

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

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

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ORDERING INFORMATION

Catalogue numbers	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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