4 to 20 mA/0 to 5 V/0 to 10 V output for system flexibility

#### **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

#### **SPECIFICATIONS**

Input Power	Class 2; 20 to 30 Vdc/24 Vac 50/60 Hz; 100 mA maximum
Analog Output	4 to 20mA (clipped & capped)/0 to 5 Vdc/ 0 to 10 Vdc (selectable)
Operating Temp Range*	0 to 50 °C (32 to 122 °F)
Operating Humidity Range	0 to 95% RH non-condensing
Housing Material	High impact ABS plastic
Terminal Block Torque	0.5 to 0.6 N-m (4.4 to 5.3 in-lbf) max.
Terminal Block Wire Size	24 to 12 AWG (0.25 to 2.5mm <sup>2</sup> )
CO <sub>2</sub> TRANSMITTER	
Sensor Type	Non-dispersive infrared (NDIR), diffusion sampling
Output Range	0 to 2000/5000 ppm (programmable)
Accuracy**	±30 ppm ±2% of measured value

Repeatability	±20 ppm ±1% of measured value
Response Time***	<60 seconds for 90% step change
WARRANTY	
Limited Warranty	5 years

#### **AGENCY APPROVALS**



EMC Conformance: Low voltage directive 2014/35/EU and EMC directive 2014/30/EU. 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 specification requirements). \*When directly measuring outside air, ensure the temperature of the air as it reaches the sensor is between 0 and 50 °C.

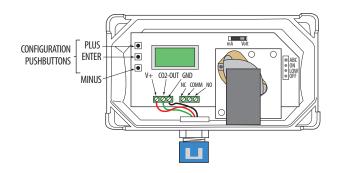
\*\*Measured at NTP

\*\*\*Response time when used with 3ft long sampling tube, Veris part number AA50. Note: Rough handling and transportation may cause a temporary reduction of  $\mathrm{CO}_2$  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.

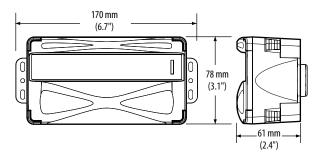
 $\dagger$ The CE mark indicates RoHS2 compliance. Please refer to the CE Declaration of Conformity for additional details.



#### **WIRING DIAGRAM**



#### **DIMENSIONAL DRAWING**



### **ORDERING INFORMATION**

MODEL	DESCRIPTION	
CRLSXX	Remote mount CO <sub>2</sub> sensor.	