

# AD-em

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## Microprocessor Controlled Gas detector

The AD-em is a microprocessor controlled refrigerant gas leak detector specifically designed for use in hotel rooms, office accommodation and residential properties.

The detector is compact and the modern styling allows it to be discreetly located within the room.

Each AD-em will continuously monitor for any escape of refrigerant into the room to provide early indication of problems before the health and safety limits are exceeded.

### Technical Overview

#### Operation

After power up the green led will flash during the warm up phase and after approximately 5 minutes will be permanently illuminated to indicate normal operation. In the event of an alarm the led will flash red/amber and the buzzer will pulse. An alarm relay with volt free contacts is also de-energised. When the refrigerant concentration falls the LED will automatically return to constant green and the relay is energised.

#### Two Alarm levels

The AD-em is configured for two alarm thresholds; a small leak for a long period of time and a larger refrigerant leak for a short period of time. This enables the device to comply with both the Health and Safety long term exposure limits (EH40) and the Practical limits as defined in EN378:2008 for total personnel protection.

### Features at a glance

- » Detects all common HFC-gases
- » Two alarm levels
- » LED indication
- » Built in buzzer
- » Fail safe alarm relay contacts
- » Factory calibrated
- » Stand alone unit
- » Optional central alarm monitoring unit available upon request



#### Location

Correct location of the detector is essential otherwise delays in the reporting of gas leaks may occur. As HFC refrigerants are heavier than air, the detector must be mounted at low level. It should be located away from fresh air inlets and in the room with the air conditioning unit.

#### Technical Information

Housing	White Plastic
Power	12-24V AC/DC
Indications	3-coloured LED
Alarm Relay	Contacts rated at 24 VAC; 1 amp
Buzzer	85 dB 2300Hz (+/- 300Hz)
Size	85mm x 85mm x 32mm
Weight	85 grams
Power consumption	Max 100 mA, normal 40 mA
Factory Calibrated	Standard calibration for refrigerant 407c. Other refrigerants available on request.

#### Accessories

##### IMEC-RAD

Up to 32 Ad-em gas detectors can be interfaced to the Imec-RAD to provide visual indication of alarm status.



The Imec-RAD has an ethernet interface enabling configuration and remote visibility across a LAN using a web browser. A common alarm relay on the Imec-RAD can be used to initiate a pump down of the refrigeration system or communicate the fault to a building management system.