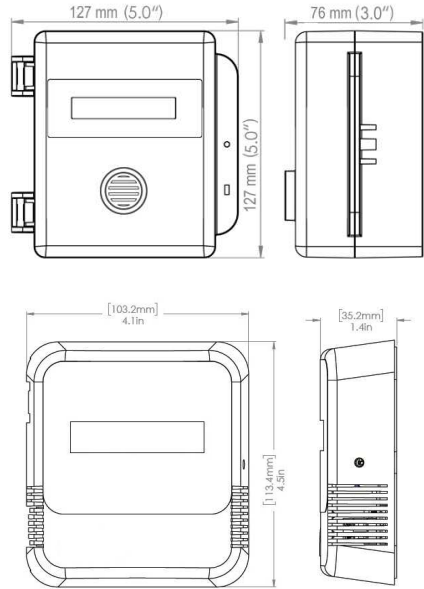




## TECHNICAL DRAWING



The CO<sub>2</sub> cGas Detector is a single channel gas detection transmitter for continuous monitoring of carbon dioxide in non-explosion rated commercial applications where compressed CO<sub>2</sub> is used and stored, or in occupied spaces where integrated demand controlled ventilation (DCV) is used for air quality and energy savings.

This carbon dioxide gas detector is available with 4-20 mA analog output or user selectable in the field digital output with your choice of BACNet® or Modbus® for communicating with a Building Automation System or ventilation controller.

The CO<sub>2</sub> cGas Detector is a low powered transmitter that has an LCD display, temperature compensation, thermal resetting fuses and the configuration and firmware can be upgraded in the field using the USB connection.

Pre-calibrated sensors with true Plug & Play Smart Sensor technology makes replacing sensors quick and easy.

Available in our standard black enclosure or the new low profile, aesthetically pleasing white enclosure for areas where less noticeability is preferred such as hotels, offices, hospitals and other publicly frequented places.

## KEY FEATURES

- » Analog output: 4-20 mA or Digital output: user configurable BACNet® MS/TP RS-485 or Modbus® RTU RS-485 communication with BAS
- » True Plug & Play Smart Sensor Technology, easy replacement at end of life, pre-calibrated
- » Bright LCD display
- » USB port for configuration changes and firmware upgrades
- » Optional RH & Temperature sensor (digital models only)
- » Standard commercial enclosure or low profile DCV enclosure
- » RoHS compliant circuit board

## APPLICATIONS

- |   |   |
|---|---|
| <p>COMMERCIAL</p> <ul style="list-style-type: none"> <li>» Greenhouses</li> <li>» Wineries / Breweries</li> <li>» CO<sub>2</sub> Fire Suppression</li> <li>» CO<sub>2</sub> Storage Rooms</li> <li>» Beverage Bottling Facilities</li> <li>» Fruit Ripening Rooms</li> <li>» ... and many more</li> </ul> | <p>DEMAND CONTROLLED VENTILATION</p> <ul style="list-style-type: none"> <li>» Schools</li> <li>» Offices</li> <li>» Hotels</li> <li>» Restaurants</li> <li>» Theaters / Auditoriums</li> <li>» Retail Stores</li> </ul> |
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## TECHNICAL SPECIFICATIONS

### GAS TYPE

Infrared Carbon dioxide (CO<sub>2</sub>)

### MECHANICAL

Standard Enclosure Black ABS / Polycarbonate, copper coated interior to reduce RF interference, IP54 rated with splash guard installed

Weight 400 g / 14 oz

Size 127 x 127 x 76 mm / 5.0 x 5.0 x 3.0 inches

Low Profile DCV Enclosure White ABS / Polycarbonate, low profile with mounting plate

Weight TBD

Size 103.2 x 113.4 x 35.2 mm / 4.1 x 4.5 x 1.4 inches

### USER INTERFACE

Display 2-line by 16 character graphic LCD, black on green  
Operating Temp: 0°C to 40°C / 32°F to 104°F

