

Pizza

DAIRY CHOICES
Butter
And
Yogurt

FROZEN CHOICES
Novelties
Ice Cream
Desserts

Ice Cream



Refrigerant Gas Detector

MGS-150

FEATURES

Infrared, semiconductor and electrochemical sensor options

Configurable alarm relay and analog output

Fast-response sensors

Local audio and visual alarms

Robust design and remote sensor options

Available in a variety of housings

Optional MGS Controller available

BENEFITS

Flexibility in sensor type provides acceptable configurations for a variety of applications

Integrate easily with control systems and initiate mitigation actions

Detects gas leaks quickly, protecting personnel, investment and the environment

Immediately alert personnel of potential safety risks

Allows for flexible placement in hard-to-reach areas

Can be used in harsh environments e.g. low temperature

Create an independent, centralised alarm system with up to 6 gas detectors

Cost-Effective Refrigerant Leak Detector for Commercial Applications

DESCRIPTION

Bacharach's MGS-150 Gas Detector has a wide range of sensor options to provide real-time monitoring of refrigerant, combustible and toxic gases. It comes standard with user-selectable analog outputs that can be set for 4-20 mA, 0-5V, 1-5V, 0-10V, or 2-10V; allowing them to connect directly to most BMS, SCADA or control systems.

Alarm indicators include an onboard alarm LED and audible buzzer, in addition to an alarm relay for connection to external audible/visual alarms or a BMS system. The product's alarm threshold value is pre-set to factory defaults but is also field programmable. A variety of housing options are available (shown below), from standard IP41 enclosures to IP66 water resistant housings, which allow the MGS-150 gas detector to be placed in the toughest of conditions. Special enclosure configurations are available for applications where mounting in vent pipes, duct work or tight spaces is required.

CHOICE OF ANALOG AND/OR RELAY OUTPUT



INTERNAL OR REMOTE SENSOR CAPABILITY









HOW TO CONTACT US:

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For more information about the MGS-150 and other Bacharach products scan here.



DIMENSIONS & WEIGHT

ENCLOSURE TYPE	DIMENSIONS	WEIGHT
 Standard IP41:	3.35"x5.59"x2.09" (86x142x53 mm)	6.3oz (180g)
 IP66:	6.89"x6.5"x3.29" (175x165x82 mm)	1lb 6oz (629g)
 IP66 w/ Splash guard:	6.89"x8.9"x3.29" (175x225x82 mm)	1lb 8.7oz (700g)
 IP66 w/ Remote sensor:	6.89"x6.1"x3.29" (175x155x82 mm)	1lb 11oz (790g)
 IP66 w/ EXd Remote head:	6.89"x6.1"x3.29" (175x155x82 mm)	2lb 10oz (1185g)
 IP66 w/ PRV sensor:	6.89"x6.1"x3.29" (175x155x82 mm)	2lb 0.3oz (916g)
 Airflow / Duct Mount	6.89"x4.9"x3.29" (175x125x82 mm)	1lb 4oz (578g)
 EXd (ATEX only):	5.51"x7.09"x3.54" (140x180x90 mm)	4lb 15oz (2234g)

TECHNICAL SPECIFICATIONS

PRODUCT ATTRIBUTES	DESCRIPTION
Power Supply	12/24 VAC/VDC operation
Power Consumption: (12V)	NDIR: 140 mA / SC: 160mA / EC: 60mA
Power Monitoring:	Green LED
Visual Alarm:	Red LED
Audible Alarm	Buzzer, enabled/disabled
Fault Monitoring:	Red LED (On) / Green LED (Off)
Fault States:	0-1 V / 0-2 mA outputs
Analog Outputs:	4-20 mA, 0-5 V, 0-10 V, 1-5 V, 2-10 V
Relay Output: (Volt-free)	1 relay, 1 amp 24 VAC/VDC
Alarm Delay:	Selectable: 0, 1, 5 or 10 minutes
IP Rating:	IP41 (standard) / IP66 (optional)
Approvals:	CE / IEC 61010 / EXd / UL CSA

ORDERING INFORMATION

Below is a list of the most common configurations. For a complete list of available configurations, visit us at www.mybacharach.com or contact your Bacharach regional sales manager.

