

REFRIGERANT GAS MONITORING

The importance of early leak detection



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measuring up

REFRIGERANT GAS MONITORING



Detecting refrigerant leaks saves you money, saves the environment and eliminates a health risk. Kenelec Scientific can show you how.

Finding refrigerant leaks early can save you money as low levels reduce the efficiency of your air conditioner, can cause the compressor to fail and can even freeze the evaporator coil. Many refrigerants (e.g. R22) are CFCs and will damage the Ozone layer if released into the atmosphere. From a health perspective, some refrigerants are toxic to health (e.g. ammonia) and others, even though non-toxic at low levels, can cause health issues such as nausea, headache and even asphyxiation at very high levels.

So it is important that you detect refrigerant leaks early. Kenelec Scientific, through our international supplier Critical Environment Technologies (CET), can provide you with a range of solutions to reliably monitor and warn if there is a leak.

Sensor technology for detecting Refrigerants

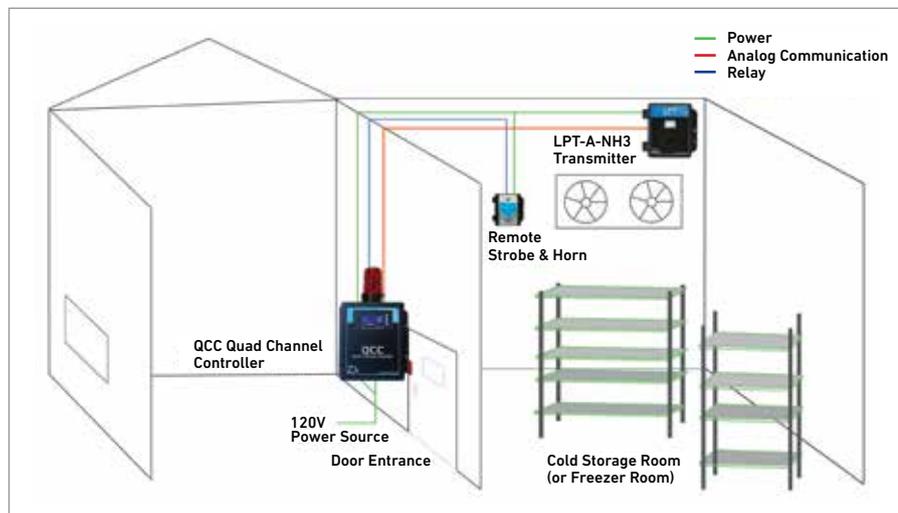
A number of technologies are available for refrigerant gas detection, many of which are offered by CET. Non-dispersive infrared sensors provide accurate, low level leak detection with no cross interferences from other gases. This technology can be found in the **ART** series. As Ammonia has a low infrared absorption profile electrochemical cell technology, a well-proven technique, is the best option. Finally, Solid State sensors provide an economical and reliable leak detection option for many refrigerants. CET offers both electrochemical and solid state in the **LPT-A** series.

Refrigerants detected using CET systems

Ammonia, R22, R123, R134A, R402A, R404A, R407A, R407C, R407F, R410A, R422A, R422D, R427A, R507, HF01234YF, HF01234ZE

TYPICAL APPLICATIONS FOR REFRIGERANT GAS MONITORING

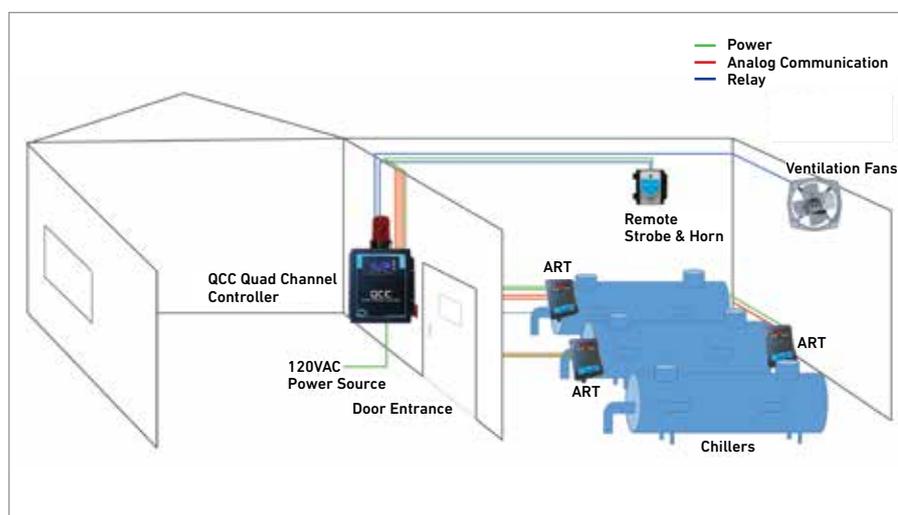
COOL ROOMS



The food and beverage industry commonly relies on ammonia refrigeration to provide consumers high quality, edible food and drinks. Ammonia is an efficient refrigerant and is readily available making it an ideal choice. However, it is also highly toxic and combustible. Therefore, an ammonia leak in a cold storage or freezer room can pose a serious health threat and result in spoiled food and other expensive losses. If a leak is detected, you want the peace of mind that comes with a properly installed ammonia monitoring system.

Figure 1: Cold Storage Room monitoring for Ammonia. Includes external controller and audible & visual alarms.

HOTELS



Hotels strive to be comfortable environments for their patrons, which includes among many things, maintaining appropriate temperatures throughout the facility. Typically, hotels have a mechanical equipment room where large chillers and pipes with refrigerant gas are tucked away to do their job cooling the establishment. In a hot climate such as Australia it is very important that air conditioning is operating efficiently and any issues such as chiller leaks are detected quickly.

Figure 2: Hotel chiller room monitoring. Includes external controller, audible and visual alarm and control for ventilation fan.

For more information about refrigerant gas monitoring or the CET product range, don't hesitate to contact Kenelec Scientific. We are sure to have a solution for you.

KENELEC SCIENTIFIC

Kenelec Scientific Pty Ltd was started in 1962. Over time Kenelec Scientific has established itself as a solution provider for scientific instrumentation in areas of Occupational Health and Safety, Water Monitoring, Environmental Monitoring, Heating Ventilation Air Conditioning, Indoor Air Quality, Pharmaceutical and Cleanroom Systems.

The core values we maintain here are based on our slogan "Measuring Up". We measure up to the excellence that exceeds customers' expectations from the first contact to after sales support. Our aim is to build long term relationships and ultimately be a valuable ally for our customers. We pride ourselves on providing solutions which are underpinned by a Quality Management System that complies fully with ISO 9001:2008.

The Kenelec Scientific Team is made up of a very special group of people united to deliver only the best for our customers. We listen and we partner with our customers to produce the best solution tailored to their specific needs and preferences.

Some of our major international suppliers have been trading with us for many years in instrumentation that is world renowned, reliable and of impeccable quality. These suppliers are constantly re-inventing and improving their technology so that you, our customer, can enjoy the benefits of the latest instrumentation, as you will see in our latest catalogue

We are also capable of installing tailored monitoring solutions which leading Pharmaceutical, Research and Medical institutions throughout Australia can attest to. Our skilled calibration engineers will assist in ensuring that you will enjoy continued reliability with minimum disruption to your businesses.

FOR FURTHER INFORMATION PLEASE CONTACT:



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