

# 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, BACnet and LonWorks, allowing easy integration into BMS/BAS systems and remote monitoring solutions.

## Features

## Benefits

|                                                                    |                                                                                  |
|--------------------------------------------------------------------|----------------------------------------------------------------------------------|
| 1 ppm Minimum Detectable Level                                     | Detects leaks that other instruments can't                                       |
| Early detection of refrigerant leaks                               | Mitigate refrigerant loss, protect produce, enhance energy efficiency            |
| Monitors up to 16 remote areas, expandable to 48 monitoring points | Ideal solution for grocery store refrigerant monitoring                          |
| Over 50 different refrigerants accurately detected                 | Monitor multiple refrigerant circuits with a single detection system             |
| Infrared sensor technology                                         | Accurate, precise measurement unaffected by other gases, temperature or humidity |
| High performance sampling pump                                     | Industry-leading cycle times for monitoring all zones with greater frequency     |
| Minimal maintenance and no calibration required                    | Low cost of ownership                                                            |
| Halogen, CO <sub>2</sub> and NH <sub>3</sub> versions available    | 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              | FA188, FC72, H1211, H1234ZE, H1301, H2402, HFP, N1230, N4710, N7100, N7200, N7300, N7600, R-11, R-113, R-114, R-12, R-124, R-125, R-21, R-227, R-23, R-236fa, R-245fa, R-401A, 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-500, R-502, R-503, R-507, R-508B, R-513A, R-514A, R-1233zd, H1233ZDE, N4710, R448A, R449A, R513A, R452A, R452B, R514A, H1336E, H1336Z, N5110, R454A, R454C, R455A, HFO1224YDz, FC-3284 |
|                   | CO <sub>2</sub> -MZ | Carbon Dioxide (CO <sub>2</sub> ), R744                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| MEASURING RANGE   | HGM-MZ              | All gases 0 to 10,000 ppm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                   | CO <sub>2</sub> -MZ | Carbon Dioxide 0 to 8,000 ppm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| ACCURACY          | HGM-MZ              | 1 ppm Minimum Detectable Level (MDL) (most gases)<br>±1 ppm ±10% of reading from 0-1,000 ppm (most gases)<br>±1 ppm ±2% of reading with field calibration (most gases)<br>±10 ppm ±15% of reading from 0-1,000 ppm (R-11, R-21, R-32, R-113)                                                                                                                                                                                                                                                                    |
|                   | CO <sub>2</sub> -MZ | ±5 ppm ±5% of reading from 0-1,000 ppm, ±10% of reading from 1,000-4,000 ppm, ±15% of reading from 4,000-8,000 ppm                                                                                                                                                                                                                                                                                                                                                                                              |
| TEMPERATURE DRIFT | HGM-MZ              | ±0.8% (R-134a) of reading per degree C between purge cycles                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                   | CO <sub>2</sub> -MZ | Less than 1 ppm per degree C between purge cycles                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

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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