

AquiTron

AT-MGS-408

Gas Detection
Controller



DATA SHEET



aquilar
leak detection solutions



AT-MGS-408

For Safety Compliance in Refrigeration Applications

The AT-MGS-408 provides audio-visual alerts and information pertaining to the status of a centralised gas detector network. This information allows concise, at-a-glance notification of any alarm or fault status regarding a connected gas detector located outside the monitored space, as required by many regulatory codes and standards.

DESCRIPTION

The AT-MGS-408 Gas Detection Controller centralises the status of up to 8 gas detection channels in a single location. The digital display provides a real-time view of the gas concentration and status at each gas detection point. It also allows for the controller to be configured in minutes via the intuitive menu system. A bank of LEDs corresponds to each connected gas detector; showing power, alarm status and fault indicators.

The AT-MGS-408 can provide power for up to 8 gas detectors, which can be daisy-chained along with Modbus communication to each gas detector; simplifying and reducing the cost of installation. Integration is possible with the AT-MGS-400 Series and AT-MGS-550 Gas Detector platforms; allowing for a gas detection system design which can utilize the benefits of multiple gas detector types as required in different locations (machinery rooms, cold storage rooms, walk-in freezers and food preparation areas).

Combining the AT-MGS-408 with AquiTron's range of gas detectors provides a single system with an easy means of achieving compliance with refrigeration safety standards such as EN 378 and ASHRAE 15.

FEATURES & BENEFITS

- **LED Status Indication** - At-a-glance visualization of whole gas detection system alarm status
- **Integrates with Gas Detectors** - Integrates the AT-MGS-410, AT-MGS-450, AT-MGS-460 and AT-MGS-550; creating a system suitable for applications with different requirements at multiple monitoring points
- **Power Gas Detectors** - Saves time and money on electrical installation
- **Modbus RTU Master to Gas Detectors** - Gathers full set of gas detector status
- **Modbus RTU Slave to BMS / BAS** - Integrates into BMS / BAS or refrigeration controllers

- **Event logging via SD Card** - Retains / exports alarm and status history of the gas detection system
- **Display Screen** - Displays real time data from all gas detectors in the system and offers simple configuration of controller
- **Audible and Visual Alarms** - Complies with ASHRAE 15 and EN 378 - no additional hardware

APPLICATIONS

The AT-MGS-408 Gas Detection Controller should be centrally located in the facility (preferably outside of the mechanical room) and should be easily accessible for visual monitoring and servicing. This is the “split architecture design” for safety of the operator.

Dirt, grease, and oils can adversely affect the operation of the controller. The controller should be installed out of direct sunlight in a clean, dry area that is not subject to temperature or humidity extremes. Installation in a mechanical room is acceptable provided reasonable environmental conditions exist. If there is a question, consider installing the unit outside of the mechanical room in a cleaner area of the facility.

The controller can be located up to 305m from the furthest gas monitor when using RS485 communications. The available distance is less when using the controller as the power supply for down line gas transmitters. Careful attention to voltage drop over distance with a suitable wire gauge employed is also required. (The controller provides an interface by which you can monitor, acknowledge alarms, and observe conditions inside the mechanical room.

TECHNICAL INFORMATION

User Interface	Front panel push buttons
Relays	1 × Fault, 1 × Low Alarm, 1 × High Alarm
Serial Ports	1 × RS485 Modbus RTU Slave for BMS / BAS, 1 × RS485 Modbus RTU Master for Gas Detectors
Ambient Temperature Range	0 - 45°C
Power	100 - 240 VAC, 50/60 Hz, 80W (max)
Size (W×H×D) Approx.	280 × 215 × 100 mm
Weight Approx.	1.250Kg
Cable Entries	2 × M20 / 1/2" conduit (power), 6 × M16 cable glands (signal)

