



## Features & Options

- Achieves True Indoor Air Quality, Not Just CO<sub>2</sub> Dilution
- Output is Correlated to a CO<sub>2</sub> Value Allowing You to Ventilate Using ASHRAE’s CO<sub>2</sub>-Based VRP Algorithm
- BAPI-Stat “Quantum” Enclosure with 0 to 5 or 0 to 10 VDC Output

Humans respire Volatile Organic Compounds (VOCs) as well as CO<sub>2</sub>. The BAPI sensor measures these VOCs and indicates when a space is occupied just as well as a CO<sub>2</sub> sensor.

The advantage of the VOC sensor is that it measures air contaminants from other sources besides respiration, such as building materials, cleaners, perfumes and furniture and carpet off-gassing. Using this sensor for Demand Controlled Ventilation then is a way of achieving true indoor air quality, rather than just CO<sub>2</sub> dilution.

A further benefit is that it requires no additional work on your part. That’s because the sensor converts the VOC reading to a CO<sub>2</sub> equivalent level. This lets you use ASHRAE’s CO<sub>2</sub>-based VRP schedule to ventilate. (More information on the CO<sub>2</sub> equivalent output is available on our website or in the Application Notes at the end of this section of the catalog.)

The BAPI-Stat “Quantum” VOC Room Sensor features 0 to 5 VDC or 0 to 10 VDC output. The VOC level is indicated as “Good, Fair or Poor” by three discrete green, yellow and red LED’s on the front of the unit. If the output reaches 2,000 PPM, the red LED will begin to flash because it has hit its maximum output.



VOC Sensor in the BAPI-Stat “Quantum” Enclosure



## Specifications

### Power:

12 to 24 VDC, 35 mA Peak  
18 to 24 VAC, 4 VA Peak

### Measurement Range:

0 to 2,000 PPM CO<sub>2</sub> Equivalent

### Selectable Output:

0 to 5 or 0 to 10 VDC > 4KΩ impedance

### Sensing Element: Micro-machined Metal Oxide

### Termination: 3 Terminals, 16 to 22 AWG

### Wiring: 2 Pair

### Operating Environment:

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

### Enclosure Material:

ABS Plastic, Material Rated UL94V-0

### VOC Detection Range: 0 to 2,000 ppm CO<sub>2</sub> Equivalent

### Start-Up Time: 15 Minutes

### Response Time:

Less Than 2 Minutes (after Start-Up Time)

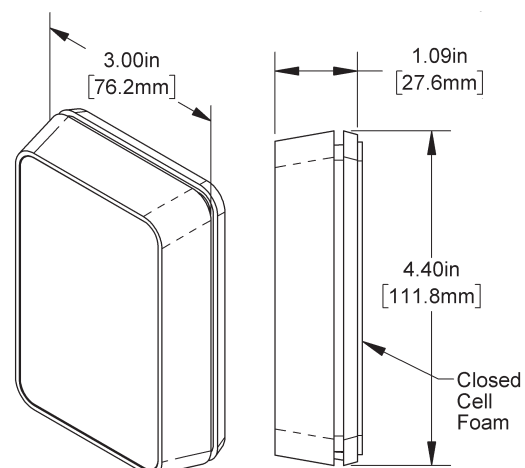
### Mounting: 2”x4” J-Box or drywall – screws provided

### LED VOC Level Indicator:

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

### Certifications: RoHS

### Warranty Period: 5 Years





# VOC 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](http://www.bapihvac.com)

## **Ordering Information: BAPI-Stat Quantum VOC Sensor**

<u>Part #</u>	<u>Description</u>	<u>List Price</u>
BA/BQX-A.....	BAPI-Stat “Quantum” VOC Sensor, 0 to 5V Output.....	\$425
BA/BQX-B.....	BAPI-Stat “Quantum” VOC Sensor, 0 to 10V Output.....	\$425

