



## **BENEFITS/FEATURES**

- Minimize inventory and save time by combining CO<sub>2</sub> and temperature measurement, as well as DIP switch selectable current/voltage outputs
- Integral passive temperature reduces the number of devices mounted in the space
- Requires minimal maintenance with Automatic Baseline Correction (ABC) to account for sensor drift
- · Reduce operation costs using a low energy, reliable, and repeatable CO2 sensor
- Simplify installation with backplate electrical connections

### **APPLICATIONS**

- Demand control ventilation in schools
- · Indoor air quality monitoring in office buildings

#### DESCRIPTION

The **Model CDSN Carbon Dioxide Transmitter** accurately monitors the CO<sub>2</sub> concentration and temperature in schools, office buildings, and other indoor environments to help achieve LEED<sup>®</sup> certification and energy savings. In order to achieve a higher level of accuracy, the Model CDSN includes digital barometric pressure adjustment. The CO<sub>2</sub> universal output allows users to select the transmitter output to be 4-20 mA, 0-5 VDC, or 0-10 VDC to work with virtually any building management controller. In addition, the housing security feature reduces the likelihood of physical tampering.

#### **SPECIFICATIONS**

Sensor	NDIR, 15 year life expectancy.
Range	0 to 2000 PPM.
Accuracy	±40 PPM +3% of reading*.
Response Time	< 120 s (τ90).
Warm Up Time	< 2 minutes operational; 10 minutes max accuracy.
Temperature Sensor Accuracy	±1°C @ 25°C**.
Temperature Limits	Operating: 32 to 122°F (0 to 50°C); Storage: -22 to 158°F (-30 to 70°C).
Humidity Limits	0 to 85%, non-condensing.
Power Requirements	24 VAC/VDC ± 20%, 50/60 Hz.
Output Signal	Field selectable; Current: 4-20 mA or 0-20 mA; Voltage: 0-5 V, 1-5 V, 0-10 V, or 2-10 V.
Electrical Connection	Screw terminals.
Enclosure Material	ABS.
Enclosure Environmental Rating	NEMA 1 (IP30).
Agency Approvals	CE.
*The specified CO <sub>2</sub> accuracy is only guaranteed after three weeks of continuous operation in environments which are intermittently occupied.	
**Included passive sensor: Sensor A - 10K O type 3 NTC thermistor: Sensor B - 10K O type 2 NTC thermistor: Sensor F - 20K O NTC thermistor	





Included passive sensor: Sensor A - 10K  $\Omega$  type 3 NTC thermistor Sensor B - 10K  $\Omega$  type 2 NTC thermistor Sensor F - 20K  $\Omega$  NTC thermistor

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USA: California Proposition 65 &WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

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DS-CDSN Rev. 1

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