

Chillgard® LS Photoacoustic Infrared Refrigerant Monitor

Ti Techingenium

Distribuidores autorizados para Uruguay
Venta - Ingeniería - Instalación - Mantenimiento
Francisco Sosa 1531
Montevideo Uruguay
Teléfono: +598 2 707 48 01
Mail: info@techingenium.com.uy
www.techingenium.com.uy



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 which set new standards in consistency and repeatability are used to provide optics with optimal reliability.

Features

- Standard gases detected: R123, R134a, R11, R12, and R22. Other refrigerants available
- Minimum detection level 20 ppm
- Available in single-point diffusion or 4-point pumped models
- Water-resistant and corrosion-resistant plastic enclosure
- 5 LEDs indicating power, fault, and 3 levels of alarm
- Easy to install, operate, and maintain

MSA
The Safety Company

Chillgard LS 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. With integral status LEDs and optional strobe, workers are provided with visual indication of status and refrigerant gas levels within their work areas. Chillgard LS Monitors, part of MSA's Chillgard Series family of products, are designed to monitor for loss of refrigerant gases within many applications.

Sensor Technology

Chillgard Series Monitors use very stable and highly selective photoacoustic infrared (PIR) technology to sense refrigerant gases. Chillgard LS 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 LS 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.

Typical Specifications: Single-point Diffusion Model

Standard refrigerants detected	R123, R134a, R11, R22, R-12
Typical 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)
Non-operating temperatures	-40 to 60°C (-40 to 140°F)
Relative humidity	0-99%
Operating power options	24 VAC/DC standard, 110/220 VAC optional
Output	4 to 20 mA and RS 485 Modbus (Chillgard LC controller)
Physical	7.1" x 10" x 4.25"
Weight	5.5 lbs.
Warranty	2 years
Approval	UL compliant with ANSI/ASHRAE 15

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)

Calibration box	10035292
Unit-mounted strobe	634674
Remote light towers	
Calibration kits	
Chillgard LC Control Module –	see bulletin #07-0009-MC for more information
Remote Displays	

Typical Specifications: 4-point Pumped Model

same specs as single-point except for:

Minimum sample flow rate	0.75 liters/min.
Maximum total tubing length	300 ft.
Physical	14.7" x 11.2" wide x 5" deep
Weight	9.5 lbs.



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 07-2042-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