VT0D Series

VT0D VOC/Temp Duct

- Cost-effective measurement of room VOC levels
- 0-5V, 0-10V, 2-wire and 3-wire 4-20mA options
- Thermistor outputs for temperature optional
- Rugged attractive design

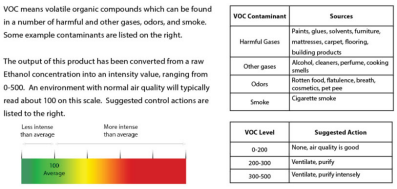
DESCRIPTION

The VT0D is capable of sensing thousands of VOC's coming from sources such as paints, glues, cleaners, alcohol, building products, smoke, and myriad other harmful or offensive gases. It's ability to sense these contaminants in addition to breath and other bodily functions makes it the preferred alternative or compliment to CO2 occupancy sensing. The VT0D Value Series ensures that odor and ventilation issues are never a topic of conversation. An array of analog outputs and thermistor options accommodate any installation and keep occupants breathing easy.

APPLICATIONS

- Verify operation of ionazation and UV systems
- Controlling ventilation in response to occupancy
- Ventillation control
- Economizer control
- Cafeterias, conference rooms, restrooms and public assembly areas

Rugged Enclosure



VOC means volatile organic compounds which can be found in a number of harmful and other gases, odors, and smoke. Some example contaminants are listed on the right.

The output of this product has been converted from a raw Ethanol concentration into an intensity value, ranging from 0-500. An environment with normal air quality will typically read about 100 on this scale. Suggested control actions are listed to the right.

Less intense than average — More intense than average

100 Average

VOC Contaminant	Sources
Harmful Gases	Paints, glues, solvents, furniture, mattresses, carpet, flooring, building products
Other gases	Alcohol, cleaners, perfume, cooking smells
Odors	Rotten food, flatulence, breath, cosmetics, pet pee
Smoke	Cigarette smoke

VOC Level	Suggested Action
0-200	None, air quality is good
200-300	Ventilate, purify
300-500	Ventilate, purify intensely

VOC Explained

Made in the USA - 7-year Warranty

FEATURES

- On-board temperature compensation for VOC
- Gasket seals sensor against wall drafts and false readings
- Senses thousands of contaminants
- Perfect alternative or compliment to CO2 sensing for ventillation
- New enclosure design is rugged and slim; unobtrusive tamper resistant design
- Fits easily in standard single gang boxes
- 0-5V, 0-10V, 2-wire and 3-wire 4-20mA options
- Thermistor outputs for temperature optional

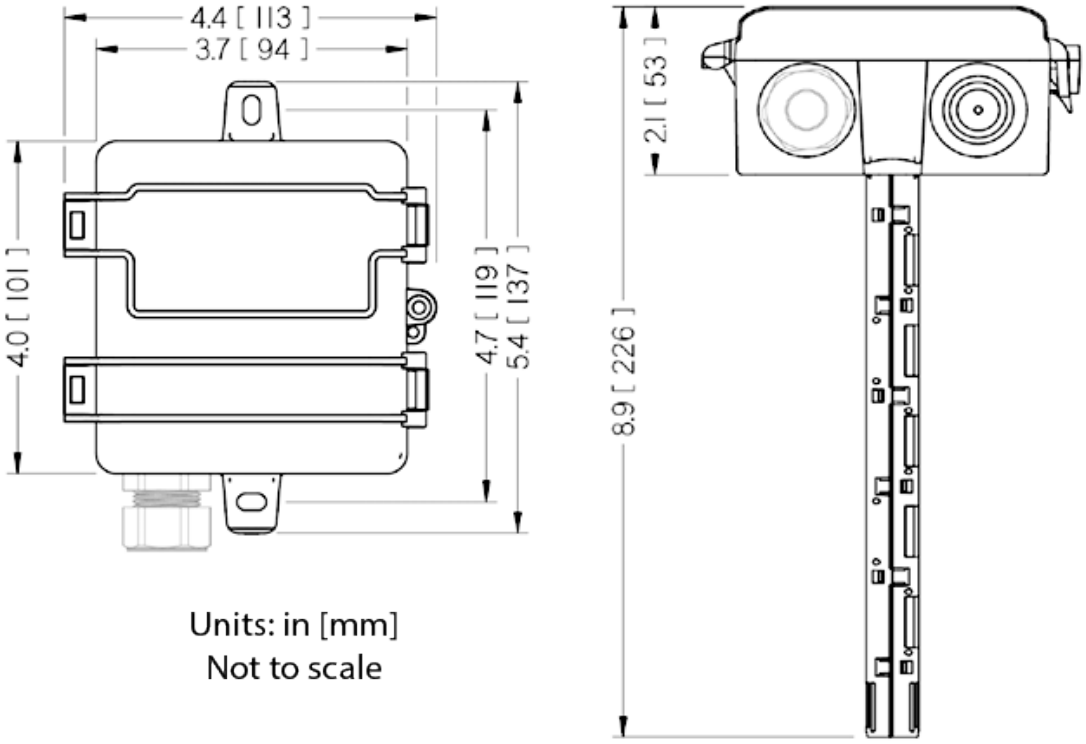
ORDERING

VT0D- ☐ ☐

Output Type
A= 0-5VDC, 3-Wire
B= 0-10VDC, 3-Wire
C= 4-20mA, 2-Wire
D= 4-20mA, 3-Wire

Temperature
A= None
C= 100PtRTD
D= 1000PtRTD
E= 10K Type 2
F= 10K Type 3
G= 10K W/ 11K
H= 3K
I = 2K2
J = 1K8
K = 20K
L= 100K

DIMENSIONS



Warning: The datasheet is designed for reference only. Refer to installation instructions that accompany the product and heed all safety instructions. Product improvement is a continuing process at Senva. Changes may occur to products without prior notice.

SPECIFICATIONS

Power Supply		12-30VDC/24VAC (1), 24mA max.
Outputs	RH% (options)	0-10V, 0-5V, 2-wire or 3-wire 4-20mA
Output scaling	RH%	0-500 (relative intensity)
Thermistor Options		Yes, see ordering table
Sensor Performance	Type	MOS
	Gas	Ethanol
	Range	0-1000ppm of ethanol equivalent
	Response time	<10s
	Humidity Compensation	Yes
	Long term drift	<0.25%RH per year
Enclosure	Dimensions	4.0"h x 4.4"w x 2.1"d (+6.8" probe)
	RH Rating	0-90% operating, 0-80% storage
	Temp Rating	-10 to 50C operating, 5 to 30C storage
Compliance		CE, RoHS

1. One side of transformer, secondary is connected to signal common. Dedicated transformer is recommended. 15-30VDC/24VAC power supply voltage required for 10 volt output.

** Product improvement is a continual process at Senva and product features and specification may change without prior notice. Refer to instructions that accompany the product for installation and wiring.*