



## Features & Options

- Automatic Air Pressure and Temperature Compensation
- Optimized for Continuously Occupied Areas
- 0 to 2,500 ppm Range Models Meet Addendum ab to ASHRAE Standard 62.1-2022

The BAPI CO<sub>2</sub> Duct Sensor is an accurate and reliable way of incorporating demand controlled ventilation. It measures CO<sub>2</sub> in ranges of 0 to 2,000, 0 to 2,500, 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 CO<sub>2</sub> 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 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. The 0 to 2,000 and 0 to 2,500 ppm units include CO<sub>2</sub> level indication by three LEDs on the front of the unit.



Duct Sensor

**5**  
YEAR  
WARRANTY



Rough Service Sensor

## Specifications

**Power:** 12 to 24 VDC, 240 mA • 18 to 24 VAC, 12 VA Peak

**CO<sub>2</sub> 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

**CO<sub>2</sub> Detection ppm Range:**

0 to 2,000, 0 to 2,500, 0 to 5,000, 0 to 10,000 and 0 to 50,000

**Start-Up Time:** <2 Minutes

**Response Time:** <2 Min for 90% step change typical (after start-up)

**CO<sub>2</sub> Accuracy @ 77°F (25°C) and Sea Level:**

0 to 2,000, 2,500 & 5,000 ppm Models:

<±(50 ppm +3% of measured value)

<±75 ppm at 600, 1,000 and 2,500 ppm

0 to 10,000 ppm Models: <±(100 ppm +5% of measured value)

0 to 50,000 ppm Models: <±75 ppm or 10% of reading  
(whichever is greater)

**CO<sub>2</sub> Drift Stability:**

0 to 2,000, 2,500 and 5,000 ppm Models: ±20 ppm per year

0 to 10,000 ppm Models: ±20 ppm per year

0 to 50,000 ppm Models: <5% of FS (over 10 years)  
or <10% of reading annual

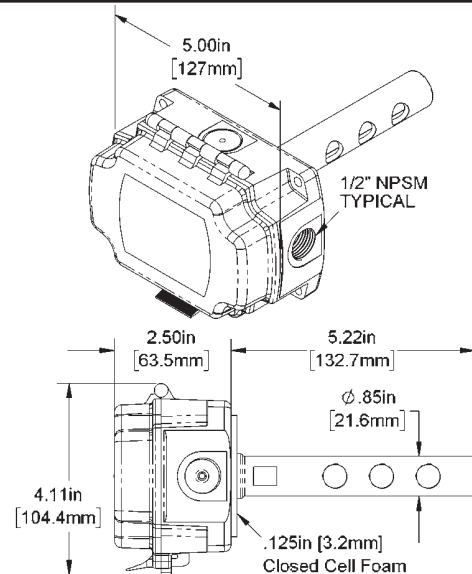
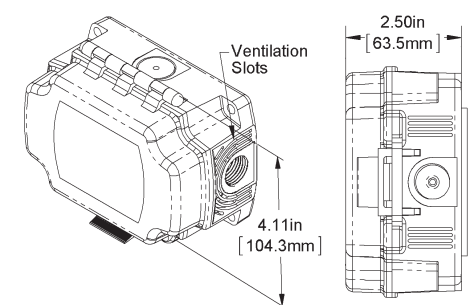
**Unventilated BAPI-Box Rating:** NEMA 4, IP66

**Enclosure Material:** Polycarbonate, UL94 V-0

**LED CO<sub>2</sub> Level Indicator** (for 0 to 2,000 & 2,500 ppm units only):

Good <1,000 ppm • Fair =1,000 to 1,500 ppm • Poor >1,500 ppm

**Agency:** CE EN 61326-1:2013 EMC, RoHS,  
Addendum ab to ASHRAE Standard 62.1-2022

CO<sub>2</sub> Duct SensorCO<sub>2</sub> Rough Service Sensor



## Ordering Information

**BA/DCD05-D-BB**

Dual Channel "24/7" CO<sub>2</sub> Duct Sensor, 0 to 5V Output, 0 to 2,000 ppm Range

**BA/DCD05-V-BB**

Dual Channel "24/7" CO<sub>2</sub> Rough Service Sensor, 0 to 5V Output, 0 to 2,000 ppm Range

**BA/DCD10-D-BB**

Dual Channel "24/7" CO<sub>2</sub> Duct Sensor, 0 to 10V Output, 0 to 2,000 ppm Range

**BA/DCD10-V-BB**

Dual Channel "24/7" CO<sub>2</sub> Rough Service Sensor, 0 to 10V Output, 0 to 2,000 ppm Range

**BA/DCD05-2.5K-D-BB**

Dual Channel "24/7" CO<sub>2</sub> Duct Sensor, 0 to 5V Output, 0 to 2,500 ppm Range

**BA/DCD05-2.5K-V-BB**

Dual Channel "24/7" CO<sub>2</sub> Rough Service Sensor, 0 to 5V Output, 0 to 2,500 ppm Range

**BA/DCD10-2.5K-D-BB**

Dual Channel "24/7" CO<sub>2</sub> Duct Sensor, 0 to 10V Output, 0 to 2,500 ppm Range

**BA/DCD10-2.5K-V-BB**

Dual Channel "24/7" CO<sub>2</sub> Rough Service Sensor, 0 to 10V Output, 0 to 2,500 ppm Range

**BA/DCD05-5K-D-BB**

Dual Channel "24/7" CO<sub>2</sub> Duct Sensor, 0 to 5V Output, 0 to 5,000 ppm Range

**BA/DCD05-5K-V-BB**

Dual Channel "24/7" CO<sub>2</sub> Rough Service Sensor, 0 to 5V Output, 0 to 5,000 ppm Range

**BA/DCD10-5K-D-BB**

Dual Channel "24/7" CO<sub>2</sub> Duct Sensor, 0 to 10V Output, 0 to 5,000 ppm Range

**BA/DCD10-5K-V-BB**

Dual Channel "24/7" CO<sub>2</sub> Rough Service Sensor, 0 to 10V Output, 0 to 5,000 ppm Range

**BA/DCD05-10K-D-BB**

Dual Channel "24/7" CO<sub>2</sub> Duct Sensor, 0 to 5V Output, 0 to 10,000 ppm Range

**BA/DCD05-10K-V-BB**

Dual Channel "24/7" CO<sub>2</sub> Rough Service Sensor, 0 to 5V Output, 0 to 10,000 ppm Range

**BA/DCD10-10K-D-BB**

Dual Channel "24/7" CO<sub>2</sub> Duct Sensor, 0 to 10V Output, 0 to 10,000 ppm Range

**BA/DCD10-10K-V-BB**

Dual Channel "24/7" CO<sub>2</sub> Rough Service Sensor, 0 to 10V Output, 0 to 10,000 ppm Range

**BA/DC05-50K-D-BB**

Dual Channel "24/7" CO<sub>2</sub> Duct Sensor, 0 to 5V Output, 0 to 50,000 ppm Range

**BA/DCD05-50K-V-BB**

Dual Channel "24/7" CO<sub>2</sub> Rough Service Sensor, 0 to 5V Output, 0 to 50,000 ppm Range

**BA/DCD10-50K-D-BB**

Dual Channel "24/7" CO<sub>2</sub> Duct Sensor, 0 to 10V Output, 0 to 50,000 ppm Range

**BA/DCD10-50K-V-BB**

Dual Channel "24/7" CO<sub>2</sub> Rough Service Sensor, 0 to 10V Output, 0 to 50,000 ppm Range

**Your Number: BA/**

