

Duct CO2 Sensor

LCD display with field calibration menu
2000/5000 ppm CO2
Integrated set-point relay
Field replaceable NDIR element



DESCRIPTION

Senva CO2 sensors maximize energy savings by ensuring optimal ventilation. Measuring exhaled CO2 levels ensures air is conditioned only when needed. The CO2D series is duct mount sensor with NDIR sensing element and features that include a standard LCD, optional thermistor for temperature, setpoint relay, menu selectable auto-calibration and provision to offset the reading +/-250ppm.

APPLICATIONS

- Controlling ventilation in response to occupancy
- Facilitating compliance with ASHRAE 62.1-2004 standard for air quality
- Offices, conference rooms, and public assembly areas

FEATURES

Easy to install and maintain

- Integrated display and push-button menus for field selectable scale, calibration, and operational modes
- Dual 4-20mA and 0-5V/0-10V output (jumper selectable)
- Integrated high-reliability solid-state set-point relay is ideal for direct control applications; easy to set up thanks to LCD

High reliability reduces call backs

- Non-dispersive infrared sensing element (NDIR)
- Field replaceable CO2 sensor
- 15+ year life expectancy on CO2 sensing element
- Industry leading 7-year limited warranty on electronics; NDIR module 3 years

High accuracy for improved system performance

- Selectable auto-calibration mode returns sensor to baseline values
- ± 40 ppm, $\pm 3\%$ of reading



Display and menu

- Easy set point and calibration adjustments. Set offsets for CO2

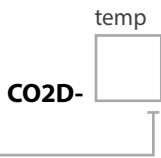


Field replaceable element

- Replaceable NDIR CO2 element for easy service



ORDERING



Temperature

- A = None
- C = 100Pt (385)
- D = 1000Pt (385)
- E = 10k type 2
- F = 10k type 3
- G = 10k type 3 w/11k shunt
- H = 3k
- I = 2k2
- J = 1k8
- K = 20k
- L = 100k

To order replacement sensor elements, please consult factory

SPECIFICATIONS

Power Supply		12-30VDC/24VAC(1), 100mA max.
Analog Outputs	Dual Analog	3-wire 4-20mA and 0-5V/0-10V (2) (jumper)
	Output scaling	0 - 2000 or 0 - 5000 ppm (selectable)
Digital Setpoint Output	Programmable	Solid-state, 1A @ 30VAC/DC, N.O.
Sensor Performance	Type	Non-dispersive Infrared (NDIR)
	Accuracy	±40ppm, ±3% of reading
	Response time	60 seconds to 90% reading
	Output update rate	3 seconds
LCD Menu Setup Parameters	SPH, Setpoint, Hi (On point)	500ppm to full-scale (700ppm default)
	SPL, Setpoint, Lo (Off point)	400ppm to full-scale-50 (600ppm default)
	SEL, Scaling	0-2000ppm or 0-5000ppm (2000ppm default)
	RDJ, Adjustment	Offset adjustment +/-250ppm (0 default)
	ERL, Calibration mode	Automatic mode ON or OFF (default=ON)
	RUN, Run mode	Displays CO2 in ppm
Operating Environment	Temperature	32 to 122F (0 to 50C)
	Humidity	0-95% non-condensing
Enclosure	Material	Polycarbonate; aluminum tube
	Dimensions	3.7"h x 3.7"w x 2.24"d (+8" probe)

- (1) One side of transformer secondary is connected to signal common. Dedicated transformer is recommended.
- (2) 15-30VDC/24VAC power supply voltage required for 10 volt output.