

GAS | VOLATILE ORGANIC COMPOUND



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)

The VOC 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 website, www.workaci.com.

PRODUCT SPECIFICATIONS			
Supply Voltage:	16-28VAC/16-35VDC (Reverse Polarity Protection)		
Sensor Type:	Metal Oxide Semiconductor		
Sensing Range:	0-1000 ppb TVOC (Isobutene)		
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:	230ppb		
Response Time:	<5 seconds		
Warm Up Time:	15 minutes		
Connections / Wire Size:	Screw Terminal Blocks / 16 AWG (1.31 mm2) to 22 AWG (0.33 mm2)		
Terminal Block Torque Rating:	0.45 lbf-in (0.5 Nm) nominal		
Operating Temperature Range:	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		

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Automation Components, Inc.

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DIMENSIONAL DRAWING		
Room		
4.528" (1)500mm) 3.268" (83.00mm)	0.984" (25.00mm)	3.169" (80.50mm) 2.362" (60.00mm) 1.181" (30.00mm) 3.307" (84.00mm) (84.00mm) (4.00mm) (4.00mm)
Front View	Right View	Back View
Front View Duct		Back View

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	