

# AquiTron

## AT-SRG

Sensor for  
Refrigerant Gas



**DATA SHEET**



**aquilar**  
leak detection solutions



# AT-SRG

## Sensor for Refrigerant Gas - Occupied Spaces

The AquiTron AT-SRG refrigerant gas sensor, designed for continuous monitoring in occupied spaces, particularly those with high-efficiency VRF/VRV cooling and heating systems. Its applications include hotels, offices, schools, server / comms rooms, dormitories, hospitals, homes, and apartments.

### SIMPLE OPERATION

The AT-SRG comes equipped with audible and visual alarms to alert occupants and seamlessly communicates with Building Management Systems (BMS). It can be directly linked to Eco range panels for centralised monitoring and alarms. The on-board volt free relay facilitates various functions, including pump down, activating alarms, exhaust fans, or remote initiating emergency calls to rescue teams.

### VERSATILE DESIGN

The AT-SRG has been designed to be installed and maintained easily, and included the following features:

- 15 year expected sensor head life span.
- Compact UK single gang electrical socket size for an aesthetically-pleasing, non-intrusive appearance.
- Simple installation, set-up and commissioning as no calibration required.
- Plug-in alarm emulation module available for easy system testing (bump test gas is required for BSEN378 Compliance).
- Multiple alarm outputs, audible and visual on high and low level concentrations (two alarm levels),.
- Mains and low voltage power options.
- Easy sensor replacement (plug & play) with interchangeable sensor heads for different gas types.
- Flush mount fascia available in standard finishes: RAL9016 ABS Gloss White Finish and Brushed Stainless Steel. (for special or bespoke face plate fascias please contact us)
- Refrigerant specific sensor, immune to poisoning and reacts only to target gas with automatic temperature and humidity compensation
- Switchable delay to avoid false alarms.
- Enhanced connectivity for remote and central alarm using either volt free relay (1x) for centralised and BMS monitoring. or direct connection to one of our ECO range panel.
- Fully compatible with the AquiNet central monitoring system where compliance to BS EN378 is required.

## APPLICATIONS

The sensor is essential as part of a life safety system for continuous monitoring of refrigerant gas leaks from air conditioning and heat pump systems and is designed to safeguard people in occupied spaces within residential and commercial buildings such as hotels, apartments, hospital rooms and offices. Suitable for single to large multi-zone installations. It's crucial to prioritise the safety of your systems, implement sufficient monitoring measures, and ensure compliance with regulations—all while managing costs effectively.

Sensor to help achieve compliance, BS EN 378, BREEAM POL1, F-GAS.

## TECHNICAL INFORMATION

<b>Detectable Gases</b>	R-410a, R-32, and R-290**
<b>Trigger Values</b>	Two alarm levels - R410 - Low Level 2000ppm - High Level 8000ppm Two alarm levels - R-32 & R-290** - Low Level 10% LEL - High Level 15%
<b>Housing</b>	Flush mount or surface mount available
<b>Dimensions</b>	<b>Body:</b> 79.5mm x 79.5mm x 30.5mm (WxHxD) <b>4667 - Faceplate White Plastic:</b> 86 x 86 x 4mm (WxHxD) <b>4666 - Faceplate Brushed Stainless Steel:</b> 86 x 86 x 2mm (WxHxD) <b>4670 - 44mm Deep Surface Enclosure (35mm minimum) :</b> 86 x 86 x 50mm (WxHxD)
<b>Protection</b>	<b>Indoor:</b> IP20
<b>Power Supply</b>	100-240 Vac, 50/60Hz 1 Watt Max 12 / 24 Vac/dc 1 Watt Max
<b>Relays</b>	1x SPDT Max Load - 3A at 30Vdc, 3A at 250Vac
<b>Audible Alarm</b>	67 dB at 1Meter
<b>Alarm Delay</b>	0 or 5 minutes. Selectable.
<b>Recommended Cable Sizes</b>	<b>Power 230Vac:</b> 3-core 1mm <sup>2</sup> minimum recommended size* <b>Power 12/24Vac/dc:</b> 2-core 1mm <sup>2</sup> minimum recommended size* <b>Relay:</b> 3-core 1mm <sup>2</sup> minimum recommended size*
<b>Environmental Operating Range</b>	<b>Operating Temperature:</b> -25°C - 50°C <b>Storage Temperature:</b> -25°C - 40°C <b>Humidity:</b> 5 - 85% RH, Accuracy guaranteed in non-condensing environments <b>Pressure:</b> 80 - 120 kPa
<b>Status LED</b>	Bi colour LED: Green and Red
<b>Sensor Life</b>	15 year expected minimum life dependant on environment with recommended 6 month testing

\* dependant on design parameters

\*\* available Q1 2025

## APPROVALS

### Electromagnetic compatibility (EMC)



BS EN IEC 61000-6-3:2021  
BS EN IEC 61000-6-1:2019

## ORDERING INFORMATION

<b>Catalogue numbers</b>	4662 - AT-SRG-12/24-R410A - Sensor for Refrigerant Gas within occupied spaces, R410A, 12/24V ac/dc, No Faceplate
	4678 - AT-SRG-12/24-R32 - Sensor for Refrigerant Gas within occupied spaces, R32, 12/24V ac/dc, No Faceplate
	4679 - AT-SRG-12/24-R290 - Sensor for Refrigerant Gas within occupied spaces, R290, 12/24V ac/dc, No Faceplate **
	4661 - AT-SRG-230-R410A - Sensor for Refrigerant Gas within occupied spaces, R410A, 230Vac, No Faceplate
	4668 - AT-SRG-230-R32 - Sensor for Refrigerant Gas within occupied spaces, R32, 230Vac, No Faceplate
	4669 - AT-SRG-230-R290 - SSensor for Refrigerant Gas within occupied spaces, R290, 230Vac, No Faceplate **

Please specify the following when ordering:

- Flush mount or surface mount
- Flush mount fascia finish options - ABS white, brushed stainless steel. **Bespoke finishes also available to special order.**
- Surface mount is available in white only
- Refrigerant gas type, R410A, R32 and R290.

\*\* Available Q1 2025

## ANCILLARY PRODUCTS

4667 - AT-SRG-SGFP-W - Single Gang Faceplate for AT-SRG, Gloss White ABS RAL9016, UL94V0
4666 - AT-SRG-SGFP-SS - Faceplate for AT-SRG, Brushed Stainless Steel, Single gang
4663 - AT-SRG-AEK - AT-SRG Alarm Emulator Kit, c/w Emulator module and AT-SRG-S removal tool
4665 - AT-SRG-PSU-12 - Power Supply for AT-SRG-12/24, (230v to12Vdc), c/w enclosure
4681 - AT-SRG-DGFP-W - AT-SRG Double Gang Faceplate Adaptor, ABS, Gloss White Finish, RAL9016, UL94V0
4682 - AT-SRG-DGFP-SS - AT-SRG Double Gang Faceplate Adaptor, Stainless Steel, Brushed Finish

## TESTING GAS AND EQUIPMENT

4528 - AT-G-CALREG - Gas Regulator (0.3l/min), (Refrigerants Only)
5433 - AT-G-CALHOOD-SRG - Hose and hood kit (AT-SRG only)
4673 - AT-G-CYL-BMP - 110 Litre Gas Cylinder - For bump testing R410A, 20,000ppm in air (For AT-SRG)
4683 - AT-G-CYL-BMP - 110 Litre Gas Cylinder - For bump testing R32, 40% in air (For AT-SRG)

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