

Bacharach® Multi-Zone Refrigerant Gas Monitor



Precision Refrigerant Monitor for Emissions Reduction



DESCRIPTION

The MSA Bacharach® Multi-Zone delivers the best refrigerant monitoring available, with industry-leading MDL of 1 ppm for halogenated gases, the fastest sampling frequency and the widest range of refrigerants accurately detected. The large graphic LCD display and LED status indicators provide a system-wide overview at a glance.

The Multi-Zone enhances effective refrigerant management, detecting leaks early to enable cost savings by reducing refrigerant recharge, enhancing energy efficiency and reducing risk of refrigeration failure and produce loss. A variety of communication interfaces are available, including Modbus RTU natively, and with the FieldServer gateway Modbus TCP, BACnet/IP, BACnet MS/TP, and EtherNet/IP, allowing easy integration into BMS/BAS systems and remote monitoring solutions.

Features

- 1 ppm Minimum Detectable Level
- Early detection of refrigerant leaks
- Monitors up to 16 remote areas, expandable to 48 monitoring points
- Over 60 different refrigerants accurately detected
- Infrared sensor technology
- High performance sampling pump
- Minimal maintenance and no calibration required
- Halogen, CO₂ and NH₃ versions available

Benefits

- Detects leaks that other instruments can't
- Mitigate refrigerant loss, protect produce, enhance energy efficiency
- Ideal solution for grocery store refrigerant monitoring
- Monitor multiple refrigerant circuits with a single detection system
- Accurate, precise measurement unaffected by other gases, temperature, or humidity
- Industry-leading cycle times for monitoring all zones with greater frequency
- Low cost of ownership
- Suitable for a variety of refrigerant monitoring applications



MORE INFORMATION:

Scan the QR code to learn about the Multi-Zone and other MSA Bacharach® products.

Measurement	Unit	Description
GAS LIBRARY	HGM-MZ	FA-188, FC-3284, FC-72, H1211, H1301, H2402, HFP, N1230, N4710, N4710, N5110, N7100, N7200, N7300, N7600, R-11, R-113, R-114, R-12, R-1224yd(Z), R-124, R-125, R-1336mzz(E), R-1336mzz(Z), R-21, R-227ea (FM-200), R-23, R-236fa, R-245fa, R-402A, R-402B, R-404A, R-407A, R-407F, R-408A, R-409A, R-422A, R-422D, R-424A, R-426A, R-427A, R-438A, R-448A, R-449A, R-452A, R-452B, R-454A, R-454C, R-455A, R-500, R-502, R-503, R-507A, R-508B, R-513A, R-514A, R-515B, R-1234ZE
	CO ₂ -MZ	Carbon Dioxide (CO ₂), R744
	Hydrocarbon	Hydrocarbons (R-290, R-600, R-600a)
	AGM-MZ	Ammonia (R-717)
	N ₂ O	Nitrous Oxide (R-744A)
	Ethylene	Ethylene (R-1150)
MEASURING RANGE	HGM-MZ	All gases 0 to 10,000 ppm
	CO ₂ -MZ	Carbon Dioxide 300 to 8,000 ppm
	Hydrocarbon	Hydrocarbons 5 to 5,000 ppm
	AGM-MZ	Ammonia 25 to 10,000 ppm
	N ₂ O	Nitrous Oxide 2 to 2,000 ppm
	Ethylene	Ethylene 10-10,000 ppm

SAFEGUARDING PEOPLE, PLACES & THE PLANET.

Bacharach® Multi-Zone Refrigerant Gas Monitor



Measurement	Unit	Description
ACCURACY	HGM-MZ	1 ppm Minimum Detectable Level (MDL) (most gases) ±1 ppm ±10% of reading from 0-1,000 ppm (most gases) ±1 ppm ±2% of reading with field calibration (most gases) ±10 ppm ±15% of reading from 0-1,000 ppm (R-11, R-21, R-113)
	CO ₂ -MZ	10 ppm MDL ±1 ppm ±10% of reading from 300-8,000 ppm (at reference conditions)
	Hydrocarbon	5 ppm MDL ±5 ppm ±5% of reading from 5-5,000 ppm
	AGM-MZ	20 ppm MDL ±10 ppm ±10% of reading from 0-10,000 ppm
	N ₂ O	2 ppm MDL ±1 ppm ±10% of reading from 2-1,000 ppm (with calibration)
	Ethylene	10 ppm MDL ±10 ppm ±15% of reading from 10-3,000 ppm
TEMPERATURE DRIFT	HGM-MZ	±0.8% of reading per degree C between purge cycles
	CO ₂ -MZ	4 ppm of reading per degree C between purge cycles
	Hydrocarbon	4 ppm of reading per degree C between purge cycles
	AGM-MZ	1.5 ppm of reading per degree C between purge cycles
	N ₂ O	2 ppm of reading per degree C between purge cycles
	Ethylene	2 ppm of reading per degree C between purge cycles



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