

Chillgard® LE Photoacoustic Infrared Refrigerant Monitor



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

Now with micro-machined optics, ultimate reliability, and two-year warranty.

The best gas sensing technology just got better through the latest advancements in micro-machined component technology. The highest quality components setting new standards for consistency and repeatability are used to provide optics with optimal reliability.

Features

- › Standard gases detected: R123, R134a, R11, R12, and R22; other refrigerants are available
- › Minimum detection level 20 ppm
- › Single-point pumped or diffusion, or 4-point pumped 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



Chillgard LE Monitors provide fast, reliable detection for low level leaks of refrigerants, helping to prevent major losses of costly refrigerant gas. Standard 4-20mA 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 (PIR) 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.

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 *(Call 1-800-MSA-INST)*

Unit-mounted strobe	634674
Remote light towers	
Calibration kits	
Remote display	

Typical Specifications:

Standard refrigerants detected:	R123, R134a, R11, R12, R22
Operating range:	0-1000 ppm
Minimum detectability:	20 ppm
Linearity:	0-100 ppm linear, 101-1000 ppm $\pm 5\%$ of reading
Warm-up time:	10 minutes
Response time:	50% of step change in less than 60 seconds
Operating temperatures:	0 to 40° C (32 to 104° F)
Outputs:	0-10V (point identification) and 4 to 20mA analog, RS-232 with datalogging
Non-operating temperatures:	-40 to 60° C (-40 to 140° F)
Relays:	4 form C SPDT, 8 amps at 240 VAC
Relative humidity:	0 to 99%
Operating power options:	24 VAC/DC standard, 110/220 VAC optional
Physical:	14.7" high x 11.2" wide x 5" deep
Approx. weight:	9.5 lbs.
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.

Ordering Information

A Chillgard LE Monitor ATO form is available in the MSA Preferred Products Catalog. Call 1-800-MSA-INST (1-800-672-4678) to obtain a copy of the MSA Preferred Products CD.



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



Note: This bulletin contains only a general description of the products shown. While uses and performance capabilities are described, under no circumstances shall the products be used by untrained or unqualified individuals and not until the product instructions including any warnings or cautions provided have been thoroughly read and understood. Only they contain the complete and detailed information concerning proper use and care of these products.



ID 07-0008-MC / October 2011

© MSA 2011 Printed in U.S.A.

Corporate Center
1000 Cranberry Woods Drive,
Cranberry Township, PA 16066 USA
Phone 724-776-8600
www.MSAnet.com

U.S. Customer Service Center
Phone 1-800-MSA-INST
Fax 1-800-967-0398

MSA Canada
Phone 1-800-672-2222
Fax 1-800-967-0398

MSA Mexico
Phone 01 800 672 7222
Fax 52-44 2227 3943

MSA International
Phone 724-776-8626
Toll Free: 1-800-672-7777
FAX 724-741-1559

Offices and representatives worldwide
For further information:

MSA
The Safety Company