



Features & Options

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

The BAPI-Stat “Quantum” CO₂ Sensor 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 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.

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.

For 0 to 2000 PPM units, the CO₂ level is indicated as “Good, Fair or Poor” by three discrete green, yellow and red LED’s on the front of the unit. If it reaches the top of the PPM range, the red LED will begin to flash.



CO₂ Sensor
in the
BAPI-Stat
“Quantum”
Enclosure



Specifications

Power:

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

CO₂ Sensing Elements:

Single Channel 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

CO₂ 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: 2”x4” J-Box or drywall – screws provided

CO₂ 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

CO₂ Accuracy (Dual Channel “24/7” Units):

75ppm or 10% of reading (whichever is greater)

CO₂ Drift Stability (Dual Channel “24/7” Units):

<5% of full scale over life of product.

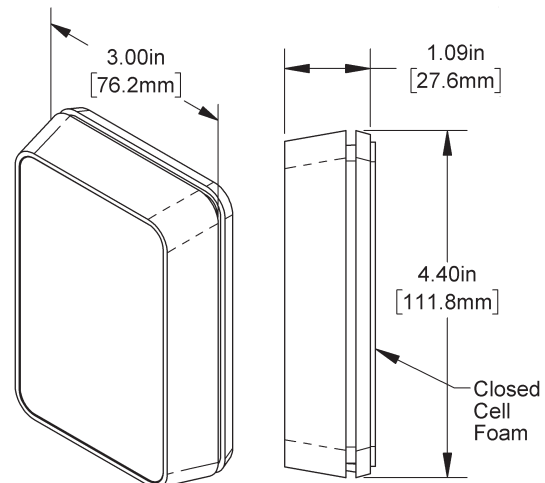
LED CO₂ Level Indicator

(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

Certifications: RoHS

Warranty Period: 5 Years





CO₂ Room Sensor, BAPI-Stat “Quantum”

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Air Quality Sensors

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

Ordering Information: BAPI-Stat “Quantum” CO₂ Sensor

Part #	Description	List Price
BA/AQX-A	Single Channel for Periodically Unoccupied Areas, 0 to 5 V Output, 0 to 2,000 PPM Range	\$425
BA/AQX-B	Single Channel for Periodically Unoccupied Areas, 0 to 10 V Output, 0 to 2,000 PPM Range	\$425
BA/AQX-C	Dual Channel for Continuously Occupied Areas, 0 to 5 V Output, 0 to 2,000 PPM Range	\$455
BA/AQX-D	Dual Channel for Continuously Occupied Areas, 0 to 10 V Output, 0 to 2,000 PPM Range	\$455
BA/AQX-E	Dual Channel for Continuously Occupied Areas, 0 to 5 V Output, 0 to 5,000 PPM Range	Call
BA/AQX-F	Dual Channel for Continuously Occupied Areas, 0 to 10 V Output, 0 to 5,000 PPM Range	Call
BA/AQX-G	Dual Channel for Continuously Occupied Areas, 0 to 5 V Output, 0 to 10,000 PPM Range	Call
BA/AQX-H	Dual Channel for Continuously Occupied Areas, 0 to 10 V Output, 0 to 10,000 PPM Range	Call
BA/AQX-I	Dual Channel for Continuously Occupied Areas, 0 to 5 V Output, 0 to 50,000 PPM Range	Call
BA/AQX-J	Dual Channel for Continuously Occupied Areas, 0 to 10 V Output, 0 to 50,000 PPM Range	Call

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

