

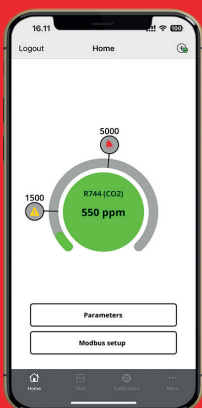
GLACIÄR MIDI

Refrigerant Gas Detector

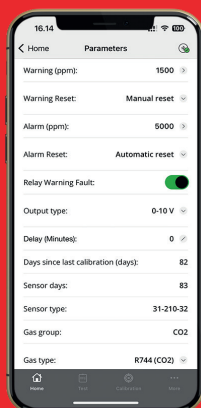


- All sensor types compatible with the GLACIÄR MIDI detector platform
- HFC/HFO blends detected via just two broad-band sensor variants
- CO₂ detection via infra-red sensor
- Electrochemical sensors for NH₃ detection
- R290 (propane) & hydrocarbon sensor
- IP67-rated enclosure & -40°C - +50°C (-40°F - +122°F) operating range suitable for all refrigeration environments
- 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
- Service & End-of-Life counter
- Bluetooth® connectivity to app for configuration & calibration (Android™ & iOS)

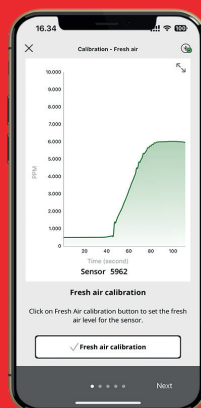
Easy Calibration & Maintenance via App



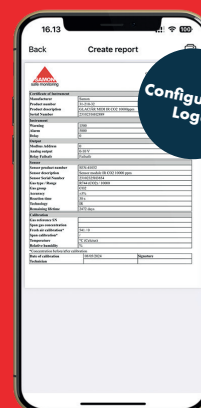
Live Sensor Measurement



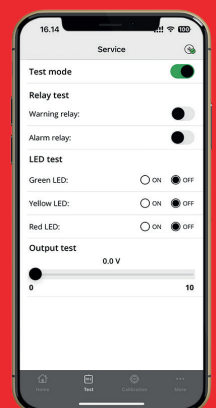
Configuration



Calibration



In Field Calibration Report



Test Mode

SIMPLY RELIABLE REFRIGERANT GAS DETECTORS

www.samon.com



Article No.	Model	Details	PG
CO₂			
31-210-32	GLACIÄR MIDI IR CO ₂ 10000ppm	0-10000 ppm, 15.. 24VDC; 24VAC/DC, max. 4 W , 170mA @24VDC	G
31-510-32	GLACIÄR MIDI Remote IR CO ₂ 10000ppm	0-10000 ppm, 15.. 24VDC; 24VAC/DC, max. 4 W , 170mA @24VDC	G
HFO/ HFC	Group 1	R32 / R407A / R407C / R407F / R410A / R448A / R449A / R452A / R452B / R454A / R454B / R454C / R455A / R464A / R465A / R466A / R468A / R507A	
31-220-12	GLACIÄR MIDI SC HFC/HFO Group 1 1000ppm	0-1000 ppm, 15.. 24VDC; 24VAC/DC, max. 4 W , 170mA @24VDC	G
31-520-12	GLACIÄR MIDI Remote SC HFC/HFO Group 1 1000ppm	0-1000 ppm, 15.. 24VDC; 24VAC/DC, max. 4 W , 170mA @24VDC	G
HFO/ HFC	Group 2	R134a / R404A / R450A / R513A / R1234yf / R1234ze / R1233zde	
31-220-17	GLACIÄR MIDI SC HFC/HFO Group 2 1000ppm	0-1000 ppm, 15.. 24VDC; 24VAC/DC, max. 4 W , 170mA @24VDC	G
31-520-17	GLACIÄR MIDI Remote SC HFC/HFO Group 2 1000ppm	0-1000 ppm, 15.. 24VDC; 24VAC/DC, max. 4 W , 170mA @24VDC	G
NH₃			
31-250-22	GLACIÄR MIDI EC NH ₃ 100ppm	0-100 ppm, 15.. 24VDC; 24VAC/DC, max. 4 W , 170mA @24VDC	G
31-250-23	GLACIÄR MIDI EC NH ₃ 1000ppm	0-1000 ppm, 15.. 24VDC; 24VAC/DC, max. 4 W , 170mA @24VDC	G
31-250-24	GLACIÄR MIDI EC NH ₃ 5000ppm	0-5000 ppm, 15.. 24VDC; 24VAC/DC, max. 4 W , 170mA @24VDC	G
31-550-22	GLACIÄR MIDI Remote EC NH ₃ 100ppm	0-100 ppm, 15.. 24VDC; 24VAC/DC, max. 4 W , 170mA @24VDC	G
