



GENESIS INTERNATIONAL, INC.

SHERLOCK™

INFRA-RED REFRIGERANT GAS SENSOR FOR WASHDOWN APPLICATIONS



GENERAL

SHERLOCK NON-DISPERSIVE IR REFRIGERANT GAS SENSOR was designed to monitor for the presence of refrigerant gases within an enclosed space. The sensor is mounted within the space to be monitored and connected by cable to a **SHERLOCK**, *Wizard* or EMS System. Each sensor is calibrated to a specific refrigerant gas. The IR comes in two different styles depending upon the monitoring environments: machine room and cold room for refrigerated applications in NEMA 3R Aluminum, or Water-tight ABS fiberglass housing for Wash down protection (NEMA 3R pictured).

The IR Sensor is a reliable method of monitoring for refrigerant gas leaks in environments that have air quality problems. The IR sensor will eliminate many false alarms in environments that contain gasoline, diesel, and propane exhaust and fumes from solvents, paints, cleansers, and others (Please call Genesis Customer Support for more information).

APPLICATIONS

Typical applications include:

- Wineries
- Bakeries
- Refrigerated Rooms
- HVAC Chiller Equipment Rooms
- Refrigeration Mechanical Rooms
- Food Processing Plants

- ENCLOSURE RATING** NEMA 3R ABS Plastic
- DIMENSIONS** Inches (mm) 12 x 7 x 6 (305x178x152)
- OPERATING ENVIRONMENT**
 - TEMPERATURE**
 - Machine Room Model 32°-110°F (0°-43.3°C)
 - Freezer Room Model -40°-110°F (-40°-43.3°C)
 - HUMIDITY** 0 TO 90% RH Non-Condensing
- POWER INPUT**
 - Sherlock / Wizard* 12VDC, 0.4 A
 - Stand-Alone* 10V DC - 36V DC Switching
- OUTPUTS** (Standard) 0 to 20 mA (Sherlock/Wizard)
4 to 20 mA (Standalone Sensor)
- CUSTOM OUTPUTS** (Stand-Alone Only)
 - External 250 Ohm Resistance* 0 - 5V DC or 1 - 5V DC
 - External 500 Ohm Resistance* 0 - 8 VDC or 2 - 8V DC
- EFFECTIVE RANGE** 0 -1500ppm, Control Dependent
- SENSITIVITY** ±1 ppm at 77°F (25°C), 45% RH
- RESOLUTION** 1 ppm
- RESPONSE TIME** Under Than 60 Seconds
- CALIBRATION** Every 6 Months
- WARM-UP TIME** Readings will stabilize after 3 hrs
- LIFE EXPECTANCY** Average of 5 to 7 years in normal environments

AVAILABLE GAS SENSORS (Please Specify Part Number 35-0113 For Washdown Housing and Specific Part Sensor number for correct Refrigerant)

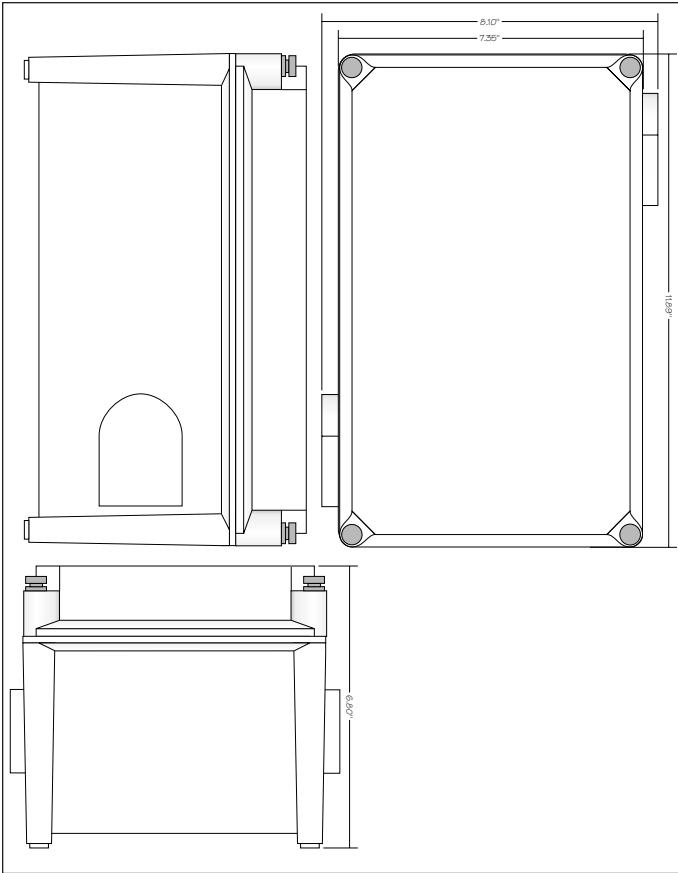
Machinery Room/Walk-In Cooler Application

