### Air Quality Sensors

Rev. 10/16/12



# Features & Options

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

The BAPI "24/7"  $CO_2$  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  $CO_2$  in a range of 0 to 2,000 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" unit has been optimized for areas that are continuously occupied. It features a dual-channel optical system and three-point calibration process for enhanced stability, accuracy and reliability.

The BAPI unit also has continuous automatic air pressure compensation. Air pressure changes from altitude or weather patterns can affect the output of  $CO_2$  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 the altitude of the installation. Because of this feature, the BAPI  $CO_2$  sensor received a 2012 AHR Expo Innovation Award.

Optional indication of the CO<sub>2</sub> level as "Good, Fair or Poor" is available as a three-color LED on the front of the unit.



"24/7" CO<sub>2</sub> Sensors in the BAPI-Stat 4 Enclosure

The bottom unit has the CO<sub>2</sub> Level of "Good, Fair or Poor" shown by a 3-color LED.

# Specifications

#### Power:

18 to 28 VAC, 2 VA Max 12 to 32 VDC, 200 mA Max (12 VDC Recommended)

#### **Sensing Elements:**

CO<sub>2</sub> – Dual Channel Non-Dispersive Infrared (NDIR)

#### **Selectable Output:**

0 to 2,000 PPM  $\dot{\text{CO}}_2$  at 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-O

CO<sub>2</sub> Detection Range: 0 to 2000 ppm

Start-Up Time: 10 Minutes

**Response Time:** 

Less Than 5 Minutes (after Start-Up Time)

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

CO<sub>2</sub> Accuracy: 75ppm

#### Optional LED CO<sub>2</sub> Level Indicator:

Good, Green < 1,000 PPM

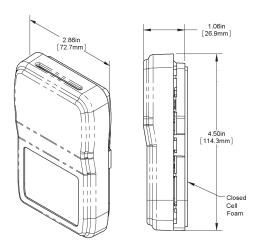
Fair, Orange = 1,000 to 1,500 PPM

Poor, Red > 1,500 PPM

Certifications: RoHS

### **Warranty Period:**

2 Years from manufacture date



"24/7" CO<sub>2</sub> Sensor in the BAPI-Stat 4 Enclosure



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Ordering Information CO2 "24/7" Room Sensor in the BAPI-Stat 4 Enclosure for Continuously Occupied Areas				
BA/BS4				
	CO₂ Output			
	-DCD05	CO₂ as 0	to 2,000 PPM, 0 to 5 VDC output, Dual Channel Calibration for buildings that are continuously occupied	
	-DCD10	CO₂ as 0	to 2,000 PPM, 0 to 10 VDC output, Dual Channel Calibration for buildings that are continuously occupied	
		CO₂ Level Indication (Must select one)		
		-LED	Green/Orange/Red LED on Logo Plate to Indicate CO₂ PPM Level. Includes Legend for Good, Fair and Poor.	
		-BNK	No LED, No Legend	
EXAMPLE				
BA/BS4	-DCD05	-LED		
Example Part Number: BA/BS4-DCD05-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.

