

**Ribble Enviro**  
*...everything gas detection*

# Data Sheet

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# MGS-410 Gas Detector

for Safety Compliance in Refrigeration Applications



## DESCRIPTION

MSA 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 MSA Bacharach's optional MGS-408 Gas Detection Controller.

## REFRIGERANT GAS DETECTOR FOR HALOGENATED AND NATURAL REFRIGERANTS WITH DIGITAL COMMUNICATIONS

### 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)



### MORE INFORMATION:

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

# MGS-410 Gas Detector



Product Attributes	Description		Definition
<b>GASES AND RANGES</b>	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
<b>STATUS INDICATOR</b>	Single tri-color LED (green, red, orange)		
<b>BUZZER</b>	72dB @ 10 cm		
<b>OUTPUT</b>	Digital	Digital	
<b>POWER SUPPLY</b>	24V AC or DC (auto selecting), 4W (max)		
<b>ENCLOSURE</b>	IP66		
<b>SIZE (W×H×D) APPROX.</b>	5.1" × 5.1" × 2.7" (130 × 130 × 68 mm)		
<b>WEIGHT APPROX.</b>	9.2oz (260 g)		
<b>APPROVALS</b>	CE, UL / CSA / IEC EN 61010-1		
<b>AMBIENT CONDITIONS</b>	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		

Note: This Bulletin contains only a general description of the products shown. While product uses and performance capabilities are generally described, the products shall not, under any circumstances, be used by untrained or unqualified individuals. The products shall not be used until the product instructions/user manual, which contains detailed information concerning the proper use and care of the products, including any warnings or cautions, have been thoroughly read and understood. Specifications are subject to change without prior notice. MSA is a registered trademark of MSA Technology, LLC in the US, Europe, and other Countries. For all other trademarks visit <https://us.msasafety.com/Trademarks>.

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