- R11 - 60-0057 R12 - 60-0104 R22 - 60-0053
- R114 - 82-0260 R123 - 60-0137 R134A - 60-0054
- R402A - 82-0249 R404A - 60-0052 R407C - 60-0214
- R408A - 60-0184 R409A - 60-0066 R410A - 60-0165
- R500 - 60-0067 R502 - 60-0059 R507A - 60-0061
- Ammonia/NH₃ - 600095

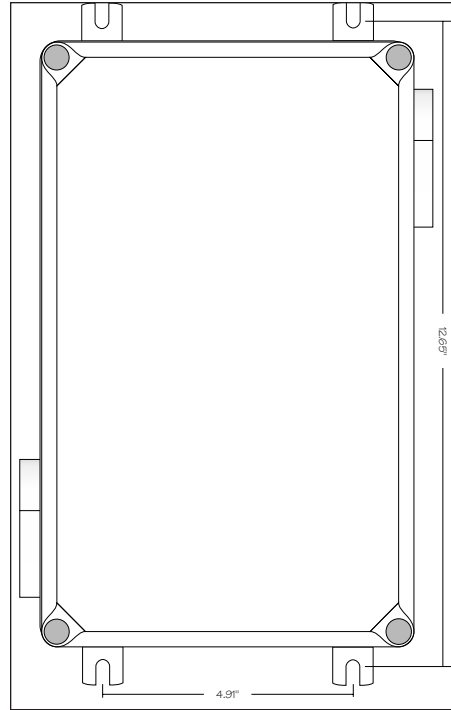
Extended Temperature/Freezer Application

- R-11 - 60-0058 R-22 - 60-0047 R-402A - 60-0142
- R-404A - 60-0051 R-408A - 60-0065 R-502 - 60-0060
- R-507A - 60-0062 Ammonia/NH₃ - 60-0096

Call factory for list of additional refrigerants



DIMENSIONS

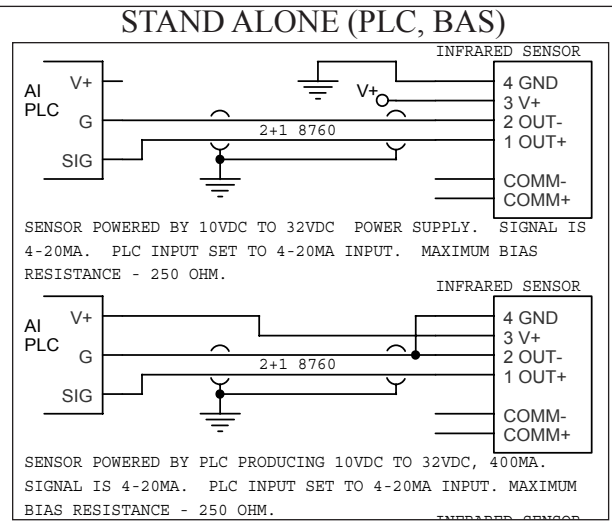
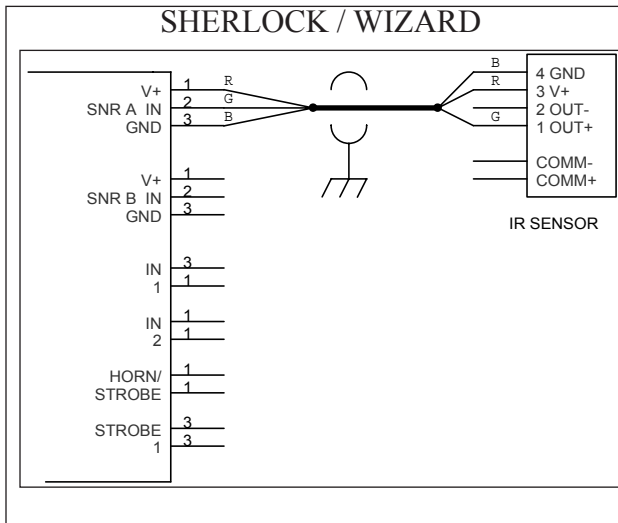


MOUNTING



WARNING!!!! The infrared sensor is not to be applied into all refrigerated storage applications where other toxic gases are used in the same room. Some installations are not suitable for Infrared technology. Misapplication may result in damage to sensor. Contact the factory for a specific list of approved applications.

TYPICAL WIRING DIAGRAMS



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