

## GM100 Gas Detection Monitor With Bacnet MS/TP & Modbus RTU



### Key Features:

- Single or dual gas monitoring
- Replaceable, plug-and-play smart sensor modules
- Non-intrusive calibration
- Splash guard accessories for improved IP rating
- Modbus RTU or BACnet MS/TP (field selectable)
- 0-10V or 0-20mA output (field selectable)
- Relay output
- 24V AC/DC power supply
- Display screen and RGB LED status indication
- Configurable audible alarm – 85dB
- Operating Temperature -4° to 122°F
- Gas Performance UL2075 (CO & NO2)
- Supplied calibrated
- Strong anti-interference circuit boards and RoHS compliant
- Corrosion-resistant enclosure with optional accessories
- Indoor & outdoor use (with additional weatherproof sensor covers)

### Product Overview:

The GM Series 100 is a single or dual CO/NO2 Detector, a cutting-edge solution engineered to safeguard enclosed areas from the dangers of vehicle exhaust fumes. Specifically designed for car parks, maintenance bays, emergency service stations, wash bays, and similar environments, this 24V powered detector with RS485 BACnet MS/TP or Modbus RTU communications offers unparalleled reliability and precision. With customizable parameters accessible on-site, engineers can tailor its configuration and settings to suit the unique needs of each project, minimizing the requirement for additional hardware and streamlining the scope of work for controls contractors to ensure the sequence of operation can be achieved.

The GM Series 100 features two alarm levels, and line voltage relays with configurable time delays, a selectable audible alarm, LCD display indicating power, alarm status, gas type, concentration, measurement, address, and fault conditions.

The equipment can be used indoors or outdoors. If used outdoors, choose a sheltered location which is protected from direct sunlight, rain, and other extreme conditions.

### RS-485 Adjustable Settings

- CO & NO2 Alarm 1 & 2 Thresholds (Low/High)
- Relay Activation – Alarm 1 or 2
- Audible Buzzer (On/Off)
- Service/Calibration LED Indication



### Partcodes

GM100-CO	Standalone CO monitor
GM100-NO2	Standalone NO2 monitor
GM100-CO-NO2	Dual CO & NO2 monitor

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## Mechanical

Material	ABS Polycarbonate 'FR' Flame
Length	5.95" (151.13mm)
Width	4.37" (110.99mm)
Depth	1.97" (50mm)
Weight	Approx 0.68kg

## Electrical

Power – Low Voltage	Nominal 24V AC/DC
Internal Fuse	Thermal Resetting, 240VAC, 400mA
Wiring (RS485)	127 Units

## IO

Digital Output	BACnet MS/TP or Modbus RTU RS485
SPST Signal Relay Output	70mA 30V

## Environmental

Operating Temperature	-4° to 122°F (-20°C to 50°C)
Storage Temperature	32° to 86°F (0°C to 30°C)
Humidity	15 to 90% RH (continuous) 0-99% (intermittent)
Atmospheric Pressure	2000ft (610m)
Installation Category	III 24V~ and II 110V~ (UL/CSA/IEC/EN/BS 61010-1)
Pollution Degree	2 (UL/CSA/IEC/EN/BS 61010-1)

## User Interface

LCD Display	RGB 16 Character – 2 Lines (32)
LED Indications	OK / Alarm 1 / Alarm 2 / Fault & Warning / Calibration
Audible Alarm	Internal >85dB at 3m(10ft)
Button(s)	Silence / Acknowledge Alarm & Reset / Relay / Settings
Language	English

## Certification/Conformance

Safety	UL/CSA/IEC/EN/BS 61010-1
Electromagnetic Compatibility	Directive 2014/30/EU / Regulation 2016 / BS 50270
FCC	This device complies with part 15 of the FCC Rules. (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
Gas Performance	UL 2075 (CO and NO <sub>2</sub> )
Sensor Agency Approvals	UL Recognized Component for ANSI/UL-2034, UL-2075

## Default Alarm

Gas	AL1	AL1 Type	AL2	AL2 Type
Carbon Monoxide (CO)	25ppm	Rising	100ppm	Rising
Nitrogen Dioxide (NO <sub>2</sub> )	0.7ppm	Rising	2ppm	Rising