



Features & Options

- Automatic Air Pressure and Temperature Compensation
- Optimized for Continuously Occupied Areas

The BAPI CO₂ Duct Sensor is an accurate and reliable way of incorporating demand controlled ventilation. It measures CO₂ in ranges 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.

BAPI's Dual Channel "24/7" unit is optimized for continuously occupied areas and features a 3-point calibration process for enhanced accuracy and reliability.

Altitude and weather patterns can affect CO₂ sensors, even putting them outside of their specified accuracy. The BAPI unit has a built-in Barometric pressure sensor that continuously compensates the output for accurate readings despite the weather or altitude.

The Duct unit samples duct air using an aspiration tube. The Rough Service unit features a ventilated BAPI-Box and is ideal for areas such as outdoor air plenums, equipment rooms, green houses and warehouses. For 0 to 2,000 ppm units, the CO₂ level is indicated as "Good, Fair or Poor" by three LED's on the front of the unit. If it reaches the top of the ppm range, the red LED will begin to flash.



Duct Sensor

5
YEAR
WARRANTY



Rough Service Sensor

Specifications

Power:

12 to 24 VDC, 240 mA,
18 to 24 VAC, 12 VA Peak

CO₂ Sensing Element:

Dual Channel Non-Dispersive Infrared

Field Selectable Voltage Output:

0 to 5 or 0 to 10 VDC

Termination: 3 Terminals, 16 to 22 AWG

Operating Environment:

32 to 122°F (0 to 50°C),
0 to 95%RH non-condensing

CO₂ Detection PPM Range:

0 to 2,000, 0 to 5,000, 0 to 10,000 and 0 to 50,000

Start-Up Time: <2 Minutes

Response Time:

<2 Minutes for 90% step change typical (after start-up)

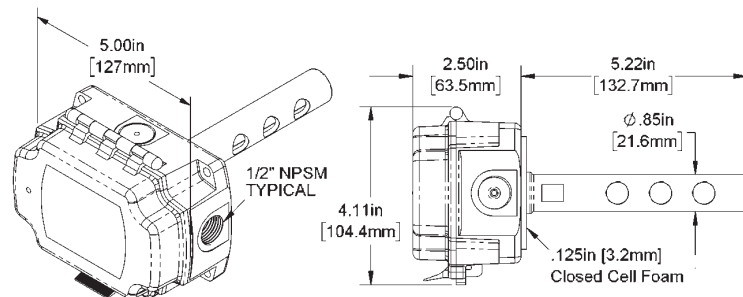
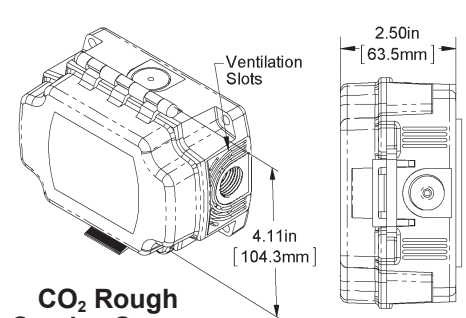
CO₂ Accuracy:

0 to 2,000 ppm: $\pm(50 \text{ ppm} + 2\% \text{ of measured value})$
 0 to 5,000 ppm: $\pm(50 \text{ ppm} + 3\% \text{ of measured value})$
 0 to 10,000 ppm: $\pm(100 \text{ ppm} + 5\% \text{ of measured value})$
 0 to 50,000 ppm: 75 ppm or 10% of reading (whichever is greater)

CO₂ Drift Stability:

0 to 2,000 ppm: $\pm 20 \text{ ppm per year}$
 0 to 5,000 ppm: $\pm 20 \text{ ppm per year}$
 0 to 10,000 ppm: $\pm 20 \text{ ppm per year}$
 0 to 50,000 ppm: <5% of FS (over 10 years)
 or <10% of reading annual

Unventilated BAPI-Box Rating: NEMA 4, IP66

CO₂ Duct SensorCO₂ Rough Service Sensor

Enclosure Material: Polycarb., UL94 V-0

CO₂ Level Indicator

(0 to 2,000 PPM units only):
 Good, Green < 1,000 PPM
 Fair, Yellow = 1,000 to 1,500 PPM
 Poor, Red > 1,500 PPM

Agency: CE EN 61326-1:2013 EMC, RoHS





CO₂ Duct and Rough Service Sensor

Submittal sheets without List Prices are available on our website at www.bapivac.com

Ordering Information

	<u>LIST PRICE</u>
BA/DCD05-D-BB Dual Channel "24/7" CO ₂ Duct Sensor, 0 to 5V Output, 0 to 2,000 ppm Range	\$470
BA/DCD05-V-BB Dual Channel "24/7" CO ₂ Rough Service Sensor, 0 to 5V Output, 0 to 2,000 ppm Range	\$550
BA/DCD10-D-BB Dual Channel "24/7" CO ₂ Duct Sensor, 0 to 10V Output, 0 to 2,000 ppm Range	\$470
BA/DCD10-V-BB Dual Channel "24/7" CO ₂ Rough Service Sensor, 0 to 10V Output, 0 to 2,000 ppm Range	\$550
BA/DCD05-5K-D-BB Dual Channel "24/7" CO ₂ Duct Sensor, 0 to 5V Output, 0 to 5,000 ppm Range	\$500
BA/DCD05-5K-V-BB Dual Channel "24/7" CO ₂ Rough Service Sensor, 0 to 5V Output, 0 to 5,000 ppm Range	\$580
BA/DCD10-5K-D-BB Dual Channel "24/7" CO ₂ Duct Sensor, 0 to 10V Output, 0 to 5,000 ppm Range	\$500
BA/DCD10-5K-V-BB Dual Channel "24/7" CO ₂ Rough Service Sensor, 0 to 10V Output, 0 to 5,000 ppm Range	\$580
BA/DCD05-10K-D-BB Dual Channel "24/7" CO ₂ Duct Sensor, 0 to 5V Output, 0 to 10,000 ppm Range	\$500
BA/DCD05-10K-V-BB Dual Channel "24/7" CO ₂ Rough Service Sensor, 0 to 5V Output, 0 to 10,000 ppm Range	\$580
BA/DCD10-10K-D-BB Dual Channel "24/7" CO ₂ Duct Sensor, 0 to 10V Output, 0 to 10,000 ppm Range	\$500
BA/DCD10-10K-V-BB Dual Channel "24/7" CO ₂ Rough Service Sensor, 0 to 10V Output, 0 to 10,000 ppm Range	\$580
BA/DC05-50K-D-BB Dual Channel "24/7" CO ₂ Duct Sensor, 0 to 5V Output, 0 to 50,000 ppm Range	\$500
BA/DCD05-50K-V-BB Dual Channel "24/7" CO ₂ Rough Service Sensor, 0 to 5V Output, 0 to 50,000 ppm Range	\$580
BA/DCD10-50K-D-BB Dual Channel "24/7" CO ₂ Duct Sensor, 0 to 10V Output, 0 to 50,000 ppm Range	\$500
BA/DCD10-50K-V-BB Dual Channel "24/7" CO ₂ Rough Service Sensor, 0 to 10V Output, 0 to 50,000 ppm Range	\$580



Your Number: BA/

Associated Products

BAPI VC350A or VC350A-EZ VOLTAGE CONVERTERS

The CO₂ unit requires 240mA of current to operate correctly. If this is more current than can be provided by the controller power output, then the unit can be powered by a BAPI VC350A or VC350A-EZ Voltage Converter. See the Accessories section for more info.



VC350A-EZ
Voltage Converter

