



## Features & Options

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

The BAPI-Stat “Quantum” CO<sub>2</sub> Sensor is an accurate and reliable way of incorporating demand controlled ventilation into your HVAC strategy. It measures the CO<sub>2</sub> 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 Channel unit has been optimized for periodically unoccupied areas and features automatic background calibration over a long time period to reduce drift. The Dual Channel “24/7” unit has been optimized for continuously occupied areas and features a three-point calibration process for enhanced stability, accuracy and reliability.

Barometric pressure changes can affect the output of CO<sub>2</sub> 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.

For 0 to 2000 PPM units, the CO<sub>2</sub> level is indicated as “Good, Fair or Poor” by three LEDs on the front of the unit. If it reaches the top of the PPM range, the red LED will begin to flash. A 60mm mounting base is also available to fit European style junction boxes.



**5**  
YEAR  
WARRANTY

### BAPI-Stat “Quantum” CO<sub>2</sub> Sensors

(Bottom unit shown w/ optional  
60mm mounting base)

## Specifications

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

### CO<sub>2</sub> Sensing Elements:

Single or 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

### Operating Environment:

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

**Enclosure Material:** ABS Plastic, Material Rated UL94V-0

### CO<sub>2</sub> Detection 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)

**Mounting:** Standard 2”x4” junction box, European junction box or drywall mount (screws provided)

### CO<sub>2</sub> Accuracy (Single Channel Units):

400 to 1,250 ppm: ±30ppm or 3% of reading, whichever is greater  
1,250 to 2,000 ppm: ±5% of reading + 30ppm

### CO<sub>2</sub> Accuracy (Dual Channel “24/7” Units):

400 to 1,000 ppm: ±75 ppm  
>1,000 ppm: ±10% of reading

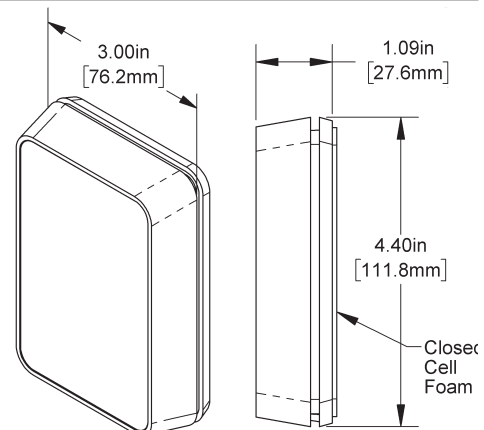
### CO<sub>2</sub> Drift Stability (Dual Channel “24/7” Units):

<5% of full scale over life of product.

### LED CO<sub>2</sub> Level Indicator (for 0 to 2,000 PPM units only):

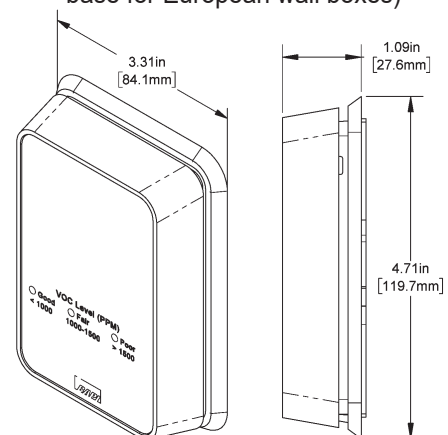
Good, Green < 1,000 PPM  
Fair, Yellow = 1,000 to 1,500 PPM  
Poor, Red > 1,500 PPM

**Agency:** RoHS, CE, Title 24 Requirements



### Unit Dimensions

(bottom unit shown w/ 60mm mounting  
base for European wall boxes)





### Ordering Information: BAPI-Stat “Quantum” CO<sub>2</sub> Sensor

#### UNITS WITH STANDARD MOUNTING BASE

Part #	Description
BA/AQX-A.....	Single Channel for Periodically Unoccupied Areas, 0 to 5V Output, 0 to 2,000 PPM Range
BA/AQX-B.....	Single Channel for Periodically Unoccupied Areas, 0 to 10V Output, 0 to 2,000 PPM Range
BA/AQX-C.....	Dual Channel for Continuously Occupied Areas, 0 to 5V Output, 0 to 2,000 PPM Range
BA/AQX-D.....	Dual Channel for Continuously Occupied Areas, 0 to 10V Output, 0 to 2,000 PPM Range
BA/AQX-E.....	Dual Channel for Continuously Occupied Areas, 0 to 5V Output, 0 to 5,000 PPM Range
BA/AQX-F.....	Dual Channel for Continuously Occupied Areas, 0 to 10V Output, 0 to 5,000 PPM Range
BA/AQX-G.....	Dual Channel for Continuously Occupied Areas, 0 to 5V Output, 0 to 10,000 PPM Range
BA/AQX-H.....	Dual Channel for Continuously Occupied Areas, 0 to 10V Output, 0 to 10,000 PPM Range
BA/AQX-I.....	Dual Channel for Continuously Occupied Areas, 0 to 5V Output, 0 to 50,000 PPM Range
BA/AQX-J.....	Dual Channel for Continuously Occupied Areas, 0 to 10V Output, 0 to 50,000 PPM Range

#### UNITS WITH 60MM MOUNTING BASE

Part #	Description
BA/AQX60-A....	Single Channel for Periodically Unoccupied Areas, 0 to 5V Output, 0 to 2,000 PPM Range
BA/AQX60-B....	Single Channel for Periodically Unoccupied Areas, 0 to 10V Output, 0 to 2,000 PPM Range
BA/AQX60-C....	Dual Channel for Continuously Occupied Areas, 0 to 5V Output, 0 to 2,000 PPM Range
BA/AQX60-D....	Dual Channel for Continuously Occupied Areas, 0 to 10V Output, 0 to 2,000 PPM Range
BA/AQX60-E....	Dual Channel for Continuously Occupied Areas, 0 to 5V Output, 0 to 5,000 PPM Range
BA/AQX60-F....	Dual Channel for Continuously Occupied Areas, 0 to 10V Output, 0 to 5,000 PPM Range
BA/AQX60-G....	Dual Channel for Continuously Occupied Areas, 0 to 5V Output, 0 to 10,000 PPM Range
BA/AQX60-H....	Dual Channel for Continuously Occupied Areas, 0 to 10V Output, 0 to 10,000 PPM Range
BA/AQX60-I....	Dual Channel for Continuously Occupied Areas, 0 to 5V Output, 0 to 50,000 PPM Range
BA/AQX60-J....	Dual Channel for Continuously Occupied Areas, 0 to 10V Output, 0 to 50,000 PPM Range



Your Number: BA/

### Associated Products

#### BAPI VC350A or VC350A-EZ VOLTAGE CONVERTERS

The CO<sub>2</sub> 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

