

# MULTI-ZONE REFRIGERANT GAS MONITOR

monitoring for emissions reduction and safety compliance



## LOW-LEVEL REFRIGERANT LEAK DETECTION

- ENABLES COMPLIANCE WITH EPA 608, CARB, F-GAS, ASHRAE 15 & EN 378
- INDUSTRY-LEADING 1PPM MDL
- ACCURATELY DETECTS 60+ REFRIGERANTS



**BACHARACH**<sup>®</sup>

# THE MOST TRUSTED NAME IN REFRIGERANT LEAK DETECTION

detect small leaks before they cause big problems

Bacharach's 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.



## WHAT IS THE IMPACT OF REFRIGERANT LEAKS?

**ENVIRONMENTAL  
IMPACT**



**COST OF  
REFRIGERANT**



**SAFETY  
COMPLIANCE**



## 1ppm Minimum Detection Level (MDL)

- Industry-leading 1 ppm Minimum Detectable Level (MDL) identifies leaks early to mitigate refrigerant loss.
- Proprietary infrared (NDIR) sensor accurately detects 60+ different refrigerants, including CFCs, HFCs, HCFCs, HFOs and natural refrigerants.
- Measurement unaffected by cross contamination from other gases and / or changes to temperature or humidity.
- Monitors also available for carbon dioxide (CO<sub>2</sub>) and ammonia (NH<sub>3</sub>).

## Up to 48 Sample Points

- Multi-Zone units available providing low level leak detection for 4, 8, 12 and 16 zones.
- Splitter kits are available to expand a single zone feed by up to 3 times, allowing up to 48 sample points in total for the 16 zone system.

## Site-wide Leak Detection

- Industry-leading sampling times / distances with high performance pump (up to 1,200 ft / 365 m).
- Maintains performance in temperatures as cold as -40°F / C (sample point).
- Capable of monitoring multiple refrigerants with a single detection system.

## Related Products

### Single-Zone Refrigerant Gas Monitor



- 1 ppm Minimum Detectable Level
- No calibration required, minimal maintenance

### PGM-IR Portable Refrigerant Monitor



- 1 ppm Minimum Detectable Level
- Unaffected by cross contamination and / or changes to temperature or humidity
- 60+ refrigerants accurately detected

### Parasense Cloud-Based Remote Monitoring



- Reduce operating costs by reducing emissions
- Refrigerant tracking and compliance
- Effective enterprise management

PRODUCT /  
SERVICE LOSS



ENERGY  
CONSUMPTION



# Gas Detection Library

CO	HFO1336E	R-717 (Ammonia)	R-125	R-402A	R-422D	R-454B
CO <sub>2</sub>	HFO1336Z	R-11	R-134a	R-402B	R-424A	R-454C
FA188	HFP	R-113	R-21	R-404A	R-426A	R-500
FC72	N1230	R-114	R-22	R-407A	R-427A	R-502
H1211	N4710	R-12	R-227	R-407C	R-438A	R-503
H1301	N5110	R-123	R-23	R-407F	R-448A	R-507
H2402	N7100	R-1233zd	R-236fa	R-408A	R-449A	R-508B
HFO1233zd(E)	N7200	R-1234yf	R-245fa	R-409A	R-452A	R-513A
HFO1234YF	N7300	R-1234ze	R-32	R-410A	R-452B	R-514A
HFO1234ZE	N7600	R-124	R-401A	R-422A	R-454A	

Check [www.mybacharach.com](http://www.mybacharach.com) for gas list.

## MULTI-ZONE EXAMPLE: MECHANICAL ROOM CONFIGURATION

- ① MULTI-ZONE
② REMOTE DISPLAY
③ SAMPLE POINTS

