

AquiTron

AT-GU

Commercial Refrigerant Sensor



DATA SHEET





AT-GU

Gas Sensing System

A state-of-the-art standalone gas sensor, which utilises a range of sensor types to detect most gases. With selectable outputs to allow direct connection to most BMS, SCADA or central control system and several housing options. To make the AT-GU a truly versatile gas monitor.

FEATURES

- Detects most gases using a variety of sensor technologies: Semiconductor, Electrochemical, Catalytic and Infrared
- Determines continuously the gas level present in an area, room, zone, airspace or airflow
- Universal gas detection solution as it interfaces with any controller, BMS or SCADA system through: Analogue Outputs: 0-5V, 0-10V, 2-10V or 4-20mA - Digital Output: One relay 1A at 24Vdc
- Visual alarm, fault sensor condition indication
- Offers a range of sensor housings for most applications
- Simplified test and calibration procedures
- Reliable-realtime continuous monitoring, no blocked filters, tubes or technical and maintenance problems experienced by air sampling/aspirated systems.

APPLICATIONS

The AT-GU Range is ideal for clients who want, a high tech, cutting edge superior gas sensor transmitter, a continuous measurement with linearised outputs and to add gas detection capabilities to their existing control or alarm system.

TYPICAL APPLICATIONS

Refrigerant Gases

All refrigerant gases including: Ammonia, Carbon Dioxide, Hydrocarbons, Halocarbons – HFCs, HCFCs and CFCs

Combustible Gases

Such as Methane, LPG, Propane, Butane and Hydrogen

Toxic Gases

Such as Carbon Dioxide and Ammonia in refrigeration, Hydrogen Sulphide in sewage treatment and Carbon Monoxide in underground car parks.

Volatile Organic Compounds

Such as Acetone, Benzene, Carbon Tetrachloride, Chloroform, Ethanol, Toluene and Trichloro Ethylene

TECHNICAL INFORMATION

Power Supply	12/24V ac/dc $\pm 20\%$
Power Consumption	EC (24V): 45.7mA SC: 91mA
Power Monitoring	Green LED
Visual Alarm	Red LED
Audible Alarm	Sounder, enabled/disabled or mute
Fault Monitoring	Red ON Green OFF
Analogue Outputs	0-1V, 0-2mA 0-5V, 0-10V 2-10V, 4-20mA
Digital Outputs	1 Relay rated 1A/24Vac Selectable Delay: 0,1,5,10 mins
IP Rating	IP41, Alternative housings are available.
Dimension and Weight	86x120x53mm 180g

SENSOR INFORMATION

	Electrochemical EC	Semiconductor with filter (Multigas) SC	Infrared IR
Measurement Range*	0-5,000 ppm	0-10,000 ppm	0 - 20,000 ppm - %
Temperature Range	A: -20°C to +40°C B: -40°C to +40°C	-40°C to +50°C	0°C to 50°C
Humidity Range Non condensing		0 to 95%	
Response Time			
T50	80 sec	20 sec (filtered)	25 sec
T90	220 sec	50 sec (filtered)	90 sec
Recovery Time	600 sec	900 sec	210 sec
Typical Sensor Life	2 yrs	2 yrs min.	5-8 yrs

Annual test and calibration every 2 years. Refer to instructions.SC and CAT sensors are non-selective, but calibrated to a specific gas for all sensors.

For other gases / ranges contact Aquilar Ltd.

*PPM dependent on gas type.

APPROVALS

Performance of portable leak detectors and of room monitors for halogenated refrigerants EN14624



ORDERING INFORMATION

Catalogue number	4555 AT-GU-SC-REF - Semi-Conductor - Refrigerants (Standard IP41 Enclosure)
	4556 AT-GU EC GTG - Electro-Chemical - General Toxic Gas (Standard IP41 Enclosure)
	4557 AT-GU EC NH3 - Electro-Chemical - Ammonia (Standard IP41 Enclosure)
	4558 AT-GUEC ECO Electro-Chemical - Carbon Monoxide (Standard IP41 Enclosure)

OPTIONAL HOUSINGS

4530 AT-G-IP66
 4572 AT-G-IP66-SG
 4537 AT-G-IP66-REM
 4533 AT-G-EXD
 4570 AT-G-EXD-REM
 4532 AT-G-PRV-VENT
 4535 AT-G-PITOT

See separate data sheet .

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