

Chillgard® LE

Photoacoustic Infrared Refrigerant Monitor



*For safety compliance, the Chillgard LE is the complete solution.
Providing the protection you need, without the costly down time.*

Refrigerant monitor with photoacoustic infrared technology provides economical, low level monitoring of refrigerant gases used in most refrigerant systems or chillers.

The best gas sensing technology just got better with the latest enhancement of improved sensor design.

Features

- Complies with ASHRAE 15
- Minimum detection level 20 ppm
- Single-point or 4-point models
- Water- and corrosion-resistant plastic enclosure
- 4 internal relays: fault and 3 alarm levels
- 85 dB horn with 100 dB option
- Easy to install, operate, and maintain

WE KNOW WHAT'S AT STAKE.



Typical installation. Multiple sampling points surround the chiller for maximum protection.

Chillgard LE Monitors provide fast, reliable detection for low-level leaks of refrigerants, helping to prevent major losses of costly refrigerant gas. Standard 4-20 mA analog output can be connected directly to any existing building automation system (BAS) or other controller to provide leak indication prior to workers entering rooms containing refrigerant gas. Relay contacts can be used to turn on fans or other ventilation and signaling devices. Additionally, integral display, status LEDs, and optional strobe provide workers with visual indication of status and refrigerant level in their work area.

Sensor Technology

Chillgard Series Monitors use very stable and highly selective photoacoustic infrared (PAIR) technology to sense refrigerant gases. Chillgard LE Monitors can operate for months with virtually no zero drift. Inherent stability eliminates the requirement of various auto-zeroing techniques that take monitors off-line at regular intervals. Installation of a fresh air sampling line or on-line scrubber is not required with Chillgard LE Monitors. These units have high immunity to interferants such as cleaning agents and solvents, with minimal effect due to changes in humidity. Both issues are typical sources of false alarms when using other sensing technologies.

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 operates in over 40 countries worldwide. To find an MSA office near you, please visit MSAsafety.com/offices.

Technical Specifications	
STANDARD REFRIGERANTS DETECTED	R123, R134a, R11, R12, R22, R404A, R407C, R410A, R507, R1234YF
OPERATING RANGE	0-1000 ppm
MINIMUM DETECTABILITY	20 ppm
LINEARITY	0-100 ppm linear, 101-1000 ppm ±5% of reading
WARM-UP TIME	10 minutes
RESPONSE TIME	50% of step change in <60 seconds
OPERATING TEMPERATURES	0° to 40°C (32° to 104°F)
STORAGE TEMPERATURE	-40° to 60°C (-40° to 140°F)
OUTPUTS	0-10 V (point identification) and 4-20 mA analog, RS-232 with datalogging*
RELAYS	4 form C SPDT, 8 amps at 240 VAC
RELATIVE HUMIDITY	0 to 99%
OPERATING POWER OPTIONS	STANDARD 24 VAC/DC OPTIONAL 110/220 VAC
PHYSICAL	14.7" x 11.2" x 5" (H x W x D) (373 x 284 x 127 mm)
APPROX. WEIGHT	9.5 lbs. (4.3 kg)
WARRANTY	2 years
APPROVAL	UL, complies with ANSI/ASHRAE 15
PUMPED UNITS	
MINIMUM SAMPLE FLOW RATE	0.75 liters/min.
MAXIMUM TOTAL TUBING LENGTH	300 ft. (91 m)

*optional Modbus or BACnet with gateway

Applications

- Mechanical equipment rooms
- Propellant-filling operations
- Solvent cleaning stations
- Cold storage and transport facilities
- Meat packing plants
- Supermarkets and refrigerant storage locations
- Other specialty applications using halocarbons

Accessories

- Unit-mounted strobe (P/N 634674)
- Remote light towers
- Calibration kits
- Remote display