

# SCC Self Contained System

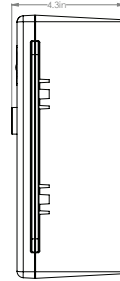
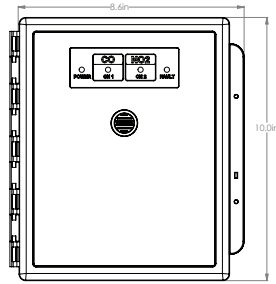


The SCC Self Contained Controller combines toxic and/or combustible gas detection with basic control functionality for non-hazardous, non-explosion rated, commercial applications.

The SCC is available in one or two channel configurations for monitoring toxic and/or combustible gas types by means of an integral electrochemical Carbon monoxide (CO) or Nitrogen dioxide (NO<sub>2</sub>) sensor and one of three remote catalytic combustible sensors used to detect Hydrogen (H<sub>2</sub>), Propane (C<sub>3</sub>H<sub>8</sub>) or Methane (CH<sub>4</sub>). Monitoring of CO or NO<sub>2</sub> may also be achieved remotely by combining the SCC with a 4 – 20 mA transmitter such as the LPT-TCO or LPT-END. The SCC also features two alarm level line voltage relays with field configurable time delays and trigger levels, a field selectable integral audible alarm and an LED panel indicating power, channel alarm status and fault conditions.

Automated calibration and other maintenance procedures are simple and easily performed in the field, and our proprietary Calibration Extending Firmware (CEF) takes into account the aging of the toxic gas sensors so that less frequent calibrations are required in less-critical applications such as parking garages.

## TECHNICAL DRAWING



## SAMPLE ENGINEERING SPECIFICATIONS

Coming soon...

## KEY FEATURES

- » Single or dual channel operation
- » Integral or remote sensors
- » Six conduit entry ports
- » Thermal resetting fuse
- » LED indicators for Power, CH1, CH2 and Fault
- » Two 5-amps SPDT dry contact relays
- » RoHS compliant circuit boards
- » Optional 4 - 20 mA input (replaces remote combustible sensor)
- » Standard water / dust tight, corrosion resistant enclosure (drip proof); IP54 certified with optional splash guard installed

## APPLICATIONS

- » Parking Garages
- » Repair Shops
- » Battery Charging Rooms
- » Buildings on Landfill Sites
- » ... and many more

## TECHNICAL SPECIFICATIONS

### GAS TYPE

Carbon Monoxide (CO)

Nitrogen Dioxide (NO<sub>2</sub>)

Combustible Gas (catalytic)

Hydrogen (H<sub>2</sub>), Methane (CH<sub>4</sub>), Propane (C<sub>3</sub>H<sub>8</sub>)

### MECHANICAL

Enclosure	ABS / Polycarbonate, rated UL94-5VA; IP54 certified with splash guard installed
Weight	600 g (1.4 lb)
Size	10.0" x 8.6" x 4.3" (254 mm x 218 mm x 109 mm)

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## TECHNICAL SPECIFICATIONS CONT'

### ELECTRICAL

Power Requirement	
Low Voltage	16 - 30 VDC or 12 - 28 VAC, 10 W, Class 2
Line Voltage	90 - 240 VAC, 50 - 60 Hz
Current Draw	
Low Voltage	400 mA @ 24 VDC
Line Voltage (110 VAC)	Approximately 90 mA
Line Voltage (220 VAC)	Approximately 45 mA
Wiring	24 VDC or 24 VAC two-conductor shielded; VAC (line voltage) three-conductor shielded
Circuit	ARM Cortex based analog signal processing board with jumpers for user interface.
Distance	Maximum 500 ft between controller and remote sensor or transmitter using minimum 18 gauge wire stranded within conduit
Fuse	Automatic resetting thermal

### INPUT / OUTPUT

Audible Alarm	Integral piezo rated 76 dB @ 10 ft
Relay	Two SPDT dry contact relays, rated 5 amps @ 240 VAC

### USER INTERFACE

Display	LED panel indicating "POWER", "CH1" state, "CH2" state, and "FAULT"
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### ENVIRONMENTAL (sensor dependent)

Operating Temperature	-20°C to 50°C (-4°F to 122°F)
Humidity	15 - 90% RH non-condensing

