

# Fixed and Portable Detectors

Murco specialises in the refrigeration industry and has models and versions to suit all the requirements of that industry, including all refrigerant gases and all typical applications. Additionally we have sensors for most common toxic and combustible gases.

We utilize all available technologies and so are well placed by virtue of our quality, flexibility, and value for money to meet all competitors worldwide.

## Fixed Gas Detectors

There are two types of fixed/static gas detectors: (a) Remote sensors (b) Air sampling (aspirated) systems. Both types of systems may be suitable depending on the size of the installation, the number of points to be monitored and the relative cost of both systems.

### Remote sensors:

With remote sensors you place a sensor in the air space you wish to monitor with a hard wire connection back to the central controller or BMS so that you have a continuous signal from the area. The sensor is constantly exposed to the atmosphere it is monitoring.

### Air Sampling systems:

An air sample is sucked back through narrow bore plastic tubes from the point being monitored to a central cell and analysed there. This approach tends to be used with cells such as infrared in order to reduce the overall system cost by reducing the number of sensors required.

## Portable detectors (leak detectors)

Portable instruments are sensing instruments that may continuously monitor while being carried from place to place. They are typically used for personal safety or leak seeking. These are usually hand-held devices that require trained operators, regular care, maintenance, and calibration. There are a variety of types each suited to different circumstances: type of gas, industry and application. For eg. ; Soapy water, Sulphur candles, Litmus paper, Halide torches, Ultraviolet lamps with injectable dyes, Ultrasonic detectors, Flame ionisation detectors. Bacharach manufacture portable detectors for further information visit their website [www.bacharach-inc.com](http://www.bacharach-inc.com).

Fixed and portable detectors are complementary. For instance, in Europe, the Standard EN378 requires the use of fixed gas detectors to continuously monitor refrigeration plant rooms, and alarm on any leakage of refrigerant. Should the system go into alarm, portable instruments need to be used to pinpoint the source of the leak. The F Gas regulation requires regulator checks with portable detectors



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