

IR & IR+ SENSORS

For GLACIÄR MIDI



Long Life.
Low Maintenance.
High Confidence.

Powered by infrared sensing, the technology ensures precise and stable refrigerant gas detection by targeting each gas's unique absorption wavelength.



**NEW
SENSOR-
LINE**

The **GLACIÄR MIDI IR & IR+** is part of the latest evolution in our simply reliable gas detection range - now equipped with a cutting-edge infrared (IR) sensor designed for next-level performance in critical refrigeration environments. Built for accuracy, longevity, and low maintenance, the IR & IR+ sensor options outperforms conventional technologies with:

No false alarms

IR sensors are selective to refrigerants, ignoring cleaning agents, humidity, and other gases.

Stable performance

Immune to temperature, humidity, and oxygen variations.

Fail-safe operation

Built-in diagnostics ensure no silent failures.

Long sensor life

Years of reliable detection.

Rapid recovery

Withstands and recovers from high gas concentrations without damage.

Years of accuracy

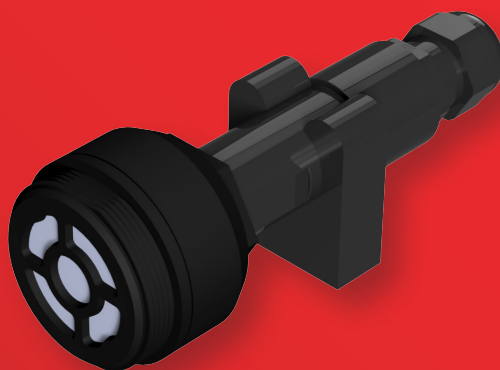
No annual recalibration needed; holds calibration far longer than SC or electrochemical sensors.

Lower total cost of ownership

Less maintenance. Fewer false alarms. More uptime.

GLACIÄR IR & IR+ BENEFITS

- Long lifetime
- Minimal sensor drift
- No cross-sensitivity
- Immune to contamination
- No poisoning effect
- Non-depleting
- Minimal calibration requirement
- Higher accuracy
- Low Minimum Detectable Limit
- Compatible with GLACIÄR MIDI accessories



**REMOTE SENSOR
OPTION AVAILABLE**



SIMPLY RELIABLE REFRIGERANT GAS DETECTORS

www.samon.com

Part of **safe monitoring group**

GLACIÄR IR+

Article No.	Model	Details	PG
	Group 6	R1234ze / R404a / R134a / R125 / R407a / R417a / R448a / R32 / R407f / R1234yf / R449a / R507 / R410a / R452b / R227 / R22 / R513a / R422d / R1233zd / R442a / R453a / R427a / R450a / R455a / R422a / R424a / R434a / R438a / R452a / R515a / R515b	
3101-0600	GLACIÄR MIDI IR+ R1234ze Group 6 2000ppm	IR+ Detector, 0-2000 ppm	G
3101-0600-5m	GLACIÄR MIDI IR+ R1234ze Group 6 2000ppm 5m	IR+ Detector, 0-2000 ppm	G
3102-0600	Sensor module IR+ R1234ze Group 6 2000ppm	IR+ Sensor module, 0-2000 ppm	G

GLACIÄR IR

Article No.	Model	Details	PG
	Group 7	R134a	
3101-0700	GLACIÄR MIDI IR R134a Group 7 5000ppm	IR Detector, 0-5000 ppm	G
3101-0700-5m	GLACIÄR MIDI IR R134a Group 7 5000ppm 5m	IR Detector, 0-5000 ppm	G
3102-0700	Sensor module IR R134a Group 7 5000ppm	IR Sensor module, 0-5000 ppm	G
	Group 8	R1234yf / R1234ze / R32 / R410a / R449a / R407c /	
3101-0800	GLACIÄR MIDI IR R1234yf Group 8 5000ppm	IR Detector, 0-5000 ppm	G
3101-0800-5m	GLACIÄR MIDI IR R1234yf Group 8 5000ppm 5m	IR Detector, 0-5000 ppm	G
3101-0801	GLACIÄR MIDI IR R1234ze Group 8 5000ppm	IR Detector, 0-5000 ppm	G
3101-0801-5m	GLACIÄR MIDI IR R1234ze Group 8 5000ppm 5m	IR Detector, 0-5000 ppm	G
3101-0802	GLACIÄR MIDI IR R32 Group 8 10000ppm	IR Detector, 0-10000 ppm	G
3101-0802-5m	GLACIÄR MIDI IR R32 Group 8 10000ppm 5m	IR Detector, 0-10000 ppm	G
3101-0803	GLACIÄR MIDI IR R410a Group 8 10000ppm	IR Detector, 0-10000 ppm	G
3101-0803-5m	GLACIÄR MIDI IR R410a Group 8 10000ppm 5m	IR Detector, 0-10000 ppm	G
3101-0804	GLACIÄR MIDI IR R449a Group 8 5000ppm	IR Detector, 0-5000 ppm	G
3101-0804-5m	GLACIÄR MIDI IR R449a Group 8 5000ppm 5m	IR Detector, 0-5000 ppm	G
3101-0806	GLACIÄR MIDI IR R407c Group 8 5000ppm	IR Detector, 0-5000 ppm	G
3101-0806-5m	GLACIÄR MIDI IR R407c Group 8 5000ppm 5m	IR Detector, 0-5000 ppm	G
3102-0800	Sensor module IR R1234yf Group 8 5000ppm	IR Sensor module, 0-5000 ppm	G
3102-0801	Sensor module IR R1234ze Group 8 5000ppm	IR Sensor module, 0-5000 ppm	G
3102-0802	Sensor module IR R32 Group 8 10000ppm	IR Sensor module, 0-10000 ppm	G
3102-0803	Sensor module IR R410a Group 8 10000ppm	IR Sensor module, 0-10000 ppm	G
3102-0804	Sensor module IR R449a Group 8 5000ppm	IR Sensor module, 0-5000 ppm	G
3102-0806	Sensor module IR R407c Group 8 5000ppm	IR Sensor module, 0-5000 ppm	G



IR	IR+
Cost-effective solution for standard commercial applications	Premium solution for demanding and critical applications
Dedicated sensor optimized for each common refrigerant	Broader refrigerant coverage using only a single article number and expandability through cross-reference factors
New sensor housing engineered for enhanced performance, using ultrasonic welding technology to achieve robustness and IP67 protection.	
Detection range: Typically 0–5000 ppm; up to 0–10 000 ppm for some gases	Detection range: Typically 0–2000 ppm (some ranges lower)
Accuracy: $\pm 5 - \pm 7\%$ of full scale	Accuracy: $\pm 1 - \pm 5\%$ of full scale
Higher detection range for general monitoring	Lower detection limits for early leak detection
Lower Detectable Limit (LDL): Higher (about 150–300 ppm)	Lower Detectable Limit (LDL): Lower (down to ~10–20 ppm with dead band off)
Operating Temperature Range: -10°C to $+50^{\circ}\text{C}$	Operating Temperature Range: -20°C to $+50^{\circ}\text{C}$

IR+
supports more
refrigerant gases and
has established
cross-reference factors
to detect additional gases
using one sensor
type.

Applicable standards

Directives	Standards
(EMC) 2014/30/EU	EN 61010-1
(LVD) 2014/35/EU	EN 378 (pending)
(RED) 2014/53/EU	EN 14624 (pending)
(RED) 2022/30/EU	EN 50270
F-Gas Regulation (EU) 2024/573	ASHRAE 15 (pending)
	FCC