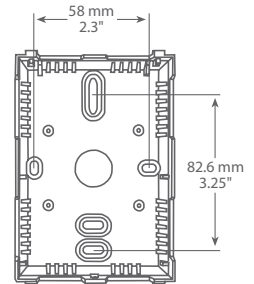
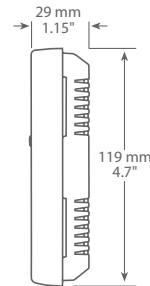
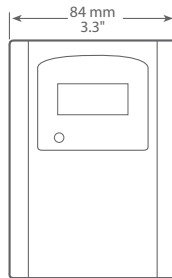




## ROOM VOC TRANSMITTER



### VOCRCM SERIES

#### PRODUCT DESCRIPTION

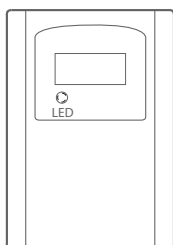
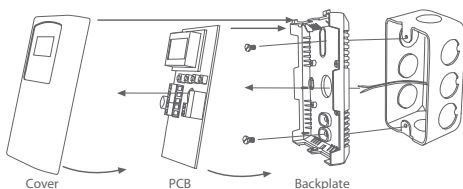
The VOCRCM Series Volatile Organic Compound Sensor uses an advanced MOx (metal oxide semiconductor) sensor to detect poor air quality. The sensor reacts quickly to detect a broad range of VOCs such as smoke, cooking odors, bio-effluence, outdoor pollutants and from human activities. Dual linear analog output signals of 4-20mA or 0-5/0-10 Vdc provide indication of the TVOC level and air quality levels against a VOC Index. Optional output parameters of humidity and temperature which can be user selected are also available. Additional add-on features of feed through temperature sensor, manual override and adjustable relay output are available.

#### TYPICAL INSTALLATION

For complete installation and wiring details, please refer to the product installation instructions.

The VOCRCM series can be mounted directly to a single gang electrical box or directly to a wall. The backplate includes many mounting hole configurations to allow for mounting on a variety of electrical boxes.

The basic VOCRCM has a screw block terminal provided for connection to the Building Automation System.



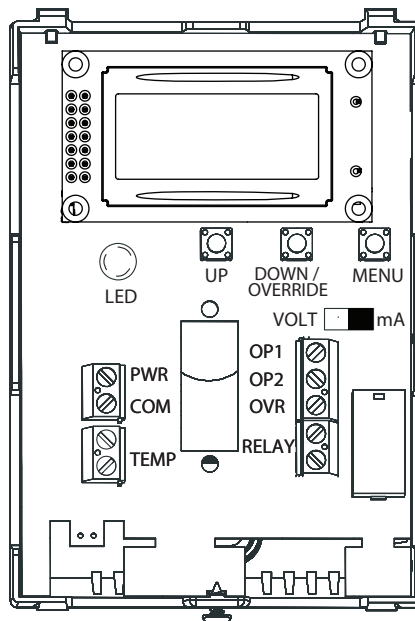
#### LED INDICATOR: VOC INDEX VALUES

- Green LED: 0-50 VOC (Good)
- Yellow LED: 51-100 (Moderate)  
101-150 (Sensitivity)
- Red LED: 151 & up (Unhealthy)

#### SPECIFICATIONS

VOC	<b>Sensor Type:</b> MOx metal oxide semiconductor <b>Range:</b> VOC Index: 0 to 500 VOCI TVOC: Analog: 0 to 2000 ug/m3 or 0 to 1000 PPB Network: 20 to 6000 ug/m3 or 5 to 1400 PPB <b>Device Variation:</b> ±15 VOC Index points, or ±15% VOC Index value (the larger value) <b>Repeatability:</b> ±5 VOC Index points, or ±5% VOC Index value (the larger value) <b>Drift Compensation:</b> Automatic baseline correction
TEMPERATURE	<b>Sensor Type:</b> Bipolar transistor sensor chip <b>Range:</b> 0 to 50°C, 32 to 122°F <b>Accuracy:</b> ± 0.2°C, ± 0.4°F (Typical) <b>Resolution:</b> 0.1°C/°F <b>Calibration:</b> -5 to 5°C Offset, Resolution = 0.1°C, -10 to 10°F Offset, Resolution = 0.1°F
OPTIONAL HUMIDITY	<b>Type:</b> Thermoset polymer-based capacitance sensor chip <b>Range:</b> 0 to 100% RH <b>Accuracy:</b> ±1.5% RH <b>Resolution:</b> 0.1% RH <b>Calibration:</b> +/- 10% Offset
RESPONSE TIME	<10 seconds
WARM-UP TIME	1 minute for detecting VOC events, 1 hour to meet specifications
OUTPUT SIGNALS ANALOG MODEL	2X 4-20mA or 0-5 / 0-10 Vdc, selectable User menu to select analog output configuration
OUTPUT SIGNALS NETWORK MODEL	Interface: RS-485, 2-wire RS-485 Software: BACnet® or Modbus (selectable) Baud Rate: 9600, 19200, 38400, 57600, 76800, or 115200 (selectable) Address Range: 0 – 127 (selectable) – BACnet® Address Range: 1 – 255 (selectable) – ModBus
POWER SUPPLY	24 Vac/dc ±10%
CONSUMPTION	150 mA max
LCD RESOLUTION	VOC Index value (0-500), resolution 1 TVOC value Analog 0 to 2000 ug/m3 or 0 to 1000 PPB, resolution 1 Network 20 to 6000 ug/m3 or 5 to 1400 PPB, resolution 1 Temperature, 0-50°C (32 to 122°F), resolution 1°C(F) Optional RH, 0-100%RH, resolution 1%RH
LCD SIZE	35mm W x 15mm H (1.4" x 0.6") alpha-numeric 2 line x 8 characters
LED INDICATOR	Tricolor (Green, Yellow, Red) see table, enable or disable via menu
OPTIONAL PASSIVE TEMPERATURE SENSOR	Type: Thermistor and RTD (see ordering chart) Accuracy: See ordering chart Output: 2-wire resistive
OPTIONAL RELAY	Form A contact 5 Amps @ 30 Vac/Vdc non inductive load (Relay action, trip point and hysteresis set via menu)
OPTIONAL OVERRIDE SWITCH	Front panel switch with FET output, 30 Vdc @ 50 mA max
WIRING	Screw terminal block (14 to 22 AWG)
OPERATING CONDITIONS	0 to 50°C (32 to 122°F), 0 to 90 %RH non-condensing
STORAGE CONDITIONS	-20 to 60°C (-4 to 140°F), 0 to 80 %RH non-condensing
ENCLOSURE	White ABS, UL94-V0
PROTECTION	IP30 (NEMA 1)
DIMENSIONS	84mm W x 117mm H x 29mm D (3.3" x 4.6" x 1.15")
COUNTRY OF ORIGIN	Canada

## WIRING INFORMATION



PWR	+ 24 Vdc/24 Vac
COM	Common
<b>If Analog Output Selected</b>	
OP1	Analog Output
OP2	Analog Output
<b>If BACNET® or Modbus Output Selected</b>	
B(+)	Network Output
A(-)	Network Output
SHLD	Network Output
<b>Relay Output</b>	
RELAY	Relay Output
<b>Resistance Output</b>	
TEMP	Resistance Output
TEMP	Resistance Output
OVERRIDE	Digital Output

## ORDERING

PS-VOCRCXXX-001