

AirSure

Issue: 1.1

Refrigerant Leak Detector

The AirSure provides a discreet and stylish product ideally suited to identification of refrigerant leaks in hotel rooms, offices and residential properties. The AirSure sits inside a standard mount electrical back box with either white plastic cover plate, or using 2 gang Euro-module cover plates to compliment the electrical switches and sockets fitted in the room. Each microprocessor controlled AirSure is provided fully configured ready to monitor the environment for refrigerant leaks before health and safety limits are exceeded.

A unique feature of the AirSure is its dual alarm operation which enables it to help fulfil the requirements of EN378 and the long term exposure limits outlined in the COSSH data sheets for refrigerant R410a, & R32. For safety purposes the alarm relays in the AirSure are energised during normal operation and de-energised in the event of a fault or alarm to provide a fail-safe feature.

After power up the status LED will turn on GREEN and remain permanently illuminated to indicate normal operation. In the event of a refrigerant leak the status LED will turn RED and the buzzer will sound. In addition the alarm relay(2) will be de-energised to provide remote indication. If the sensor fails the AirSure will also indicate a fault condition and fault / warning relay will be de-energised. A warning alarm level is also configured for testing purposes which initiates a flashing RED status LED and will also de-energise the fault / warning relay(1). When the refrigerant concentration subsides the alarm on the AirSure will automatically reset.



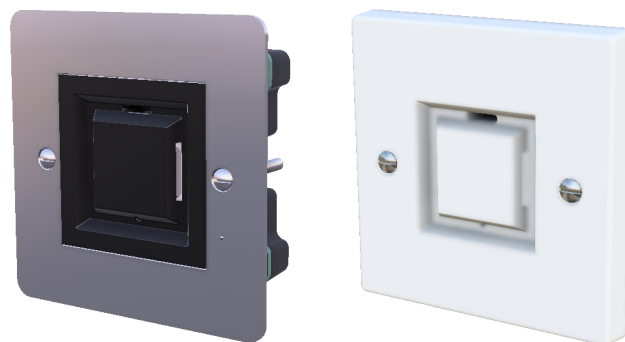
Features at a glance

- » Stylish aesthetic cover plate design
- » Fits inside standard electrical back box
- » Reliable and accurate NDIR sensor
- » Easy to install and commission
- » Visual and audible status & alarm indication
- » Modbus RS485 interface
- » Euro module cover plate options to match electrical cover plates
- » Wi-Fi access point with Webpage for commissioning and maintenance
- » 2 x configurable single pole double throw relays
- » Factory calibrated
- » Helps achieve the requirements of EN378



Technical Information

Cover Plate	White Plastic, or Euro module cover plate options (available from CPC UK)
Power supply	12-24V AC or DC, 3 Watt Max
Relays	2 x SPDT relays 1A @ 24VDC contact rating
Connection terminals	16/28AWG / 1.5mm ²
Status & Alarm indication	Multi-colour status LED (Green, Red, Orange, Blue), Bi-colour RS485 data LED
Buzzer	85dB @ 10cm
Refrigerants & range	R410a 7%Vol R32 50%LFL (other R32 blends available soon)
Sensor performance	Accuracy $\pm 10\%$ Response time T90 $\leq 30s$
Interfaces	RS485 Modbus, Wi-Fi HTML
Environmental	0-60DegC, 0-99%RH Operating range
Certification	CE / UKCA



Easy commissioning and maintenance

The AirSure incorporates a WiFi access point, which can be enabled by pressing the Service button accessed through the front of the cover plate. Once enabled any web-browser on a connected phone, tablet or laptop can be used to view the operating status information, change settings and perform tests.

Access to all operating status information, settings and test functions is also available via the Modbus RS485 interface.

Versatile configuration options

The AirSure is supplied pre-configured to suite most typical application requirements. However, the operation of the many aspects of the unit can be changed via the configuration options, accessed via the HTML or Modbus RS485 interfaces, meaning the AirSure can be easily customised for your requirements.

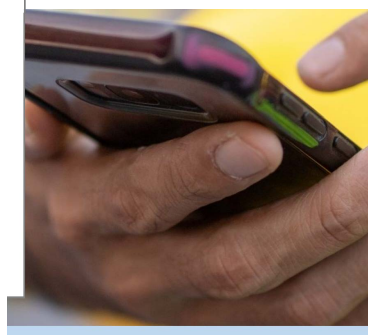
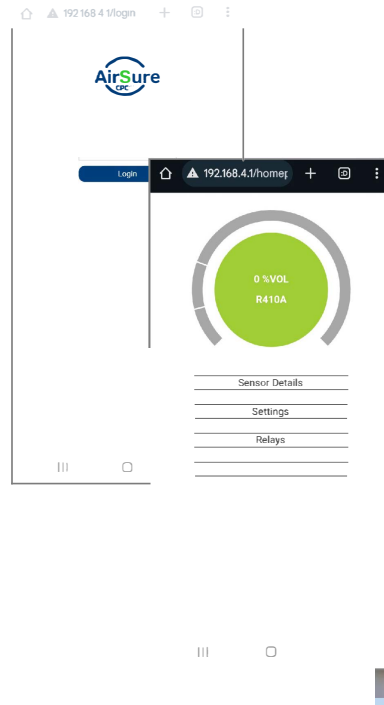
Location

To identify a refrigerant leak and protect personnel it is essential the AirSure is located appropriately. As HFC's and HFO's are significantly heavier than air, any leaking refrigerant will accumulate at low level and hence the AirSure needs to be located where it will be most effective. Detectors should be located in the room installed with the air-conditioning unit, away from windows and doors. In bedrooms an ideal location is beside the bed at low level.

Test Equipment

To test and monitor the performance of the AirSure refrigerant leak detectors, test gas and diagnostic tools are available, for further details please contact CPC (UK).

It is recommended that each AirSure is annually tested to verify its performance and operation.



Stylish and customisable cover plates

Utilising Euro-module cover plates enables the AirSure design to be customised to match your design requirements. Cover plates are available in many different finishes, colours and materials.

