

Air Conditioning in Hotel Rooms

Solid State Refrigerant CGAS Detector For Public Spaces

Peace of mind. Guaranteed.

Continuous monitoring of potential refrigerant leaks from air conditioning units in hotel rooms.

Many hotel rooms are equipped with air conditioning units to maintain a comfortable environment in which guests can relax and enjoy their stay. Air conditioners use refrigerant gas in their cooling operation. There is the potential for the refrigerant to leak out into the room, evaporating into a gas that is harmful for humans to inhale. In addition, the damage a leak can cause to the air conditioner components and the loss of refrigerant add up to costly bills for the hotel owner. A refrigerant leak can occur if the air conditioning unit isn't performing properly due to wear and tear from continual use, improper operation, inadequate maintenance or any other cause.

To ensure the health and safety of guests and to reduce the potential costs if a leak were to occur, Critical Environment Technologies' **CGAS** Detector for public spaces offers the best monitoring solution for either VTAC or PTAC applications.

If a leak is detected, the **CGAS** will communicate with a controller or Building Automation System (BAS) which will then trigger a predetermine response such as quickly switch off the air conditioner and implement an emergency response process.



The CGAS Detector for indoor public spaces is ideal for continuous monitoring of refrigerants in hotel rooms where high efficiency, high volume refrigerant cooling and heating system are used to keep the indoor environment comfortable. The low profile, aesthetically pleasing enclosure is designed to reduce the noticeability of the device by the public eye. It is secured by a mounting plate that can be mounted proud of the wall or flush with the wall using a junction box. The CGAS Detector is available with analog or digital output for communicating with a controller or BAS.



In packaged terminal air conditioner (PTAC) applications, the remote sensor model offers flexible placement options for the sensor, making it easier to place the sensor as close to the potential leak area as possible. The remote sensor should be mounted near the air conditioner coil and connected to the CGAS Detector with 18 awg wire stranded in conduit. The maximum length of wire between the remote sensor and the transmitter should not exceed 50 ft (15 m).

For vertical terminal air conditioner (VTAC) applications, the internal sensor model is ideal for mounting flush with the wall, 6 in / 15 cm from the finished floor close to the air conditioning unit.

The CGAS Detector has configurable Low, Mid and High alarm setpoints.

The alarm setpoint value entered is the exact number/level of gas concentration at which the device will indicate an alarm condition and send a signal to the controller or Building Automation System (BAS) which in turn will trigger an alarm device and/or whatever emergency protocol is required to warn of the hazard and keep occupants safe.

cGas Detector Model Name	Output to BAS	Sensor Style
CGAS-AP-SR410A	4-20 mA analog	internal
CGAS-AP-RD +ESH-B-SR410A	4-20 mA analog	remote dongle
CGAS-DP-SR410A	Modbus® RTU RS-485 or BACnet® MS/TP RS-485	internal
CGAS-DP-RD +ESH-B-SR410A	Modbus® RTU RS-485 or BACnet® MS/TP RS-485	remote dongle

Other refrigerant gases may be available