INFRARED (NDIR) SENSOR - COMMON CONFIGURATIONS	
6300-1090	CO ₂ IR: 0-5,000 ppm - Standard housing
6300-8091	CO ₂ IR: 0-10,000 ppm - Duct Mount
SEMICONDUCTOR (SC) SENSOR - COMMON CONFIGURATIONS	
6300-7118	NH ₃ : 0-10,000 ppm - IP66 w/PRV sensor
6300-4101	R-134a: 0-1,000 ppm - IP66 w/Remote sensor
6300-1105	R-407A: 0-1,000 ppm - Standard housing
6300-4107	R-410A: 0-1,000 ppm - IP66 w/Remote sensor
6300-1156	R-448A: 0-1,000 ppm - Standard housing
6300-1113	R-290: 0-2,000 ppm - Standard housing
6300-2152	R-1234ze: 0-1,000 ppm - IP66 housing
ELECTROCHEMICAL (EC) SENSOR - COMMON CONFIGURATIONS	
6300-3031	NH ₃ : 0-500 ppm - IP66 w/Splash guard
6300-4030	NH ₃ : 0-100 ppm - IP66 w/Remote sensor
6300-2001	CO: 0-1,000 ppm - IP66 Housing
6300-2019	NO ₂ : 0-10 ppm Parking Garage - IP66 Housing



COMMERCIAL



REFRIGERATION

SENSOR INFORMATION

PRODUCT ATTRIBUTES	DESCRIPTION	DEFINITION	
Semiconductor Sensor	Refrigerants - HCFCs: (R-134a, R-404A, R-407A etc.)	0-1,000 / 0-3,000 / 0-5,000 / 0-10,000 ppm	
	Refrigerants - HFCs: (R-22, R-32, R-290 etc.)	0-1,000 / 0-3,000 / 0-5,000 / 0-10,000 ppm	
	Refrigerants - CFCs (R-11, R-12 etc.)	0-1,000 / 0-3,000 / 0-5,000 / 0-10,000 ppm	
	NH ₃	0-1,000 ppm / 0-5,000 ppm / 0-10,000 ppm	
	H ₂	0-2,000 ppm	
	Hydrocarbons: (Methane, Propane, Butane etc.)	0-2,000 ppm	
	VOCs: (Acetone, Ethanol, Methanol etc.)	0-2,000 ppm	
Infrared (NDIR) Sensor	CO ₂	0-5,000 / 0-10,000 (0-1%vol.) 0-20,000 ppm (0-2%vol.) / 0-5% / 0-10%	
	Hydrocarbons (Methane, propane, etc.)	0-100% LEL	
Electrochemical Sensor	NH ₃ *	0-100 / 0-250 / 0-500 / 0-1,000 / 0-5,000 ppm	
	CO	0-1,000 ppm	
	Cl ₂ **	0-10 ppm	
	C ₂ H ₄	0-20 / 0-1,000 ppm	
	F ₂ **	0-1 ppm	
	H ₂	0-2,000 ppm	
	HCl**	0-10 ppm	
	HCN**	0-50 ppm	
	H ₂ S	0-20 ppm	
	NO**	0-100 ppm	
	NO ₂ **	0-10 ppm	
	O ₂	0-30% vol.	
	O ₃ **	0-1 ppm	
	SO ₂ **	0-10 ppm	
	Infrared (NDIR)	Semiconductor (SC)	Electrochemical (EC)
Temperature Range:	-4 - 122°F (Standard housing)	-4 - 122°F (Standard housing)	-4 - 104°F (Standard housing)
	-20 - 50°C (Standard housing)	-20 - 50°C (Standard housing)	-20 - 40°C (Standard housing)
	-40 - 122°F (IP66 housing)	-40 - 122°F (IP66 housing)	-4 - 104°F (IP66 housing)
	-40 - 50°C (IP66 housing)	-40 - 50°C (IP66 housing)	-20 - 40°C (IP66 housing)
Humidity (non-condensing):	0-95%	0-95%	0-95%
Sensor Life:	5-8 years, typical	2 years, minimum	2 years, typical
Time to Alarm: (T50)	25 seconds, typical	20 seconds, typical;	80 seconds, typical
Time to Alarm: (T90)	90 seconds, typical	50 seconds, typical	220 seconds, typical
Recovery Time:	210 seconds, typical	900 seconds, typical	600 seconds, typical

* The ammonia (NH₃) EC sensor is available -40 to 104°F (-40 to 40°C) with the IP66 housing for 100, 250, 500 and 1,000 ppm.

** Only available in the IP41 housing.

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