AT-MGS-400 Series gas detectors

Detection for refrigerants, toxic and combustible gases

- Enables compliance with BS EN 378, ASHRAE 15, & CSA B-52
- Integrated audio / visual alarms
- Mobile app interface for easy commissioning and maintenance

Intuitive refrigerant safety compliance
Refrigerant Safety Compliance has never been more intuitive.

Modern refrigeration systems are designed to be efficient and leak free, but improper installation, inadvertent damage or mechanical wear can result in potentially hazardous leaks. With their rapid response time, low-temperature performance (-40°C) and integrated audio & visual alarms, AT-MGS-400 Series gas detectors make compliance with safety regulations simple and easy.

Machinery Rooms
Walk-in Freezers & Cold Rooms
Industrial Cold Storage
Chiller Rooms

All Gas Detectors Include:

| EFFECTIVE | INTUITIVE | BLUETOOTH | BMS / BAS |
| LOW TEMPERATURE PERFORMANCE | LOW TEMPERATURE PERFORMANCE | CONNECTIVITY | INTEGRATION |

**PRODUCT SELECTION GUIDE**

| AT-MGS-410 | AT-MGS-450 | AT-MGS-460 |
| Enclosure Rating | IP66 | IP41 or IP66 | IP66 |
| Digital Communications (MODBUS COMMUNICATIONS TO BMS / BAS) | ✔️ | ✔️ | ✔️ |
| Analog Communications | | ✔️ | ✔️ |
| Relays (CORRESPONDING TO FAULT, LOW ALARM AND HIGH ALARM) | | 3 | 3 |
| Remote Sensor | | | ✔️ |
Features

AT-MGS-410 Gas Detector
- Integrated audio & visual alarms comply with safety regulations — no additional hardware
- Maintains performance in temperatures as cold as -40°C
- Modbus RTU interface, BMS / BAS connectivity

AT-MGS-450 Gas Detector
- Integrated audio & visual alarms comply with safety regulations — no additional hardware
- Maintains performance in temperatures as cold as -40°C
- IP41 and IP66 rated ABS enclosures available
- Three relays, fully configurable, correspond to alarm thresholds (High / Low) and fault status
- Modbus RTU interface, analog, BMS / BAS connectivity

AT-MGS-460 Gas Detector
- Integrated audio & visual alarms comply with safety regulations — no additional hardware
- Maintains performance in temperatures as cold as -40°C
- Remote sensor for monitoring for leaks in inaccessible areas
- Three relays, fully configurable, correspond to alarm thresholds (High / Low) and fault status
- Modbus RTU interface, analog, BMS / BAS connectivity

AT-MGS-402 Controller
- LED status indication for “at-a-glance” system / alarm status
- Seamless integration of power / communications for up to two AT-MGS-410 Gas Detectors
- Modbus RTU Master / Slave provides seamless integration from connected gas detectors to many third-party BMS / BAS
- Audible and visual alarms enable compliance with BS EN 378 / ASHRAE 15 - no additional hardware required

AT-MGS-408 Controller
- Capable of powering up to 8 gas detectors
- Displays real time data (status / gas measurement) from connected instruments
- Retains alarm & status history of connected gas detectors
- Modbus RTU interface, analog, BMS / BAS connectivity
The MGS-400 App allows users to configure, maintain and interface with compatible AT-MGS-400 gas detectors. Once a Bluetooth connection has been established, the app replaces the need for specialty training/tools and makes compliance with safety standards (BS EN 378, ASHRAE 15) easy and effective.

**Features include:**
- Configuration (Rename device, define alarm thresholds, adjust Modbus settings, configure relay behavior and manage analog output settings).
- Maintenance (Test LED/buzzer function, relays, and analog output level).
- Calibration (View sensor type, serial number and “Calibration Due” timer and initiate zero/span calibrations with customizable field calibration certificate).
- Intuitive Interface (View current gas measurement and acknowledge alarm/fault status).

**DOWNLOAD TODAY**
Application Guide

AT-MGS-550
Dual-Gas Detector with Remote Sensors

- Flexible two-sensor capability, local and/or remote
- Two analog outputs and Modbus RTU interface
- Three fully configurable, user-assignable relays
- Magnetic wand enables easy, non-intrusive configuration/calibration
- IP66-rated ABS enclosure provides protection from dust and water
- Works with AT-MGS-408

AT-MGS-408 Gas Detection Controller
8-Channel Controller

- Centralized power and alarming for up to 8 gas sensors, including the AT-MGS-410, AT-MGS-450, AT-MGS-460 and AT-MGS-550
- LEDs and display screen provide a real-time at-a-glance visualization of entire gas detection system alarm status
- Modbus master and slave capabilities allow device to gather full set of data from connected gas detectors and relay to facility’s BMS/BAS
- 3 Relays (fault, low alarm, high alarm) and integrated horn/strobe allow controller to activate ventilation or other counter measures.

AT-MGS-402 Gas Detection Controller
2-Channel Controller

- Centralized power and alarming for up to 2 AT-MGS-410 gas detectors
- Modbus RTU Master/Slave provides seamless integration from connected gas detectors to many third-party BMS/BAS
- Audible and visual alarms enable compliance with BS EN 378 - AHSRAE 15 no additional hardware required.
Supported Gas Detection by Product

- CO
- CO₂
- Ethylene (C₂H₄)
- HFO1233zd(E)
- HFO1234YF
- HFO1234ZE
- LPG
- R-50 (Methane)
- NH₃ / R-717 (Ammonia)
- NO₂

- O₂
- O₂ (Low Alarm)
- R-1234yf
- R-1234e
- R-134a
- R-22
- R-290 (Propane)
- R-32
- R-404A
- R-407A

- R-407C
- R-407F
- R-410A
- R-422
- R-422D
- R-427A
- R-433A
- R-448A
- R-449A
- R-450A

- R-452A
- R-452B
- R-454A
- R-454B
- R-454C
- R-455A
- R-507
- R-507A
- R-513A
- R-600 (Butane)

AT-MGS-400 SERIES EXAMPLE: MECHANICAL ROOM CONFIGURATION

1. AT-MGS-410
2. SOUNDER / BEACON
3. AT-MGS-450
4. AT-MGS-408 CONTROLLER WITH SOUNDER / BEACON

CAN WE HELP YOU?
If you have a project that Aquilar can assist with please call us on 01403 216100.