

▶ PGM-IR

Refrigerant leak analyzer



Technical specifications

Sensor: Non-dispersive infrared (NDIR)

Sensor life: 5 to 7 years

Detected gases:

- **CFC:** R11, R12, R113, R114, R502, HFP
- **HFC:** R404a (HP62), R407a, R407c (AC9000), R-134a, R410a (AZ20), R507 (AZ50), R508b (SUVA95), R236FA, R125, R245Fa, R422a, R422d, R427a, R424a, R426a, et R438a,
- **HCFC:** R22, R123, R124, R500, R503, R401a (MP39), R402a (HP80), R402b (HP81), R408a, R409a, R21, R23, R227
- **HALON:** H1301, H2402, H1211
- **HFO:** FA188, FC72, N1230, H1234YF

Measuring range: 0 – 10 000 ppm (for all gases)

Accuracy: ± 1 ppm ± 10% of reading from 0 to 1000 ppm (for R11, R22, and R113: ±10 ppm ±15% of reading from 0 to 1000 ppm)

Preheating time: 5 minutes (300 seconds)

Response time: T90 < 5 seconds (100% in 7 seconds)

System noise: < 40 dB(A) at 3 m

Measuring flow: 1 l/min

Display: Large backlit LCD display

Front with 3 light indicators:

- Green: undervoltage, in operation
- Yellow: faulty system
- Red: Overflow of alarm

Battery: Rechargeable Li-Ion with charge indicator

Operating conditions:

- Temperature: 0 to 50°C
- Humidity: 5 to 90% RH (non-condensing)

Dimensions (D x L x W): 229 x 368 x 127 mm

Weight: < 4 kg battery included

Product description

Bacharach's PGM-IR is a refrigerant gas analyzer, particularly suitable for detecting leaks of halogenated refrigerants such as HFCs, HCFCs and HFOs. Its long-life non-dispersive infrared detector (NDIR) measures most known refrigerant gases.

The LCD screen displays gas concentrations in real time with a resolution of 1 ppm and an audible warning allows precise location of the leak source when traditional leak detectors cannot.

The **PGM-IR** refrigerant leak analyzer is based on the infrared absorption principle. This measurement principle makes it possible to detect gases quickly, selectively and with very high precision (1 ppm for halogenated gases).

The unit self-calibrates every 4 minutes by sucking in ambient air through its filter to determine and adapt the “zero” level and thus allow the device to be used in contaminated environments without affecting the target gas readings.

The **PGM-IR** probe helps locate leaks in tight or hard to reach places and the long-life battery provides up to 12 hours of operation. With the PC DUMP (Transfer to PC) function of the analyzer, it is possible to transfer the last 200 recorded gas measurements (in csv) for more precise monitoring and analysis.

Upon request, the **PGM-IR** is also available for CO₂ (carbon dioxide), N₂O (nitrous oxide) or SF₆ (sulfur hexafluoride) leak detection.

▶ Main assets

- Very precise non-dispersive infrared technology (NDIR) with high reliability level
- High performance sampling pump for refrigerant gas leaks fast response time
- Frequency buzzer to pinpoint the source of the leak
- More than 50 refrigerant gases precisely detected
- Very low minimum detection threshold (1 ppm)
- Locates leaks in contaminated or highly ventilated areas
- Unaffected by variations in humidity and temperature
- Minimum maintenance and no calibration required
- Reduced leakage inspection costs by more than 50%

▶ Applications areas

The **PGM-IR** is a particularly suitable solution for searching for leaks in cold stores, hypermarkets, frozen food store chains which have many trays or refrigerated display cases with as many potential micro-leaks that can spoil food and increase operating costs.