

# CO<sub>2</sub> Duct Sensors

## Accessory for HVAC/R

Automated Logic's CO<sub>2</sub> Duct Sensors are an accurate and reliable way of incorporating demand controlled ventilation. They measure the CO<sub>2</sub> in a range of 0 to 2,000, 0 to 5,000, 0 to 10,000, and 0 to 50,000 ppm with a field selectable output of 0 to 5 or 0 to 10 VDC.

The non-dispersive infrared (NDIR) technology of the "24/7" units have been optimized for areas that are continuously occupied. They feature a dual-channel optical system and three-point calibration process for enhanced stability, accuracy and reliability.

These units also have continuous automatic air pressure compensation. Air pressure changes from altitude or weather patterns can affect the output of CO<sub>2</sub> sensors, even putting them outside of their specified accuracy. These units have a built-in barometric sensor that continuously compensates the output for accurate readings despite the weather or the altitude of the installation.

The unit samples duct air using an aspiration tube.

Optional indication of the CO<sub>2</sub> level as "Good, Fair or Poor" is available as a 3-color LED for 0 to 2,000 ppm range units.

### Key Features

- Automatic Barometric Pressure and Temperature Compensation
- Optimized for Areas that are Continuously Occupied



**CO<sub>2</sub> Duct Sensor with and without 3-color LED**



The WebCTRL® building automation system gives you the ability to understand your building operations and analyze the results. The WebCTRL system integrates environmental, energy, security and safety systems into one powerful management tool that allows you to lower energy consumption, increase occupant comfort, and achieve sustainable building operations. Our web-based platform allows building managers to control and access information about their HVAC, lighting, central plant and critical processes on premises or remotely at any time of day.

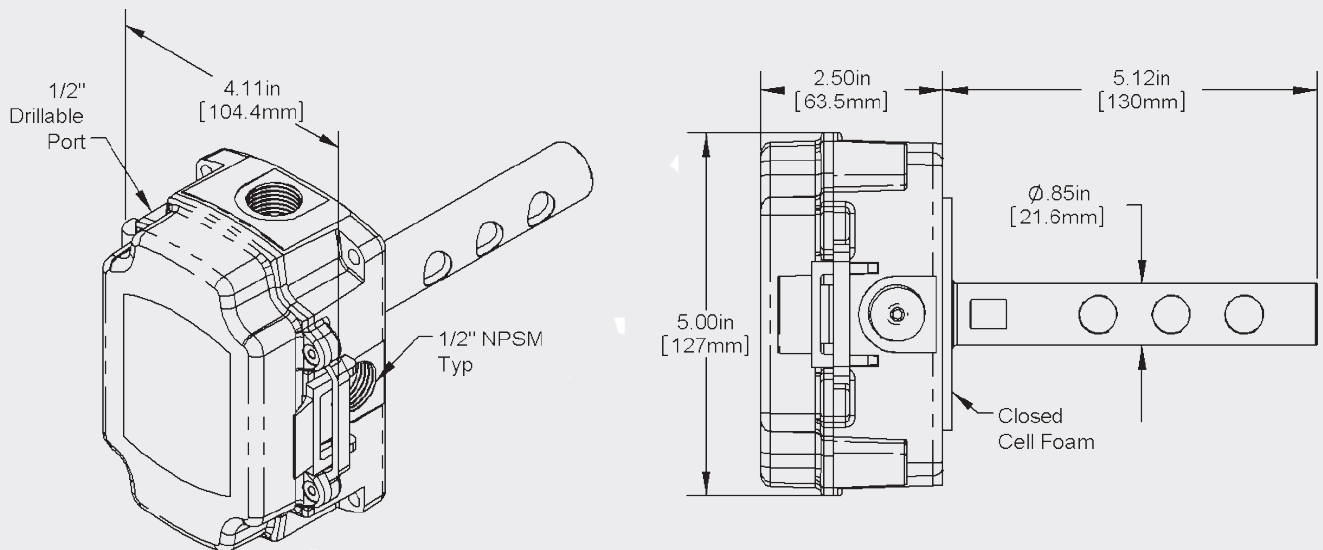


# CO<sub>2</sub> Duct Sensor

## Specifications

Sensing Element	CO <sub>2</sub> – Single Beam Non-Dispersive Infrared (NDIR)	Response Time:	Less Than 5 Minutes (after Start-Up Time)
Detection Range:	0 to 2,000 PPM	Operating Environment:	32 to 122°F (0 to 50°C)
Accuracy:	75ppm		0 to 95%RH non-condensing
Field Selectable Output	0 to 2,000 PPM CO <sub>2</sub>	Enclosure Material:	Polycarbonate, UL94 V-O
	0 to 5 VDC or 0 to 10 VDC	Optional LED CO <sub>2</sub> Level Indicator:	Good, Green < 1,000 PPM
Power Supply	12 to 24 VDC, 200 mA Peak		Fair, Orange = 1,000 to 1,500 PPM
	18 to 24 VAC, 2 VA Peak		Poor, Red > 1,500 PPM
Termination:	3 Terminals, 16 to 22 AWG	Certifications:	RoHS
Wiring:	2 Pair	Warranty Period:	2 Years from ship date
Start-Up Time:	10 Minutes		

Part Number	Description	Channels	Output	LED indicator
NSB-DCD05-D-BB-A	Duct CO <sub>2</sub> Unit	Dual Channel, 2,000 PPM	0 to 5 VDC	No LED
NSB-DCD05-D-BB-LED-A	Duct CO <sub>2</sub> Unit	Dual Channel, 2,000 PPM	0 to 5 VDC	3-Color LED
NSB-ACD05-D-BB-A	Duct CO <sub>2</sub> Unit	Single Channel	0 to 5 VDC	No LED
NSB-ACD05-D-BB-LED-A	Duct CO <sub>2</sub> Unit	Single Channel	0 to 5 VDC	3-Color LED



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