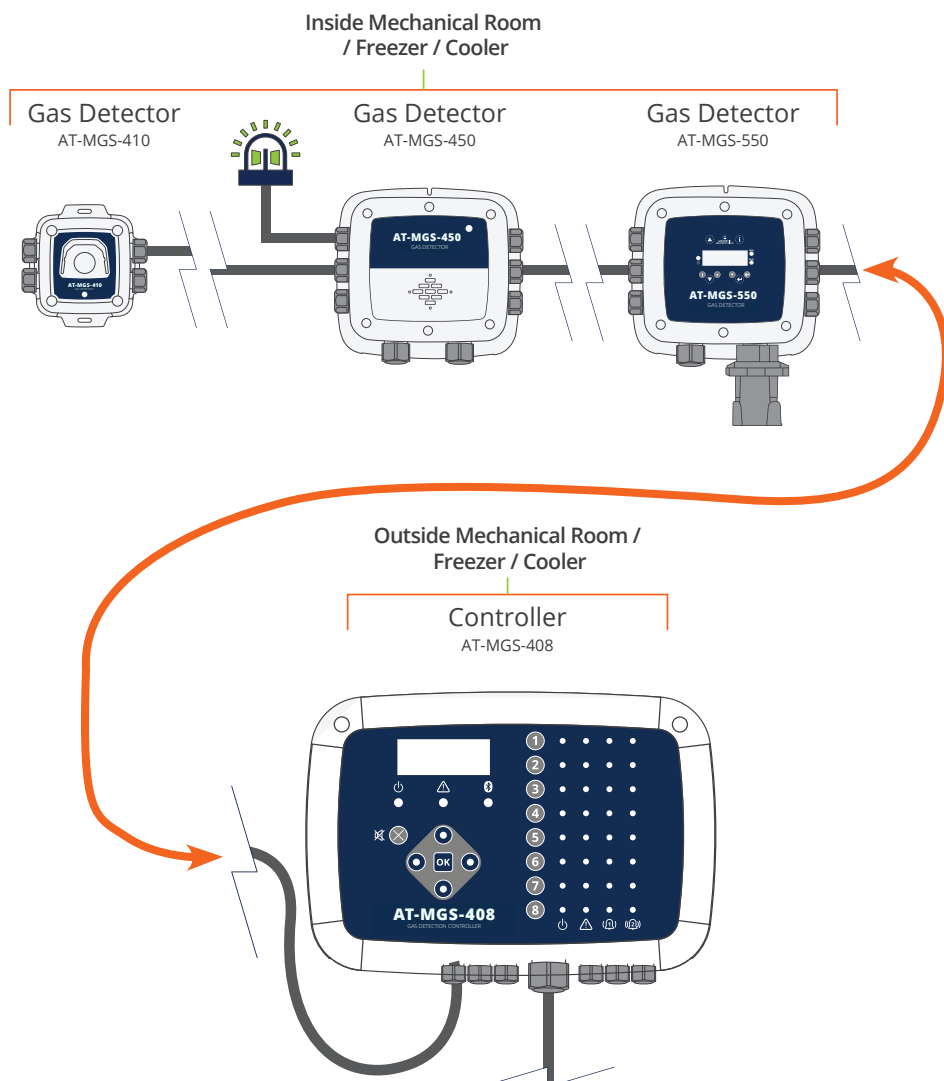
Inputs

- 100 - 240 VAC
- Modbus from Gas Monitors
- Alarm Silence



Outputs

- 3 × Relay (Low, High, Fault)
- BMS Modbus
- Analog CH 1
- Analog CH 2



APPROVALS

CE EN 61010-1, CAS C22.2 61010-1, EN 50270, FCC 15 Subpart B

ORDERING INFORMATION

Catalogue number 40800 - AT-MGS-408 gas detection controller, 8 channels

ANCILLARY PRODUCTS

Catalogue number 40802 - AT-MGS-408-SR - Optional sounder/beacon, mounts directly onto AT-MGS-408, red lens

40803 - AT-MGS-408-SG - Optional sounder/beacon, mounts directly onto AT-MGS-408, green lens

40804 - AT-MGS-408-SB - Optional sounder/beacon, mounts directly onto AT-MGS-408, blue lens

40805 - AT-MGS-408-SA - Optional sounder/beacon, mounts directly onto AT-MGS-408, amber lens

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