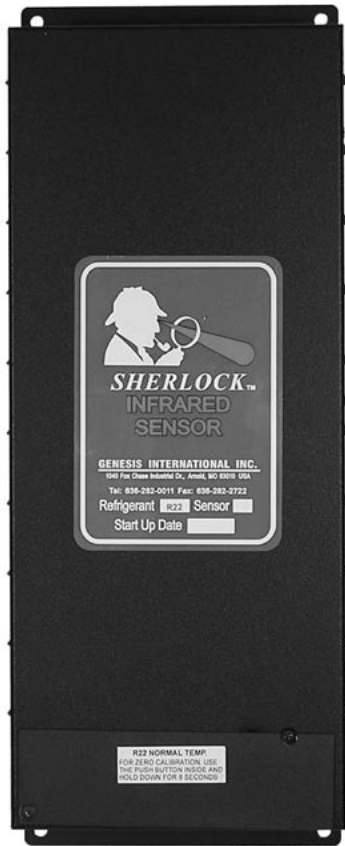




GENESIS INTERNATIONAL, INC.

SHERLOCK™

INFRA-RED REFRIGERANT GAS SENSOR



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 (Pictured). Water-tight ABS fiberglass housing for Wash down protection (NEMA 3R) and Stainless Steel enclosure also available for special applications.

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

SPECIFICATIONS

ENCLOSURE RATING NEMA 3R Aluminum, Black Powder Coat

DIMENSIONS 12.86 x 4.8 x 2.44
Inches (mm) (327 x 122 x 62)

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)

4 to 20 mA (Standalone Sensor)
0 to 20 mA (Sherlock/Wizard)

CUSTOM OUTPUTS (Stand-Alone Only)

External 250 Ohm Resistor 0 - 5V DC or 1 - 5V DC
External 500 Ohm Resistor 0 - 8 VDC or 2 - 8V DC

EFFECTIVE RANGE 0 to 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 (Part Numbers)

Machinery Room/Walk-In Cooler Application

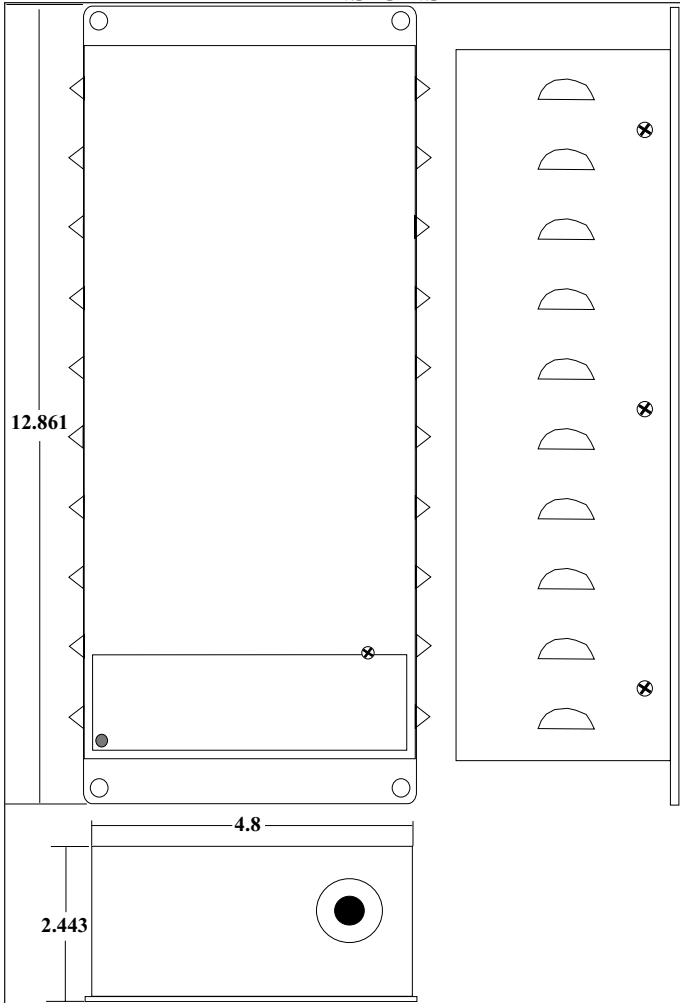
R11 - 60-0057	R12 - 60-0104	R22 - 60-0053
R114 - 82-0260	R123 - 60-0137	R134A - 60-0054
R402A - 82-0249	R404A - 60-0052	R407C - 60-0214
R408A - 60-0184	R409A - 60-0066	R410A - 60-0165
R500 - 60-0067	R502 - 60-0059	R507A - 60-0061
Ammonia/NH ₃ - 600095		

