

ENGINEERING TOMORROW

### Monitor a wide variety of refrigerants with our innovative Gas Detectors

The Danfoss Gas Sensor is a state-of-the art fixed gas detector which can detect a wide range of different gases. The sensors can be used on a stand-alone basis and integrated into your Refrigeration Control System or Building Management Systems.







## **PGM-IR** Portable Gas Monitor

## Portable Gas Monitors

The PGM-IR is designed to **detect, measure, and display** the concentration of refrigerant gas in the area being monitored. To ensure accurate gas measurements, the monitor self-zeros every four minutes using an external supply of fresh air provided by activated carbon filtering.



During normal operation the Refrigerant Monitor displays both the current gas level and the peak gas level detected on its front LCD panel.

The monitor retains a log of previous readings that can be easily accessed at a later time for analysis.

a variety of gases and independent leaks (small), spill (medium), and evacuation (large) levels may be designated for each zone. The instrument also retains a log of previous readings that can be easily accessed for analysis.



## Gas Detectors

Danfoss Gas Detectors are a range of products designed to meet all industrial and commercial refrigeration and air conditioning application requirements. Typical refrigerant gas applications include Halocarbons - HFCs, HCFCs, CFCs, Carbon Dioxide, and Hydrocarbons. DGS is available in IP41 and IP66 versions.

## **HGM-400** Halogen Gas Monitor Gas Monitor

HGM-400 is specified to support compliance to federal, state and local safety codes governing emissions. The Danfoss Multi-zone monitor provides continuous monitoring of gas levels in up to 16 separate test zones. The instrument is **easily programmed** to monitor

## DGS-SC Gas Sensor

## Gas Sensor

DGS helps to comply to environmental F-Gas Regulations and Health & Safety requirements, on new or existing systems in supermarkets, process refrigeration plants, refrigerated storage/ warehousing, special applications areas/zones.

### **Functions:**

- Utilizing either Semi-Conductor (SC) or Infrared (IR) technologies (only available for CO<sub>2</sub> versions).
- DGS gives quick and immediate response in detecting a wide range of different gases typically applied in Refrigeration & Air Conditioning systems.



DGS sensors can be used stand-alone or with integrated systems. Danfoss ADAP-Kool® refrigeration control and monitoring system and/or Building management systems provide continuous real time automatic monitoring of the sensors.

Danfoss Gas Detectors offer absolute confidence that both safety and compliance **requirements are met or exceeded.** 



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# One family for your various needs...

#### Only available for HGM-400

- Optional models: LCD display, IP65 enclosure, EExd (Explosion Protected)
- Two digital outputs low level and high level alarm
- Manual or automatic alarm reset optional
- Detects, measures, and displays the level of refrigerant gas in the area being monitored
- Automatically logs up to 200 gas readings that can be printed/plotted for analysis
- Eliminates false alarms with use of non-dispersive IR source and sample draw system
- Extensive self diagnostics, providing both visual and audible indications when a fault occurs
- Battery powered, providing 8-12 hours of operation

Avoiding

Safety Risks, which also

- Protects the Environment

Reduces equipment replacement cost Maintains equipment

efficiency Promotes Safety



#### All models

- Gas Detector is specifically developed for refrigeration applications
- Interchangeable precalibrated sensors
- Can operate as stand-alone product
- Linear analog outputs, current (mA) / (V) proportional to the gas concentration
- Adjustable setting for alarm levels and output contacts with optional NO or NC switches
- Alarm levels can be set locally
- Gas Detectors can be monitored by integrating them into an existing or New ADAP-KOOL Controls Solution.
- Available with a range of different sensor technologies to monitor refrigeration gases: electro-chemical, semi-conductor, catalytic and infra-red
- Measures all gases up to 10.000 ppm with a sensitivity of 1 ppm
- Visual and audible gas alarm indicators that are turned "ON" when the detected gas level exceeds a user defined trip-point

## Typical **Applications**

- Commercial refrigeration
- Cold Storage Facilities
- Supermarket/Hypermarket
- Distribution Centers
- Air Conditioning
- Chillers

#### Please contact your local Danfoss office for further information

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