



Features & Options

- Corresponds to ASHRAE's Demand Controlled Ventilation algorithm
- Quick Response Sensor Through Aspiration Tube
- Detects Human Metabolic VOC Emissions for Occupancy Beyond CO₂

The IEQ Sensor is an accurate and reliable way of incorporating Demand Controlled Ventilation into a building's HVAC strategy. It measures the Total Volatile Organic Compounds — which are as good an indicator of space occupancy as CO₂ — while also measuring the other contaminants which affect human comfort and health.

Most system designers use CO₂ sensors to indicate room occupancy as part of their DCV setup. The problem with this method is that it ignores the offensive odors and VOCs that may be present even when the CO₂ levels are low. BAPI's IEQ Sensor offers the best of both worlds. It measures all the contaminants in the air but outputs a signal that corresponds to a CO₂ level of 0-2,000 ppm, allowing system designers to use their existing DCV algorithms. The VOC measurement range is the optimum value for demand controlled ventilation of any commercial, school or public building.



BAPI's duct mounted IEQ sensor reports percent of air quality. The duct mount IEQ sensor samples duct air using an aspiration tube. Moving air from the duct enters the tube, is forced into the BAPI-Box enclosure and exits through the other half of the tube. As long as there is air movement in the duct, air is continuously exchanged.



**Duct Mounted
Air Quality Sensor**

Demand Controlled Ventilation with Confidence!

Specifications

Power:

9-35 VDC @ 50 mA Max (9-24VDC recommended) for 0-5 VDC Outputs
 15-35 VDC @ 50mA Max (15-24VDC recommended) for 0-10 VDC Outputs
 No AC Power

Sensing Element:

Air Quality – Micro-machined Metal Oxide

VOC Detection Range: 0 – 100%

Response Time: Less Than 60 Seconds

Start-Up Time: 15 minutes

Operating Environment:

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

Analog Outputs

(0-5VDC or 0-10VDC, >10KΩ impedance)

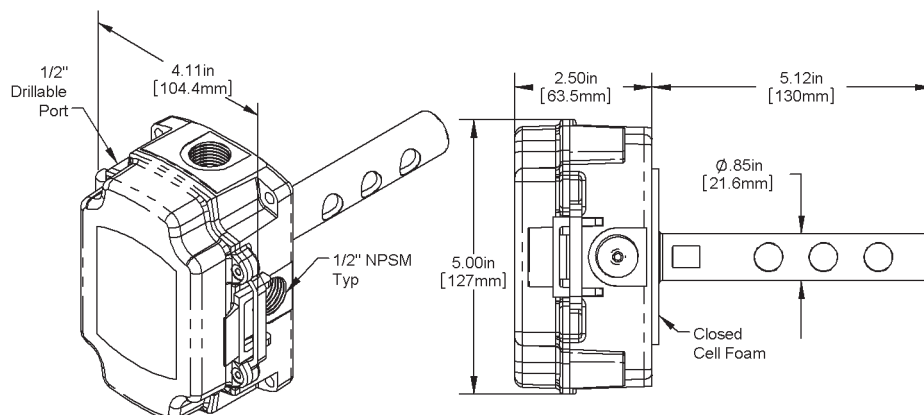
VOC Contaminants 0 - 100%

Dimension: 4.91"H x 3.21"W x 1.20"D
 (124.6 x 81.5 x 30.5 mm)

Material: ABS Plastic, Material Rated UL94V-0

Certifications: RoHS

Warranty Period: Two years from manufacture date





Rev. 12/09/10

Ordering Information Duct IEQ Sensor			
BA/			
	Air Quality Transmitter		
	IEQ05	Air Quality Transmitter as 0 to 100% Contaminated, 0 to 5 VDC output	
	IEQ10	Air Quality Transmitter as 0 to 100% Contaminated, 0 to 10 VDC output	
		Enclosure	
	-D-BB	BAPI-Box Enclosure - IP66 rated, UV-resistant polycarbonate	
EXAMPLE			
BA/	IEQ05	-D-BB	
Example Part Number: BA/IEQ05-D-BB			
Your Part Number:			

Call BAPI if you have questions about the above ordering grid.