

# HALOGUARD®

Refrigerant Leak Monitor



Visit our website at:  
[www.thermalgas.com](http://www.thermalgas.com)



Detects CFC's, HFC's and HCFC's.  
Provides continuous detection  
and notification for...

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

Provides non-selective PPM detection  
for CFC, HFC and HCFC refrigerants.

- Meets ASHRAE Std. 15-1994 & Canada Std. B52-95
- Reduces refrigerant loss
- Protects sensitive inventory
- Alerts service personnel
- Enables scheduled maintenance
- Features remote notification
- Controls exposure risk

**THERMAL GAS *Systems* inc.**  
Haloguard® Monitors

# HALOGUARD

## Single Gas 24-hour Refrigeration Leak Notification Systems

HALOGUARD is the cost-effective, reliable way to reduce costly refrigerant leakage. With a HALOGUARD Leak monitor installed, you quickly know where the leak is located and how much refrigerant you are losing. This exclusive early warning system detects leaks in a designated area and flashes a bright red LED when parts-per million (PPM) reaches the alarm level you preset. With a dialer or other remote signal hookup, maintenance personnel will know immediately when and where a leak occurs. Repairs can be made quickly, before you lose costly refrigerant or perishable products. An optional analog output is available to interface with EMS/BMS systems.

### Features

- **Simple installation, easy field calibration**
- Remote sensor with 6 ft. instrument cable and DIN plug, extendable to 300 ft.
- Audible alarm
- LCD shows PPM Concentration, Alarm, Test, Reset, Sensor Fault and Low Battery
- 2 user alarms adjustable between 10 - 100% of scale
- Off-scale alarm
- **Three flashing alarm LED's**
- Sensor Fault LED
- Power On/Off LED
- Four alarm relays for ventilation, dialer or remote **notification**
- Alarm Test and Reset push buttons
- Rugged NEMA 4/12 plastic enclosure
- Dependable, solid-state electronics

### Options and Accessories

- Strobe light alarm
- Analog output for BAS/EMS interface or data logging
- Gas test kit
- Battery back-up
- Automatic calibration

### Specifications

Technology.....	CMOS
Electrical Supply.....	115-230v, 50-60Hz
Output Signal.....	Std: 4 x 3A, dry contact Opt: 0 - 10V DC or 4 - 20mA analog
Accuracy.....	10% Full-scale
Response Time.....	<1 minute
Recovery Time.....	<3 minutes
Sensor Life.....	+5 years
Measuring Range.....	0 - 1000 ppm CFC, HFC, HCFC (except R123) 0 - 300 ppm R123
Operating Temperature:	
Sensor .....	-20°F to +110°F non-condensing
Controller.....	0°F to 120°F non-condensing
Materials:	
Enclosure.....	NEMA 4/12 design
Sensor .....	PVC and porous PP filter
Weight.....	6 lbs. (add 4 lbs. for optional battery back-up)

### Exposure Limits

	TLV-TWA* *	CEIL	PEL
R11	•	1000	•
R12	1000	•	1000
R22	1000	•	1000
R134a	1000	•	•
R500	1000	•	1000
R502	1000	•	1000

Other exposure limits are pending  
TLV-TWA = 8hr./day, 40 hr./wk. avg. Short term exposures should not exceed 3-5 times the TWA for more than 30 min./day.  
\* ACGIH trademark

### Warranty

Sensor element is unconditionally guaranteed for one year from the date of shipment. Any sensors found defective in that period will be replaced free of charge. Read terms and conditions of sale for complete warranty information.

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