31-550-23	GLACIÄR MIDI Remote EC NH ₃ 1000ppm	0-1000 ppm, 15.. 24VDC; 24VAC/DC, max. 4 W , 170mA @24VDC	G
31-550-24	GLACIÄR MIDI Remote EC NH ₃ 5000ppm	0-5000 ppm, 15.. 24VDC; 24VAC/DC, max. 4 W , 170mA @24VDC	G
R290	Group 3	R290 / R50 / R600a / R1150 / R1270	
31-290-13	GLACIÄR MIDI SC R290 / Group 3 4000ppm	0-4000 ppm, 15.. 24VDC; 24VAC/DC, max. 4 W , 170mA @24VDC	G
31-590-13	GLACIÄR MIDI Remote SC R290 HC 4000ppm	0-4000 ppm, 15.. 24VDC; 24VAC/DC, max. 4 W , 170mA @24VDC	G



Article No.	Model	Details	PG
40-440	FL-RL-R	Red, Combined flashing light & siren. 18..28V DC	A
4000-0001	UPS 1000 Battery Back-Up (w/o batteries)	This power backup requires two 12V 1,2Ah batteries	D
62-9022	Delivery Protection Cap	Protection Cap for GLACIÄR MIDI	D
40-901	Protection Bracket Big	For GLACIÄR MIDI	A

For more accessories see www.samon.com

GLACIÄR MIDI TECHNICAL DATA



Analogue Output

Selectable analogue output range	1...5V; 0...10V; 2...10V; 4...20mA (default)
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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 1 A at 24 VAC/VDC, resistive load
Switches	Service wheel (x1) and Magnetic (x1)
Analogue service output	0-10VDC

Power Supply

Operating voltage	24 VDC/VAC +/-20%, 50/60 Hz (Selected automatically)
Operating effect and current, max.	5W, 170mA @ 24VDC

Wiring

Power supply	28 to 16 AWG / 0.75 mm ² to 1.5 mm ²
Analogue signals and relays	28 to 16 AWG / 0.75 mm ² to 1.5 mm ²
Modbus network	3-core, 2 twisted pair + ground, shielded cable with 120 Ω characteristic impedance, 24 to 16 AWG / 0.25 mm ² to 1.5 mm ² , maximum length 300 meters / 985 ft.
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 / 5.28x4.02x2.13 in Remote, main enclosure: 134x102x54 mm / 5.28x4.02x2.13 in. Remote, sensor enclosure: 103x50 mm / 4.06x1.97in
Weight	Built-In: 430 g / 15.16 oz Remote: 660 g / 23.28 oz

Environmental

Operating temperature	-40°C to 50°C / -40°F to 122°F
Storage temperature	-40°C to 50°C / -40°F to 122°F
Humidity	5 to 90% RH, non-condensing
Enclosure protection	IP67
Enclosure material	Polycarbonate
Allowed air pressure range	75 kPa to 106 kPa

Applicable standards

Directives	Standards
(EMC) 2014/30/EU	EN 61010-1
(LVD) 2014/35/EU	EN 378
(RED) 2014/53/EU	EN 14624
	EN 50270
	IEC 60529
	ASHRAE 15
	UL 61010-1