

STANDARD FEATURES

Accurate, low level leak detection

Long life, NDIR sensor with dual beam technology

One 4-20 mA analog or 0-10 V output or user configurable in the field Modbus® RTU RS-485 or BACnet® MS/TP RS-485 digital output signal to a BAS or DDC

Easy Plug & Play Smart sensor replacement, pre-calibrated ready to install

1 SPDT relay 30 volts, 2 amp max

Internal buzzer

USB port for firmware upgrades

CSA, UL, FCC, Listed by BTL



CGAS-IR Detector

INFRARED REFRIGERANT GAS DETECTION

Non-dispersive infrared refrigerant gas detector with accurate, low level leak detection for a wide range of gases commonly used in commercial refrigeration systems.

More than 30+ types of refrigerant gas sensors to choose from, including A2L refrigerants, SF6 and CO2 (R744).

Dual beam, non-dispersive infrared sensor technology overcomes the limitations of solid state refrigerant sensors, accurately detects refrigerant gases without cross interference from toxic or combustible gases and is low maintenance with a longer lifespan.

Infrared gas sensors are low maintenance and have a long life span. They provide the highest degree of sensor accuracy at low gas concentrations in areas where other contamination gases or multiple refrigerants exist in the same area. Infrared refrigerant sensors should not be used in locations that have corrosive chemicals such as chlorine, ammonia and other oxidizers that are present, especially if there is a higher humidity level.

APPLICATIONS

- Supermarkets / Grocery stores
- Walk-in Coolers & Freezers
- Refrigerated Mechanical Rooms
- Commercial Chiller Equipment Rooms
- Food storage / Cold Storage Rooms
- Food Processing Plants
- Food & Beverage Service Facilities
- ...and many more

ANALOG OR DIGITAL COMMUNICATION

CGAS-A-IR Single channel, analog 2-40 mA or 0-10v transmitter

CGAS-D-IR Single or dual channel, digital, user configurable in the field Modbus® RTU RS-485 or BACnet® MS/TP RS-485 transmitter



SAFER AIR EVERYWHERE.

EARLY DETECTION OF REFRIGERANT LEAKS

SAVES LIVES, MONEY AND ENERGY

Early detection of a refrigerant leak helps prevent dangerous health consequences to occupants, reduces significant loss of expensive refrigerant and decreases energy costs. If a leak does occur, a fixed gas detection system permanently installed near the chiller equipment in an area where a refrigerant leak is most likely to concentrate will ensure people will be alerted and kept safe.

The food and beverage industry commonly relies on ammonia refrigeration to provide consumers high quality, edible food and cold drinks. An ammonia leak in a cold storage or freezer room can pose a serious health threat and result in spoiled food and other expensive losses.

There are safety standards in place for the design, construction and operation of mechanical refrigeration and ammonia systems. The goal of these safety standards is to keep the refrigerant or ammonia contained within the equipment and mitigate any potential health consequences on people.

For a refrigerant system, a gas detector with the appropriate refrigerant gas sensor should be mounted 10 in to 18 in (25 cm to 43 cm) off the floor in an area where a refrigerant leak is most likely to concentrate.

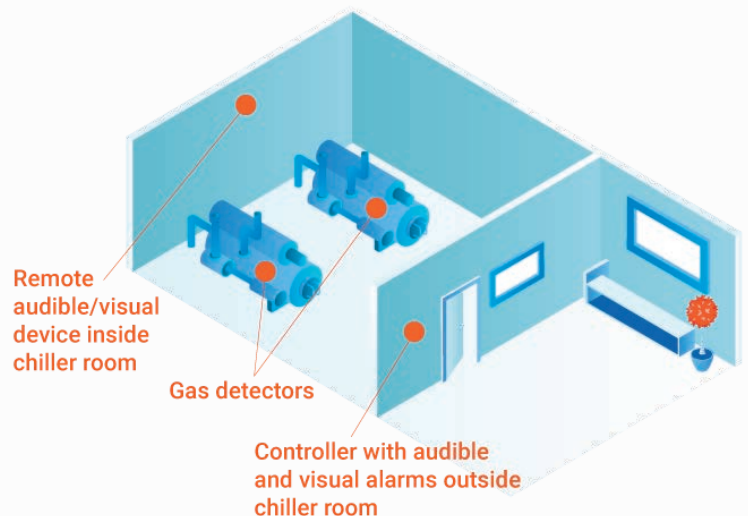
For an ammonia system, a gas detector with an ammonia sensor should be mounted on or near the

ceiling in an area where an ammonia leak is most likely to concentrate.

More than one gas detector may be required depending on the size of the room, airflow patterns and room configuration.

Outside the main machinery room door, should be mounted a Controller with a top mounted strobe and a manual shut off switch. The Controller will provide a visual confirmation of the gas readings inside the room. The top mounted strobe will activate should the gas detector go into alarm and the manual shut off switch can be configured to shut off mechanical equipment inside the room.

A remote display connected to a remote horn/strobe should be mounted outside each door that accesses the machinery room. The remote display will provide visual confirmation of the gas readings inside the room. The gas detector(s) inside the room should be configured to trigger an audible and visual alarm mounted inside the machinery room and outside each entrance door to the room.



CODES / STANDARDS:

CSA B52-05, ASHRAE 15 AND 34, EN 378