



## MGS-410 Gas Detector

### for Safety Compliance in Refrigeration Applications

#### FEATURES

Mobile App Interface

Pre-calibrated Sensors

Semi-automated Calibration

Temperature-compensated Measurement

Digital Communications

Audible and Visual Alarms

Multiple Cable Entries and Terminals

Low-temperature Performance

#### BENEFITS

Makes commissioning, configuration and maintenance intuitive and requires no special training or tools to set alarm behavior and / or thresholds

Saves time and money on maintenance procedures

Easy process with no potentiometers or volt meters

Mitigates false alarms and optimizes accuracy in refrigeration applications

Integrates with BMS / BAS control systems via Modbus

Complies with ASHRAE 15 / EN 378 - no additional hardware

Quick and easy installation of all wiring; daisy-chain power and digital communications

Engineered for use in all refrigeration applications (machinery rooms, cold storage, walk-in freezers) and maintains performance at temperatures as low as -40°F (-40°C)

Refrigerant Gas Detector with Remote Sensor for Halogenated and Natural Refrigerants with Digital Communications

#### DESCRIPTION

Bacharach's MGS-410 Gas Detector makes compliance with refrigeration safety codes simple and easy, saving time and money on equipment and installation. Using the MGS-400 App, users can intuitively use, commission and maintain their gas detection system without the need for specialty training or tools. Pre-calibrated sensor modules simplify maintenance, take minutes to exchange and do not require the use of calibration gas.

The MGS-410 allows installers to daisy-chain power and Modbus communication cables across the system, and can be easily integrated into a BMS / BAS, or with Bacharach's optional MGS-408 Gas Detection Controller.

#### FOR MORE INFO:

Scan the QR code to learn more about the MGS-410 and other Bacharach products.



## TECHNICAL DATA

PRODUCT ATTRIBUTES	DESCRIPTION		DEFINITION
Gases and Ranges	Refrigerants		1,000 ppm
	CO <sub>2</sub>		5,000 / 10,000 / 20,000 / 30,000 / 40,000 / 50,000 ppm
	NH <sub>3</sub>		100 / 1,000 / 5,000 / 100% LEL
	O <sub>2</sub>		30 Vol%
	CO		500
	Combustible gases - Semiconductor (R-290, R-600, R-50, R-600a, HC-12a, R-717)		5,000 ppm
	Combustible gases - NDIR (R-600, R-50, R-290)		100% LEL
	Combustible gases - Catalytic (R-600, R-50, R-290, R-717)		100% LEL
	NO <sub>2</sub>		20 ppm
Status Indicator	Single tri-color LED (green, red, orange)		
Buzzer	72dB @ 10 cm		
Output	Digital		Modbus RTU via RS 485
Power Supply	24V AC or DC (auto selecting), 4W (max)		
Enclosure	IP66		
Size (W×H×D) Approx.	5.1" × 5.1" × 2.7" (130 × 130 × 68 mm)		
Weight Approx.	9.2oz (260 g)		
Approvals	CE, UL / CSA / IEC EN 61010-1		
Ambient Conditions	Temperature	Semiconductor	-40 to 122°F / -40 to +50°C
		Electrochemical	NH <sub>3</sub> 100 / 1,000 ppm: -40 to 40°C
	NH <sub>3</sub> 5,000 ppm: -20 to 40°C		
	CO 500 ppm: -40 to 50°C		
	NO <sub>2</sub> 20 ppm: -20 to 40°C		
	O <sub>2</sub> 30% Volume: -20 to 50°C		
	Infrared	-40 to 122°F / -40 to +50°C	
	Catalytic Bead	-40 to 122°F / -40 to +50°C	
Humidity	5 to 90 % RH, non condensing		
Pressure	23.6 to 32.5 inch Hg / 800 to 1,100 mbar		

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