Push Buttons Initiate calibration and menu options with internal UP, DOWN and ENTER push buttons

USB Port Internal port for USB memory stick connection for field configuration/firmware upgrades



{COMING SOON}

# cGas DETECTOR Carbon Dioxide (CO<sub>2</sub>)

FIXED SYSTEMS

## TECHNICAL SPECIFICATIONS... continued

### INPUT / OUTPUT

Digital Output (CGAS-D models)	BACnet® MS/TP (version 1 rev 14) RS-485 or Modbus® RTU (version 1.1b3) RS-485 (user configurable in the field)
Analog Output (CGAS-A models)	Linear 4-20 mA
RH & Temperature (Option -RHT)	Relative humidity and temperature sensor (available with digital models only)

### ELECTRICAL

Power Requirement	16-30 VDC, 3W, Class 2 12-27 VAC, 50-60 Hz, 3 VA, Class 2
Digital Wiring	VDC or VAC (ground referenced) 4-conductor shielded, 16 AWG stranded within conduit, network wiring (daisy-chain)
Analog Wiring	VAC (ground referenced) 3-conductor shielded 18 AWG (or larger) stranded within conduit
Fuses	Automatic resetting thermal

### ENVIRONMENTAL

Operating Temperature	0°C to 40°C (32°F to 104°F)
Operating Humidity	15 - 90% RH non-condensing

### CERTIFICATION

- Conforms to: pending CSA / UL
- Conforms to: pending EMC / EN
- Conforms to: pending FCC.

## PRODUCT CODES - STANDARD ENCLOSURE

Part Number		Lifespan
<i>ANALOG MODELS - 4 - 20 mA output</i>		
<b>CGAS-A-C02-6</b>	Carbon Dioxide (CO <sub>2</sub> ) sensor (0 - 5,000 ppm)	8+ yrs
<b>CGAS-A-C02-18</b>	Carbon Dioxide (CO <sub>2</sub> ) sensor (0 - 5% vol)	8+ yrs
<i>DIGITAL MODELS - Modbus® / BACnet® output</i>		
<b>CGAS-D-C02-6</b>	Carbon Dioxide (CO <sub>2</sub> ) sensor (0 - 5,000 ppm)	8+ yrs
<b>CGAS-D-C02-18</b>	Carbon Dioxide (CO <sub>2</sub> ) sensor (0 - 5% vol)	8+ yrs

**OPTIONS** (Factory installed) Add at the end of the "Part Number" above.

<b>RHT</b>	RH & Temperature sensor (available with digital models only)
<b>S</b>	Splash Guard (standard black enclosure only)

### ACCESSORIES

<b>CET-SGC</b>	Calibration clip for splash guard
<b>CET-715A-CK1</b>	Calibration Kit for 17, 34, 58, 74, 100 L cylinders, 0.5 LPM flow regulator & adapter to fit 17 L cylinder
<b>DUCT KIT 301A</b>	Twin probe assembly for fixed system, two lengths of 1.23 m / 4 ft tubing, adapter plug and dust filter
<b>SCS-8000-RSG</b>	Metal protective guard, small, 16 gauge

## PRODUCT CODES - LOW PROFILE ENCLOSURE

Part Number		Lifespan
<b>CGAS-A-DCV</b>	Carbon Dioxide (CO <sub>2</sub> ) sensor (0 - 5,000 ppm), 4-20 mA analog output, white, low profile enclosure with mounting plate	8+ yrs
<b>CGAS-D-DCV</b>	Carbon Dioxide (CO <sub>2</sub> ) sensor (0 - 5,000 ppm), Modbus® / BACnet® output, white low profile enclosure with mounting plate	8+ yrs

**OPTIONS** (Factory installed) Add at the end of the "Part Number" above.

<b>RHT</b>	RH & Temperature sensor (available with the digital models only)
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