# **HALOGUARD®** IR

Maximum Performance Photoacoustic Infrared Refrigerant Monitoring for Conservation Applications



Complete Submittal Information online:

www.thermalgas.com

Photoacoustic Infrared Technology Enhances Selectivity & Sensitivity for:

- Refrigeration Equipment
- Machinery Rooms
- Cold Storage Areas
- Process Cooling

THERMAL GAS Systems inc.

Haloguard® Monitors

- Provides highly selective, very sensitive 1 ppm detection for all refrigerants.
- Meets ANSI/ASHRAE Standards 15 & 147, and all Mechanical, Fire & Building codes
- Single or multigas
- Single or multipoint sensing
- Alerts service personnel
- Features remote notification
- Upgradeable to newer refrigerants
- Reduces refrigerant loss
- Controls exposure risk

### HALOGUARD<sup>®</sup> IR

Highly Selective, Very Sensitive 1 ppm Photoacoustic Infrared, 24-hour Refrigerant Leak Detection & Notification

The HALOGUARD® IR combines advanced microprocessor based digital signal processing and a highly selective and sensitive photoacoustic infrared cell to provide the newest, most sensitive system for continuous monitoring of any refrigerant gas.

The HALOGUARD® IR monitors single or multiple, local and remote locations and provides notification when gas concentration reaches preset alarm levels. Add individual, simultaneous monitoring of up to 3 different gases and up to 24 sample points by adding optional channel scanners and remote IR modules.

Alarm relays and analog outputs are designed to activate remote devices or to interface with an energy management (EMS) or building automation (BAS) system.

To find out more, contact Thermal Gas Systems today.

#### **Features**

- Detects all refrigerants & heat transfer fluids
- Simple installation
- Factory calibrated & programmed
- Up to 500 ft. sample draw
- Six user adjustable alarms between 10 ppm & 100% of scale, one Fault Alarm
- LCD shows PPM Concentration, Alarm, Test, Reset, and Fault Diagnostics
- Three flashing alarm level LED's
- Fault, Ready & Power ON/OFF LED's
- Seven alarm relays for ventilation, damper or remote notification
- Alarm Test & Reset/Silence push buttons
- High-intensity audible alarm
- Rugged enclosure

#### **Options**

- 2, 4 or 8 channel scanner
- Analog output for BAS/EMS interface or data logging
- Remote IR sensor modules allow up to 24 sensing points
- Oxygen depletion sensor
- Amber strobe light alarm
- Remote strobe light & horn alarms
- Vacuum florescent display
- Gas calibration kit
- NEMA 4 enclosure

#### **Specifications**

	Technology	Photoacoustic Infrared
	Electrical Supply	.100-240V, 50-60Hz, 65W
	Fuse	3A/240V, fast acting
	Output Signal	Std: 7 x 10A, dry contact SPDT relays Opt: 0-5,10 VDC, 4-20mA analog Opt: BACnet Interface Module
Sensitivity1 ppm		1 ppm
	Resolution	1 ppm
	Measuring Range	0 - 1000 ppm all refrigerants
	Response Time	<1 minute per channel
	Clearing Time	<2 minutes per channel
	Maximum Sample Point Tubing Length	150' with standard performance. 500' optional where slower response is acceptable.
	Operating Conditions	32°F to +120°F, (0°C to +50°C) non-condensing
	Enclosure: Std: NEMA 12 Opt: NEMA 4	
	Sample Rate	1.5 Lpm in free air

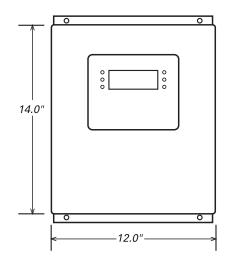
Electrical Safety Conforms to UL/CSA/EN 61010-1

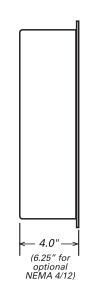
Electromagnetic Compatibility Conforms to FCC Part 15 B, ICES-003:ISSUE 5, ANSI C63.4:2009 and EN 61326-1



#### Warranty

HALOGUARD® IR is guaranteed for 18 months from the date of shipment. Any device found defective in that period will be repaired or replaced free of charge. Read terms and conditions of sale for complete warranty information.





## THERMAL GAS Systems inc.

11285 Elkins Road, Bldg #H-1 • Roswell, GA 30076 USA Tel: (770) 667-3865 • Fax: (770) 667-3857 www.thermalgas.com