### ACCESSORIES

<b>CET-715A-CK1</b>	Calibration kit for 17, 34, 58, 74, 103 L cylinders, 0.5 LPM flow regulator & adapter to fit 17 L cylinder
<b>SCS-8000-SPG</b>	Metal protective guard, large, 16 gauge, galvanized metal guards for controllers

### CERTIFICATION

Conforms to: CSA-C22.2 No. 205-M1983 (R2009) UL508 (Edition 17):2007
Conforms to: EMC Directive 2004/108/EC EN 50270:2006, Type 1, EN61010
Conforms to: FCC. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

## PRODUCT CODES

### PART NUMBER

Type A: Single Channel (Internal Electrochemical Sensor)		Lifespan
<b>SCC-A-TCO</b>	CO sensor (0 - 200 ppm)	6+ yrs
<b>SCC-A-NO2B</b>	NO <sub>2</sub> sensor (0 - 10 ppm)	5 - 6 yrs

### Type B: Single Channel (Remote Catalytic Sensor Head only)\*

<b>SCC-B-R</b> <b>+ESH-CH2</b>	H <sub>2</sub> sensor (0 - 50% LEL)	5 yrs
<b>SCC-B-R</b> <b>+ESH-CCH4</b>	CH <sub>4</sub> sensor (0 - 50% LEL)	5 yrs
<b>SCC-B-R</b> <b>+ESH-CC3H8</b>	C <sub>3</sub> H <sub>8</sub> sensor (0 - 50% LEL)	5 yrs

### Type D: Dual Channel (Internal Electrochemical Sensor + Remote LPT Transmitter)

<b>SCC-D-TCO-R</b> <b>+LPT-TCO</b>	CO sensor (0 - 200 ppm) & LPT-TCO CO sensor (0 - 200 ppm)	6+ yrs 6+ yrs
<b>SCC-D-TCO-R</b> <b>+LPT-END</b>	CO Sensor (0 - 200 ppm) & LPT-END NO <sub>2</sub> sensor (0 - 10 ppm)	6+ yrs 5 - 6 yrs
<b>SCC-D-NO2B-R</b> <b>+LPT-END</b>	NO <sub>2</sub> sensor (0 - 10 ppm) & LPT-END NO <sub>2</sub> sensor (0 - 10 ppm)	5 - 6 yrs 5 - 6 yrs

### Type D: Dual Channel (Internal Electrochemical Sensor + Remote Catalytic Sensor Head)\*

		Lifespan
<b>SCC-D-TCO-R</b> <b>+ESH-CH2</b>	CO sensor (0 - 200 ppm) & H <sub>2</sub> sensor (0 - 50% LEL)	6+ yrs 5 yrs
<b>SCC-D-TCO-R</b> <b>+ESH-CCH4</b>	CO sensor (0 - 200 ppm) & CH <sub>4</sub> sensor (0 - 50% LEL)	6+ yrs 5 yrs
<b>SCC-D-TCO-R</b> <b>+ESH-CC3H8</b>	CO sensor (0-200 ppm) & C <sub>3</sub> H <sub>8</sub> sensor (0 - 50% LEL)	6+ yrs 5 yrs
<b>SCC-D-NO2B-R</b> <b>+ESH-CH2</b>	NO <sub>2</sub> sensor (0 - 10 ppm) & H <sub>2</sub> sensor (0 - 50% LEL)	5 - 6 yrs 5 yrs
<b>SCC-D-NO2B-R</b> <b>+ESH-CCH4</b>	NO <sub>2</sub> sensor (0 - 10 ppm) & CH <sub>4</sub> sensor (0 - 50% LEL)	5 - 6 yrs 5 yrs
<b>SCC-D-NO2B-R</b> <b>+ESH-CC3H8</b>	NO <sub>2</sub> sensor (0 - 10 ppm) & C <sub>3</sub> H <sub>8</sub> sensor (0 - 50% LEL)	5 - 6 yrs 5 yrs

### Type E: Dual Channel (Internal Electrochemical Sensors)

		Lifespan
<b>SCC-E-TCO-NO2B</b>	CO sensor (0 - 200 ppm) & NO <sub>2</sub> sensor (0 - 10 ppm)	6+ yrs 5 - 6 yrs

### OPTION (To be added at the end of the "Part Number" above)

<b>S</b>	Splash guard (not available with O <sub>3</sub> or Cl <sub>2</sub> sensors)
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\*The splash guard affixes to the SCC and/or LPT enclosures protecting internal sensors, it does not protect remote sensor heads.

