

Automation Components, Inc.



## **VOC** Volatile Organic Compound

VOCs are emitted as gases from certain solids or liquids, such as building materials and furnishings, office equipment, cleansers and disinfectants, etc. These types of contaminants directly affect indoor air quality and occupant comfort. Measuring and communicating VOC levels back to the BAS will help users adjust ventilation to maintain proper IAQ levels. These units utilize a high-performance metal oxide sensor and will output TVOC levels in a range from 0-1000 ppb. All units come equipped with both analog and RS485 Modbus RTU outputs easily interface into existing BAS systems.

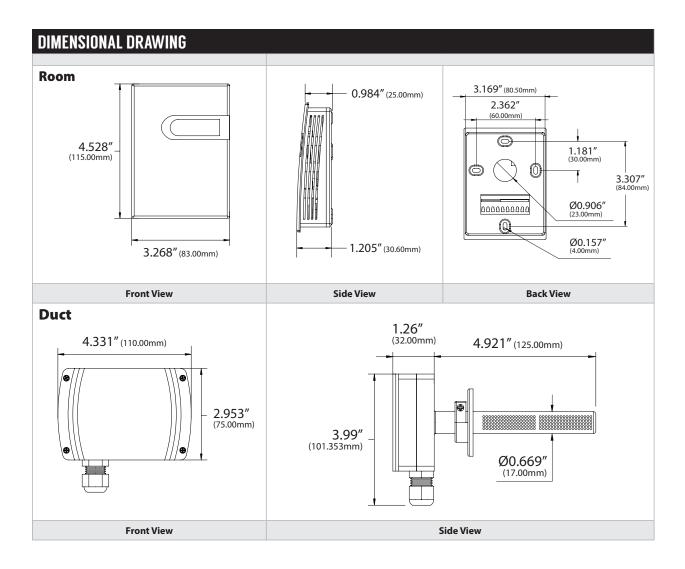
Applications: VOC Measurements for IAQ (indoor air quality)

TheVOC Series is covered by ACI's Two (2) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's web site, <u>workaci.com</u>.

PRODUCT SPECIFICATIONS	
Supply Voltage:	16-28VAC/16-35VDC (Reverse Polarity Protection)
Supply Current:	LCD: 50mA   Non-LCD: 33mA
Sensor Type:	Metal Oxide Semiconductor
Sensing Range:	0-1000 ppb TVOC (lsobutene)
Output/Load Resistance:	4-20 mA: 500 Ohms maximum (Default)   0-10 VDC: 2K Ohms minimum
Communication Protocol:	Modbus RTU; EIA RS-485
Relay:	1 SPDT, N.O. rated 3A @ 30VDC, 3A @ 250VAC
Relay Trip Point:	230 ppb
Response Time:	<5 seconds
Warm Up Time:	15 minutes
Connection/Wire Size:	Screw Terminal Blocks/16 AWG (1.31 mm <sup>2</sup> ) to 22 AWG (0.33 mm <sup>2</sup> )
Terminal Block Torque Rating:	0.45 lb-in (0.5 Nm) nominal
<b>Operating Temperature Range:</b>	32 to 122°F (0 to 50°C)
Storage Temperature Range:	-4 to 140°F (-20 to 60°C)
Operating Humidity Range:	10 to 95% RH, non-condensing
Enclosure Protection:	IP30 (Room)   IP65 (Duct)   IP30 (Probe)
Enclosure Material/UL Flammability:	ABS Plastic/UL94V-0
Weight:	Room: ~190g   Duct: ~270g
Approval:	CE







STANDARD ORDERING		
Configuration	ltem #	Description
VOC-R	147635	Room Mount, 4-20 mA and 0-10 VDC, Modbus RS-485
VOC-R-LCD	147636	Room Mount, Relay, LCD, 4-20 mA and 0-10 VDC, Modbus RS-485
VOC-D	147637	Duct Mount, 4-20 mA and 0-10 VDC, Modbus RS-485

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