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

Modbus

ASHRAE BACnet

Key Features:

- NFC app configuration
- 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 4-20mA output (field selectable)
- Relay output
- 24V AC/DC power supply
- Display screen and RGB LED status indication
- 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 24V detector with RS485 BACnet MS/TP or Modbus RTU communications, offering exceptional reliability and precision. Customizable on-site, engineers can tailor its settings to fit project needs, reducing hardware and simplifying controls work to achieve the sequence of operation. It features two alarm levels, signal relay, configurable delays, and a selectable audible alarm. The LCD displays power, alarm status, gas type, concentration, address, and faults.

Part Codes

GM100 – [S1 Gas] – [S2 Gas]

Gas Selection: Select one (1) for each Gas 1 and Gas 2

Gas Type	Code
No Sensor	Leave Blank
Carbon Monoxide (CO)	CO
Nitrogen Dioxide (NO2)	NO2
Natural Gas (NG)	NG
Hydrogen (H2)	H2
Butane / Propane (LPG)	LPG
Oxygen (O2)	O2

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

Splash Guard Option: Order GM-SPL

Option	Code
Splash Guard	GM-SPL

Splash Guard

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Mechanical

Material	ABS Polycarbonate 'FR' Flame Retardant
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
Digital Output	BACnet MS/TP or Modbus RTU RS485
SPST Signal Relay Output	70mA 30V

Environmental

Operating Temperature	-4º to 122ºF (-20ºC to 50ºC)
Storage Temperature	32º to 86ºF (0ºC to 30ºC)
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

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_2)
Sensor Agency Approvals	UL Recognized Component for ANSI/UL-2034, UL-2075

Default Alarm

Gas	AL1	AL1 Type	AL2	AL2 Type	Range
Carbon Monoxide (CO)	25ppm	Rising	100ppm	Rising	10-250ppm
Nitrogen Dioxide (NO2)	0.5ppm	Rising	2ppm	Rising	0.5-10ppm
Natural Gas (NG)	8%LEL	Rising	10%LEL	Rising	3.0-90%LEL
Hydrogen (H2)	8%LEL	Rising	10%LEL	Rising	3.0-90%LEL
Butane / Propane (LPG)	8%LEL	Rising	10%LEL	Rising	3.0-90%LEL
Oxygen (O2)	19.5% V/V	Rising	18.5%/23% v/v	Rising	0-25% v/v