



Features & Options

- Automatic Barometric Pressure and Temperature Compensation
- Optimized for Periodically Unoccupied or Continuously Occupied Areas

The BAPI CO₂ Sensor in the BAPI-Stat 4 Enclosure is an accurate and reliable way of incorporating demand controlled ventilation into a building's HVAC strategy. It measures the 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.

The Single Beam (ACD) unit has been optimized for periodically unoccupied areas and features automatic background calibration over a long time period to reduce drift. The Dual Channel (DCD) "24/7" unit has been optimized for continuously occupied areas and features a three-point calibration process for enhanced stability, accuracy and reliability.

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

Optional indication of the CO₂ level as "Good, Fair or Poor" is available as a 3-color LED for 0 to 2,000 ppm range units.



CO₂ Sensors in the BAPI-Stat 4 Enclosure
The bottom unit has the CO₂ Level of "Good, Fair or Poor" shown by a 3-color LED.

Specifications

Power:

12 to 24 VDC, 200 mA Peak
18 to 24 VAC, 12 VA Peak

Sensing Elements:

ACD Unit CO₂: Single Beam Non-Dispersive Infrared (NDIR)
DCD Unit CO₂: Dual Channel Non-Dispersive Infrared (NDIR)

Field Selectable Voltage Output: 0 to 5 or 0 to 10 VDC

Termination: 3 Terminals, 16 to 22 AWG

Wiring: 2 Pair

Operating Environment:

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

Enclosure Material: ABS Plastic, Material Rated UL94V-0

CO₂ Detection Range:

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

Start-Up Time: 10 Minutes

Response Time:

Less Than 5 Minutes (after Start-Up Time)

Mounting: 2"x4" J-Box or drywall – screws provided

CO₂ Accuracy (Single Beam ACD Units):

400 to 1,250 ppm: ±30ppm or 3% of reading,
whichever is greater

1,250 to 2,000 ppm: ±5% of reading + 30ppm

CO₂ Accuracy (Dual Channel DCD "24/7" Units):

±3.75% of full range

Optional LED CO₂ Level Indicator:

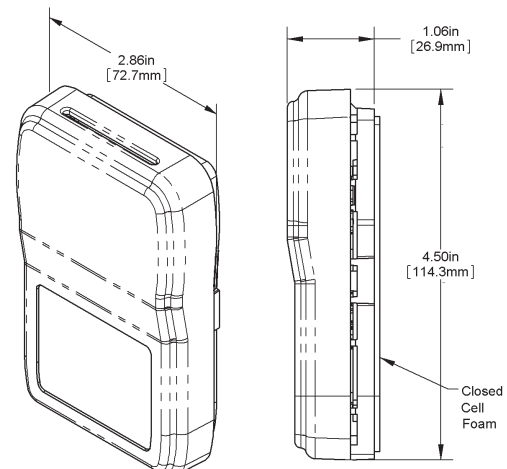
Good, Green < 1,000 PPM
Fair, Orange = 1,000 to 1,500 PPM
Poor, Red > 1,500 PPM

(LED available for 0 to 2,000 ppm units only.)

Certifications: RoHS

Warranty Period:

2 Years from manufacture date



CO₂ Sensor in the BAPI-Stat 4 Enclosure





CO₂ Room Sensor, BAPI-Stat 4 Enclosure

D11

Rev. 01/19/16

Air Quality Sensors

Ordering Information		CO ₂ Room Sensor in the BAPI-Stat 4 Enclosure Style
BA/BS4		
CO₂ Output		
ACD05	CO ₂ as 0 to 2,000 PPM, 0 to 5 VDC output, Single Beam Automatic Background Calibration for periodically unoccupied areas	
ACD10	CO ₂ as 0 to 2,000 PPM, 0 to 10 VDC output, Single Beam Automatic Background Calibration for periodically unoccupied areas	
DCD05	CO ₂ as 0 to 2,000 PPM, 0 to 5 VDC output, Dual Channel Calibration "24/7" unit for continuously occupied areas	
DCD10	CO ₂ as 0 to 2,000 PPM, 0 to 10 VDC output, Dual Channel Calibration "24/7" unit for continuously occupied areas	
DCD05-5K	CO ₂ as 0 to 5,000 PPM, 0 to 5 VDC output, Dual Channel Calibration "24/7" unit for continuously occupied areas	
DCD10-5K	CO ₂ as 0 to 5,000 PPM, 0 to 10 VDC output, Dual Channel Calibration "24/7" unit for continuously occupied areas	
DCD05-10K	CO ₂ as 0 to 10,000 PPM, 0 to 5 VDC output, Dual Channel Calibration "24/7" unit for continuously occupied areas	
DCD10-10K	CO ₂ as 0 to 10,000 PPM, 0 to 10 VDC output, Dual Channel Calibration "24/7" unit for continuously occupied areas	
DCD05-50K	CO ₂ as 0 to 50,000 PPM, 0 to 5 VDC output, Dual Channel Calibration "24/7" unit for continuously occupied areas	
DCD10-50K	CO ₂ as 0 to 50,000 PPM, 0 to 10 VDC output, Dual Channel Calibration "24/7" unit for continuously occupied areas	
CO₂ Level Indication (Must select one)		
-LED	Green/Orange/Red LED on Logo Plate to Indicate CO ₂ Level. Includes "Good, Fair and Poor" Legend (Only available for the 0 to 2,000 ppm range units)	
-BNK	No LED, No Legend (Required for 0 to 5,000, 0 to 10,000 and 0 to 50,000 ppm range units)	
EXAMPLE		
BA/BS4	-ACD05	-LED
Example Part Number: BA/BS4-ACD05-LED		
Your Part Number:		

Call BAPI if you have questions about the above ordering/pricing grid or the configuration of the product you are ordering.

