



FEATURES AT A GLANCE

- 'Mix & Match' a combination of pre-calibrated CO₂ & HFC sensors
- Green / Red LED display for indication of system health and alarm levels
- User defined:
 - Alarms
 - Outputs
 - Communications
 - Power supply
- Up to 2 relays and 2 analogue outputs
- Wide application use due to operating temperature versatility

APPLICATIONS

- Retail Convenience Stores
- A/C Systems
- Chiller Plant Rooms
- Production & Distribution Facilities
- Hotels
- Hospitality

GASES ANALYSED

HFC

CO₂

RefDetec

The RefDetec is a fully configurable, stand-alone refrigerant gas leak detector for dual gas detection of CO₂ & HFC's which has been robustly designed for the refrigeration and air conditioning industry.

The RefDetec offers user defined gas alarms, outputs, communications and power supply options to give a refrigerant leak detector that's adaptable to your leak detection needs with the aim of minimising costs.

The RefDetec is ideal for applications where continuous monitoring is required to meet compliance under the BREEAM & F-Gas Regulations

- Retail convenience stores with chilled storage
- Chiller plant rooms in production and distribution
- Buildings that use A/C systems e.g hotels, hospitality

BENEFITS

- **Fully Configurable to Your Needs** – User defined gas alarms, outputs, communications and power supply options
- **Compliance** – Early detection of refrigerant gas leaks help minimise emissions and costs. The RefDetec complies with BREEAM & F-Gas Regs
- **Flexible Connectivity** – The RefDetec is able to interface with most commonly used control systems and building management systems using TCP/IP or Modbus interfaces
- **Minimal Installation** – Ideal for applications where only a small number of points are required. More cost effective to install than buying a multipoint sampling system
- **System Back Up** - Can be used to provide 100% back up to a multipoint sampling system. For example the *Automatic Refrigerant Sampling System*

Technical Overview

Low Installation Costs

The RefDetec is perfect for applications requiring a simple, quick and cost-effective installation. The detector has been designed with the aim of minimal installation costs, through innovative design to offer a tailored solution to customer specific requirements.

Enhanced Connectivity

The RefDetec incorporates up to two analogue outputs (4-20mA and/or 0-10mV). Furthermore, volt free relays, Modbus (RS485 or RS232) or TCP/IP (Ethernet) ensure ultimate flexibility. Its future proof design will allow for wireless transmission.

Fully Flexible Configuration

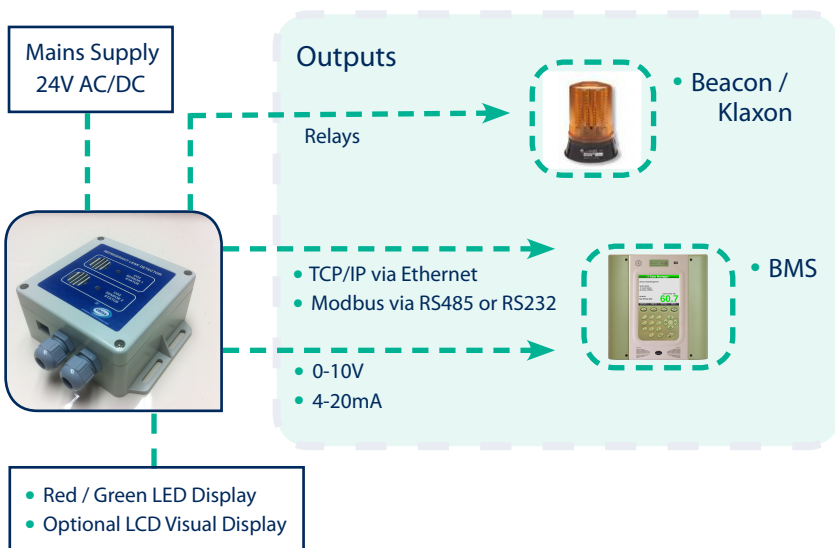
The RefDetec utilises innovative and high speed gas sensors housed in a robust, hard wearing, non-flammable casing. Fully configurable visual alarms, are presented in a coloured LED display unit and optional sounder to give an indication of alarm points. An optional LCD display is available to present detailed gas readings, fault status, or alarm.

Easy Operation

Once the gas detector has been turned on, a green LED will illuminate to indicate that the unit is fully operational. The detection system has two levels of alarm; a flashing red LED for a low-level gas alarm and a solid red LED for high-level alarm.

Calibration & Replacing Sensors

Intuitive calibration software makes on-site calibration quick and easy. Each gas sensor is fully factory calibrated and modular in design with sensor specific information relating to the gas range and gas sensor type stored on the PCB. The a1-cbiss Service Centre can provide onsite calibration and annual service.



TECHNICAL SPECIFICATION

LED INDICATION

- Green - OK
- Flashing Red - Low Alarm
- Solid Red - High Alarm

AUDIBLE

- Buzzer or None

COMMUNICATIONS

- TCP/IP via Ethernet
- Modbus via RS485 or RS232

WEIGHT & DIMENSIONS

- 148mm(W) x 120mm (L) x 60mm(H)
- Weight: 400g

POWER

- Power Source: Mains Powered or 24v DC

OPERATING TEMPERATURE

- -30°C to +60°C
- Suitable for Extreme Temperatures
e.g. Freezers & Cold Rooms

SENSING ELEMENTS

- CO₂ NDIR
- HFC Heated Tin Oxide or IR

OUTPUTS

- Up to 2 Relays
- Up to 2 Analogue Outputs
- (4-20 mA and/or 0-10mV)

GASES DETECTED

- Up to 2 Sensors - CO₂ (0-3%),
HFC (0-2000ppm) or Both
Dual Redundancy Sensing

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Cert No. 996
ISO 9001



REFRIGERANT LEAK DETECTION SOLUTIONS