MGS-250 Infrared Gas Detector
For Safety and Regulatory Compliance

BACHARACH.

DESCRIPTION

The MGS-250 Infrared Refrigerant Gas Detector delivers accurate, stable and precise refrigerant monitoring for safety and regulatory compliance. It can be configured as either a broadband sensor used for coarse leak detection *(ASHRAE 15, EN 378)*, or as a gas-specific version that's characterized for precision response to individual refrigerants *(CARB)*. The MGS-250 is the economical solution for detecting refrigerants without the limitations posed by solid-state sensor technologies.

Advanced infrared sensor technology makes the MGS-250 immune to cross sensitivities from combustible and toxic gases, as well as changes in temperature and humidity. The sensor provides accurate leak detection and delivers up to 5 to 7 years of virtually maintenance-free operation. The MGS-250 has an alpha-numeric LED display, status indicator, on-board relay and Modbus via RS485. An audio-visual alarm is included to alert personnel when measurements exceeded the user-defined threshold, enabling compliance with safety standards including AHSRAE 15 and EN 378.

FEATURES	BENEFITS
Infrared Sensor Technology	Minimize false alarms from cross-interference from other gases, temperature and humidity
On-board Audio-visual Alarms	Enable compliance with regulatory standards, including ASHRAE 15, EN 378:2016*, and EN 14624:2020* *(*A1 gases only)*
Modbus, 4-20mA Output & Alarm Relay	Integrate with BMS / BAS control systems to initiate action when a leak is detected
Digital Display Screen	Easy user interface for configuration and set-up
Self-diagnostics	Enhanced troubleshooting capability
Minimal Maintenance Requirements	Low cost of ownership
Optional MGS-408 Controller Available	Create an independent, centralized alarm system with up to 8 gas detectors

For additional product specifications and ordering information, please visit us on our or call 1-800-736-4666 to speak with a Bacharach representative.

HOW TO CONTACT US:
US Customer Service: +1 724 334 5000
EU Customer Service: +353 1 284 6388
CAN Customer Service: +1 905 882 8985

FOR MORE INFO:
Scan the QR code to learn more about the MGS-250 and other Bacharach products.

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SPECIFICATIONS	DESCRIPTION
Sensor	Non Dispersive Infrared (NDIR); 5-7 year life
Range	0-3,500 ppm
Response Time, T90	90 Seconds

PRODUCT DETAILS	DESCRIPTION
Power Supply	24 VDC, 24 VAC 50/60 Hz, 2.5 W max
Display / Visual Status	Red 4-digit alpha-numeric LED display; Power LED
Audible Alarm	Buzzer (80 dB @ 10cm), enable / disable
Analog Outputs	4-20 mA; 0-5 V; 0-10 V; 1-5 V; 2-10 V
Relay	1 relay rated 1 A @ 24 VAC / VDC (0.5 A, 125 V AC UL rating)
Communication	Modbus RTU over RS-485
Alarm Delay	Selectable; 0 to 15 minutes
Temperature Range	-22 to 104°F (-30 to 40°C)
Humidity Range	5-90% relative humidity, non-condensing; 0-10,000 ft. altitude
Approvals	CE, UL/CSA/IEC/EN 61010-1* (*A1 gases only)
Dimensions	4.0" × 5.5" × 1.5" (100 × 140 × 40 mm)
Weight	6.3 oz (180 g)

PART NUMBERS	ACCURACY	TARGET GAS
6401-0501	±5%	R-22
6401-0502	±5%	R-123
6401-0503	±5%	R-134a
6401-0504	±5%	R-404a
6401-0505	±3%	R-407a
6401-0506	±3%	R-407c
6401-0507	±3%	R-407f
6401-0508	±3%	R-410a
6401-0509	±5%	R-422a
6401-0510	±5%	R-422d
6401-0511	±3%	R-427a
6401-0512	±5%	R-507
6401-0513	±5%	HFO-1234YF
6401-0514	±5%	HFO-1234Ze
6401-0515	±5%	HFO-1233ZD
6401-0516	±5%	R-32
6401-0517	±5%	R-448A
6401-0518	±5%	R-449A
6401-0519	±5%	R-513A
6401-0520	±5%	R-452A