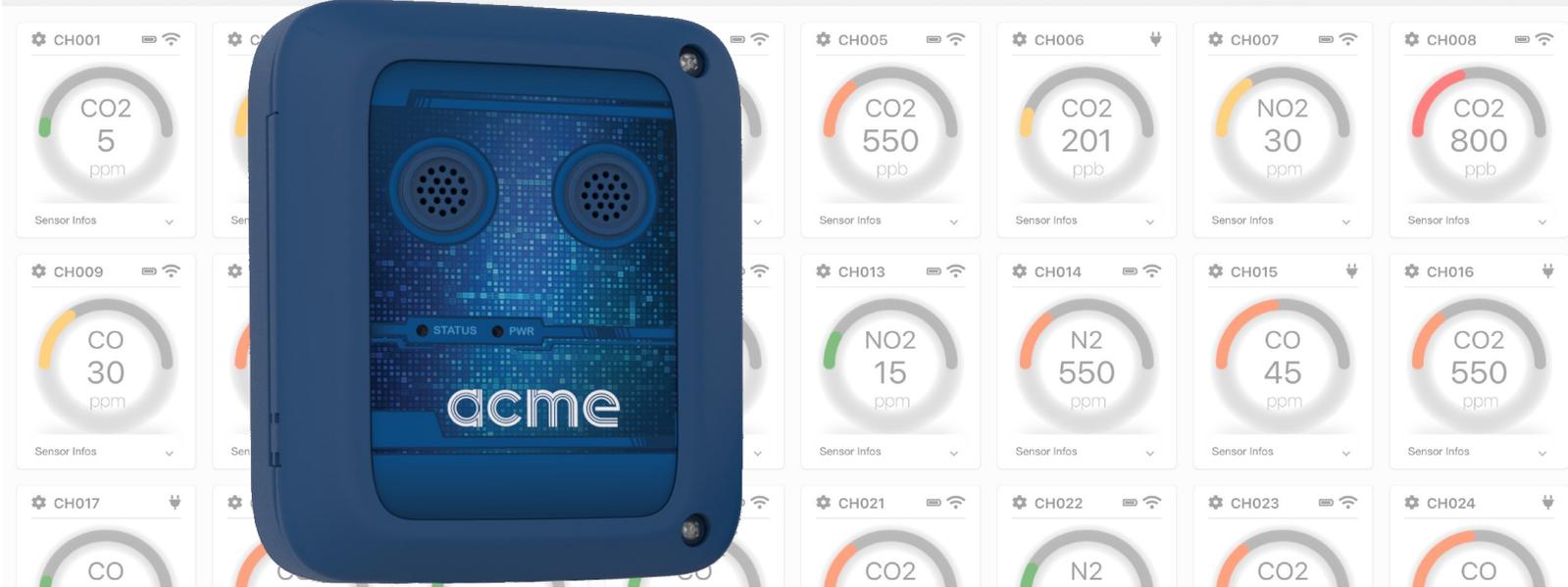


# MGMS Sensing Module

## Gas Detection & Control System

Gas Monitor

Sensors Relay Boards Analog Boards



Scalable system using remote Hardwired Sensors communicating with a central Control Panel as well as Remote Relay Modules to operate ventilation equipment & Remote Alarms.



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ENGINEERING

Manufacturers Of  
Environmental  
Controls & Systems

### FEATURES

- Gas Detection network capable of communicating real time with any smart device.
- Pre-calibrated sensing elements makes maintenance a non-issue
- Highly accurate and gas specific sensors
- “Plug-and-play”.
- Full remote visibility of network through optional web based interface.
- Relative humidity and temperature compensated sensors
- Visual indication of sensor’s operational status
- Fully compatible with Acme’s MGMS-MC Control Panel

### APPLICATIONS

- Energy savings through the intermittent operation of ventilation equipment in enclosed facilities.
- Suitable for garages, tunnels, warehouses and other enclosed commercial locations where a hazardous build-up of gases may occur.
- Ideal for retrofit of existing buildings to improve safety and conserve energy.
- Designed for multiple stage projects.

## Sensor-Transmitter Specifications

GASES DETECTED: CO, Diesel Fumes (NO<sub>2</sub>), CO<sub>2</sub>, O<sub>2</sub>, H<sub>2</sub>, H<sub>2</sub>S, Ammonia, etc. Methane, Propane & Butane Family of refrigerant gases

SENSOR TECHNOLOGY: Electrochemical, NDIR or Catalytic Bead

SENSING METHOD: Diffusion type

DETECTION RANGE: Varies by gas

ACCURACY: +/- 5ppm of reading

POWER REQUIREMENTS: 24 VAC

COMMUNICATION: RS485

RADIUS OF DETECTION (CO AND NO<sub>2</sub>): 50 ft. (10,000 square feet)

OPERATING TEMPERATURE: 32°F to 104°F (0°C to +40°C)\*

HUMIDITY RANGE: 0-95% RH Non-condensing

EXPECTED SENSOR LIFETIME: Electrochemical CO: 7 years  
Electrochemical other: 2 Years  
Catalytic Bead: 3 Years NDIR: 10 Years

