

# 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**

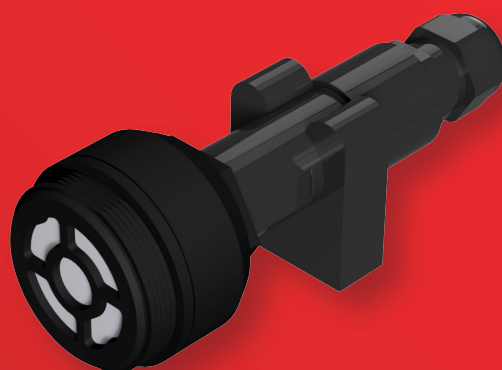
No annual recalibration needed; holds calibration far longer than SC or electrochemical sensors.

### **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](http://www.samon.com)

Part of **safe monitoring group**

## GLACIÄR IR+

| Article No.  | Model                                           | Details                                                                                                                            | PG |
|--------------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|----|
|              | <b>Group 6</b>                                  | R1234YF, R1234ZE, R1233ZD, R125, R134A, R22, R227, R32, R404A, R407A, R407F, R410A, R417A, R422D, R448A, R449A, R452B, R507, R513A |    |
| 3101-0600    | GLACIÄR MIDI IR+ HFC/HFO Group 6 2000ppm        | IR+ Detector, 0-2000 ppm                                                                                                           | G  |
| 3101-0600-5m | GLACIÄR MIDI Remote IR+ HFC/HFO Group 6 2000ppm | IR+ Detector, 0-2000 ppm                                                                                                           | G  |
| 3102-0600    | Sensor module IR+ HFC/HFO Group 6 2000ppm       | IR+ Sensor module, 0-2000 ppm                                                                                                      | G  |



## GLACIÄR IR

| Article No.  | Model                                          | Details                                    | PG |
|--------------|------------------------------------------------|--------------------------------------------|----|
|              | <b>Group 7</b>                                 | R134A                                      |    |
| 3101-0700    | GLACIÄR MIDI IR R134a Group 7 5000ppm          | IR Detector, 0-5000 ppm                    | G  |
| 3101-0700-5m | GLACIÄR MIDI Remote IR R134a Group 7 5000ppm   | IR Detector, 0-5000 ppm                    | G  |
| 3102-0700    | Sensor module IR R134a Group 7 5000ppm         | IR Sensor module, 0-5000 ppm               | G  |
|              | <b>Group 8</b>                                 | 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 Remote IR R1234yf Group 8 5000ppm | 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 Remote IR R1234ze Group 8 5000ppm | 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 Remote IR R32 Group 8 10000ppm    | 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 Remote IR R410a Group 8 10000ppm  | 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 Remote IR R449a Group 8 5000ppm   | 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 Remote IR R407c Group 8 5000ppm   | 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

**Cost-effective solution** for standard commercial applications

Dedicated sensor optimized for each common refrigerant

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

Accuracy: ±5% of full scale

Higher detection range for general monitoring

Lower Detectable Limit (LDL): Higher (about 150–300 ppm)

Operating Temperature Range: –10°C to +50°C

### IR+

**Premium solution** for demanding and critical applications

Broader refrigerant coverage using only a single article number and expandability through cross-reference factors

Detection range: Typically 0–2000 ppm (some ranges lower)

Lower detection limits for early leak detection

Lower Detectable Limit (LDL): Lower (60–100 ppm depending on the gas)

Operating Temperature Range: –40°C to +60°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                 |