Extended Temperature/Freezer Application

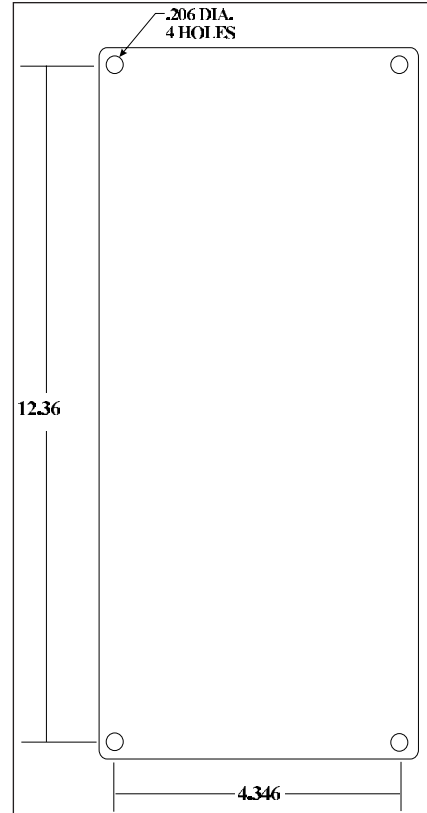
R-11 - 60-0058	R-22 - 60-0047	R-402A - 60-0142
R-404A - 60-0051	R-408A - 60-0065	R-502 - 60-0060
R-507A - 60-0062	Ammonia/NH ₃ - 60-0096	

Call factory for list of additional refrigerants

DIMENSIONS



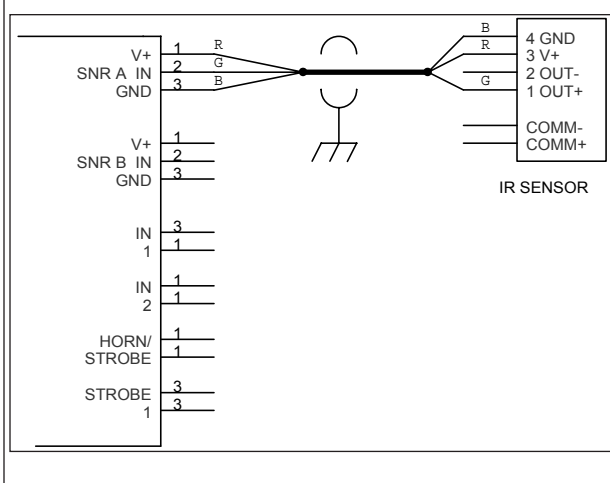
MOUNTING



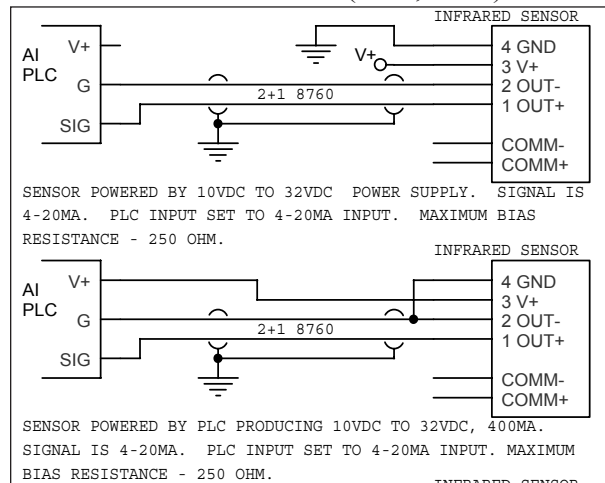
WARNING!!!! The infrared sensor is not to be applied into all refrigerated storage applications where other toxic gases are used in the same room. Some installations are not suitable for Infrared technology. Misapplication may result in damage to sensor. Contact the factory for a specific list of approved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

TYPICAL WIRING DIAGRAMS

SHERLOCK / WIZARD



STAND ALONE (PLC, BAS)



GENESIS INTERNATIONAL, INC.

1040 FOX CHASE INDUSTRIAL DRIVE
ARNOLD, MISSOURI 63010

PHONE: (636) 282-0011
FAX: (636) 282-2722

WEBSITE:
WWW.GENESIS-INTERNATIONAL.COM

EMAIL:
MAIL@GENESIS-INTERNATIONAL.COM