ENCLOSURE: NEMA 3

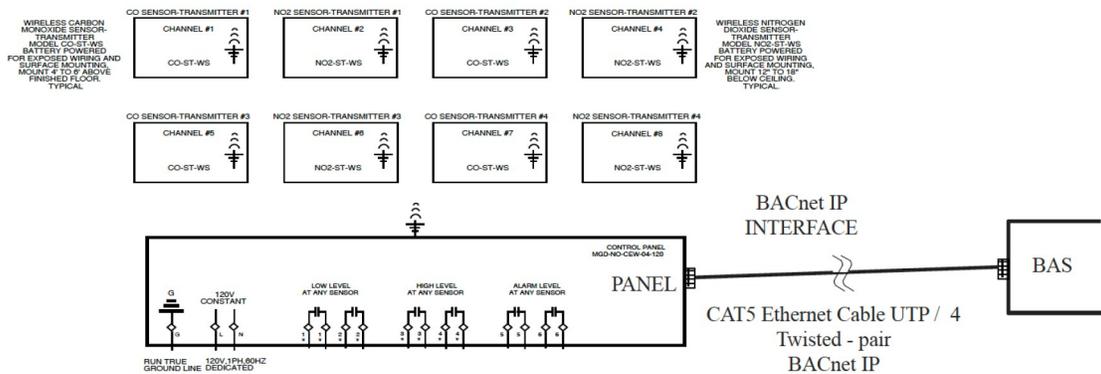
CALIBRATION CLEARIFICATION: Yearly

\* Extended temperature ranges available

## Other Acme Products

The MGMS-CM Sensing Module is fully compatible with the MGMS-CM Control Modules

## Typical Wiring Diagram



## Ordering Information

MODEL NUMBER	GAS DETECTED
CP-MGMS-SM-N-X*	GASOLINE EXHAUST (CO)
DG-NO-MGMS-SM-N-X*	DIESEL FUMES (NO <sub>2</sub> )
CO <sub>2</sub> -MGMS-SM-N-X*	CARBON DIOXIDE (CO <sub>2</sub> )
MDG-NO-MGMS-SM-N-X*	GASOLINE/DIESEL (CO/NO <sub>2</sub> )
O <sub>2</sub> -MGMS-SM-N-X*	OXYGEN (O <sub>2</sub> )
H <sub>2</sub> -MGMS-SM-N-X*	HYDROGEN (H <sub>2</sub> )
H <sub>2</sub> S-MGMS-SM-N-X*	HYDROGEN SULFIDE (H <sub>2</sub> S)
NH <sub>3</sub> -MGMS-SM-N-X*	AMMONIA (NH <sub>3</sub> )
40-CH <sub>4</sub> -MGMS-SM-N-X*	METHANE (CH <sub>4</sub> )
40-C <sub>3</sub> H <sub>8</sub> -MGMS-SM-N-X*	PROPANE (C <sub>3</sub> H <sub>8</sub> )
40-C <sub>4</sub> H <sub>10</sub> -MGMS-SM-N-X*	BUTANE (C <sub>4</sub> H <sub>10</sub> )
REF**-MGMS-SM-N-X*	REFRIGERANT GASES

N = Number of sensors for each gas.

Add a "BB" suffix at the end to indicate a battery back-up.

\*\* REF = Refrigerant Gas desired.

For combinations of gases or other gases available, please contact the factory for more information.



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REPRESENTED BY:

# MGMS Control Module

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### FEATURES

- Gas Detection network capable of communicating real time with any smart device.
- Highly customizable system that seamlessly manages a handful of sensors all the way to 256 units and 98 remote relay modules.
- BACnet capable with READ and WRITE features
- “Plug-and-play”.
- Full remote visibility of network through optional web based interface.
- Relay outputs from the Control Panel or from Remote Wireless Relay Modules.
- Intuitive network/user interface makes fine tuning of network incredibly easy.
- Activation sequence that can be based on time, zone based readings (AVG, MIN and MAX)

### APPLICATIONS

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## Sensor-Transmitter Specifications

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SENSOR TECHNOLOGY: Electrochemical, NDIR or Catalytic Bead

SENSING METHOD: Diffusion type

DETECTION RANGE: Varies by gas

ACCURACY: +/- 5ppm of reading

POWER REQUIREMENTS: 120 VAC

SENSOR POWER: 24 VAC from panel

COMMUNICATION: RS485

COMMUNICATION RANGE: 1500-2000 ft.

OPERATING TEMPERATURE: 32°F to 104°F (0°C to +40°C)\*

HUMIDITY RANGE: 0-95% RH Non-condensing

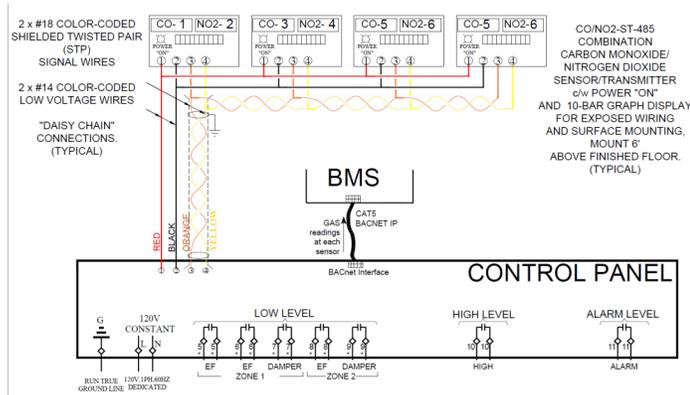
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H <sub>2</sub> -MGMS-CM-N-X*	HYDROGEN (H <sub>2</sub> )
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C <sub>3</sub> H <sub>8</sub> -MGMS-CM-N-X*	PROPANE (C <sub>3</sub> H <sub>8</sub> )
C <sub>4</sub> H <sub>10</sub> -MGMS-CM-N-X*	BUTANE (C <sub>4</sub> H <sub>10</sub> )
REF** -MGMS-CM-N-X*	REFRIGERANT GASES

N = Number of sensors for each gas.

Add a "-BB" suffix at the end to indicate a battery back-up.

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