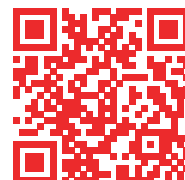




# GLACIÄR MIDI

**SIMPLY RELIABLE REFRIGERANT GAS DETECTORS**

[www.samon.se](http://www.samon.se)



# GLACIÄR MIDI

**GLACIÄR MIDI** detects leaks of refrigerant gases that are harmful to the environment we live in, and harmful to the environments that people work in. By mitigating these leaks, our planet is protected against greenhouse gas emissions, our colleagues stay safe and healthy, and property is protected against the risks of system failure and explosion.

## SIMPLE SELECTION

**GLACIÄR MIDI** can be configured for detection of synthetic refrigerants (HFC & HFO blends), natural refrigerants including CO<sub>2</sub>, NH<sub>3</sub> and R290 (propane), and other hydrocarbon gases. We have used our extensive gas detection expertise to make it possible to detect all commonly used refrigerants with only 5 different sensor types, making it simple and easy to select the right detector for your application.



## SYSTEMS INTEGRATION

A range of connectivity choices are available for integration of **GLACIÄR MIDI** into refrigeration control systems and/or building management systems. Modbus, analogue output, and relay contacts are available as standard. Installation is made easy by the availability of multiple cable glands located for easy access.



## SENSOR SELECTION

- All sensor types compatible with the **GLACIÄR MIDI** detector platform
- HFC/HFO blends detected via just two broad-band sensor variants
- CO<sub>2</sub> detection via infra-red sensor
- Electrochemical sensors for NH<sub>3</sub> detection
- R290 (propane) & hydrocarbon sensor

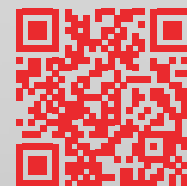
## EASY INSTALLATION

- Comes ready to install with standard configuration
- Multiple cable glands located for easy access to power connections & output terminals
- Pluggable screw terminals for simple installation on site
- IP67-rated enclosure & -40°C - + 50°C operating range suitable for all refrigeration environments

# THE SIMPLY RELIABLE REFRIGERANT GAS DETECTOR

Protect the environment, protect people, protect property

More information  
about **GLACIÄR MIDI**



## DESIGNED WITH YOU IN MIND

SAMON has drawn on over 30 years' experience in the refrigeration industry to design a gas detector to meet the needs of every user. Providing interfaces for set-up, configuration, and maintenance via both a digital app connection and via an analogue service-wheel, **GLACIÄR MIDI** can be used in all refrigeration environments without the need for any special tools.



## RELIABLE PERFORMANCE

SAMON products have a warranty rate of less than 0.001% - we understand how important reliability is to our customers and build it into everything we do. **GLACIÄR MIDI** is designed to be robust and reliable in machinery rooms, cold rooms, and the harshest of industrial refrigeration applications.

## MULTIPLE CONFIGURABLE OUTPUTS

- Alarm indication via relay contacts for high- and low-alarm levels
- Interface to control systems via Modbus RTU over RS485 & selectable analogue output range
- Visual health-check via high-intensity status LEDs
- Selectable dedicated fault relay

## INTELLIGENT SERVICE & MAINTENANCE

- Service counter tells you when service is needed
- Bluetooth® connectivity to app for configuration & calibration (Android™ & iOS)
- Analogue configuration via service-wheel & magnetic switch
- Pre-calibrated sensor module replacements
- Sensor lifetime counter

# TECHNICAL DATA



| Analogue Output                    |                                                                                                                                                     |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Selectable analogue output range   | 0...5V; 1...5V; 0...10V; 2...10V; 4...20mA (default)                                                                                                |
| Modbus RTU over RS-485             |                                                                                                                                                     |
| Connection                         | Galvanically isolated (optocoupler)                                                                                                                 |
| Baud rate                          | 9,600 or 19,200 (default)                                                                                                                           |
| Data bits                          | 8                                                                                                                                                   |
| Parity                             | None (default), odd, even                                                                                                                           |
| Stop bits                          | 1 or 2 (default)                                                                                                                                    |
| Other Interfaces                   |                                                                                                                                                     |
| Visible indicator                  | Multi-color Status LED                                                                                                                              |
| Bluetooth®                         | BLE (Service app)                                                                                                                                   |
| Relays                             | 2 SPDT<br>1 A at 24 VAC/VDC, resistive load                                                                                                         |
| Switches                           | Service wheel (x1) and Magnetic (x1)                                                                                                                |
| Analogue service output            | 0-10VDC                                                                                                                                             |
| Power Supply                       |                                                                                                                                                     |
| Operating voltage                  | 15 to 24 VDC; 24 V AC/DC, 50/60 Hz (Selected automatically)                                                                                         |
| Operating effect and current, max. | 4W, 170mA @ 24VDC                                                                                                                                   |
| Wiring                             |                                                                                                                                                     |
| Power supply                       | 28 to 16 AWG / 0.75 mm² to 1.5 mm²                                                                                                                  |
| Analogue signals and relays        | 28 to 16 AWG / 0.75 mm² to 1.5 mm²                                                                                                                  |
| Modbus network                     | 3-core, 2 twisted pair + ground, shielded cable with 120 Ω characteristic impedance, 24 to 16 AWG / 0.25 mm² to 1.5 mm², maximum length 300 meters. |
| Cable gland                        | 4 x M16, 4-8mm cable outer diameter                                                                                                                 |
| Cable rating                       | UL 2556 VW-1 or equivalent                                                                                                                          |
| Dimensions                         |                                                                                                                                                     |
| Enclosure Size (W×H×D)             | Built-In: 134x102x54 mm<br>Remote, main enclosure: 134x102x54 mm Remote, sensor enclosure: 103x50 mm                                                |
| Weight                             | Built-In: 430 g<br>Remote: 660 g                                                                                                                    |
| Environmental                      |                                                                                                                                                     |
| Operating temperature              | -40° to 50° Celsius                                                                                                                                 |
| Storage temperature                | -40° to 50° Celsius                                                                                                                                 |
| Humidity                           | 5 to 90 %RH, non-condensing                                                                                                                         |
| Enclosure protection               | IP67                                                                                                                                                |
| Enclosure material                 | Polycarbonate                                                                                                                                       |

## Applicable standards

| Directives       | Standards  |                    |
|------------------|------------|--------------------|
| (EMC) 2014/30/EU | EN 61010-1 | IEC 60529          |
| (LVD) 2014/35/EU | EN 378     | IEC 60355-2-40,    |
| (RED) 2014/53/EU | EN 14624   | Annex LL (Pending) |
|                  | EN 50270   |                    |
|                  | EN 50271   |                    |



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