



Fixed Gas Monitors

Gas Detector/Monitor IAM-100



Features & Benefits:

- Real-time continuous gas detection that's scalable, reliable and affordable
- Ideal for commercial applications such as hotel rooms, apartments, dorms, hospitals, restaurant kitchens or battery charging rooms
- Detects refrigerants (at $\geq 1,000$ or $\geq 10,000$ ppm), TVOCs (at $\geq 1,000$ ppm), combustible gases and hydrocarbons (at $\geq 5,000$ ppm)
- Fast-responding, long-life sensors
- Integrated visual LED and audible alarms
- Two onboard relays to activate shut-off valves, exhaust fans, or connect to a BMS or fire panel
- Remote sensor with aesthetic faceplate available for discreet monitoring in decorative interiors



IAM-100 Standard Housing

Remote sensor
aesthetic faceplate
(brushed steel finish)



Economical Standalone or System Wide Monitoring

The IAM-100 Gas Monitor from Bacharach offers exceptional continuous monitoring performance and flexibility at an economical price. By itself, or integrated into a comprehensive detection system, the IAM-100 is a scalable solution for detecting a variety of refrigerants, combustible gases and VOC gas leaks at the lowest possible cost.



Optional IAM-Controller

Onboard LEDs illuminate when the sensor is in an alarm state while the unit's audible alarm alerts personnel in the area that levels have exceeded the desired limit. The audible alarm can be muted with the onboard silence switch. Integrated dual relays enable the IAM-100 to shut-off refrigerant or propane supply lines while the second relay can be used as a connection to a building BMS or BAS system.

The IAM-100 is an alarm threshold device. When the range of the sensor is exceeded, the detector will go into alarm. For example, a unit with a 1,000 ppm R-410a sensor will activate its alarm when the detected refrigerant meets or exceeds 1,000 ppm.

IAM-100 Technical Specifications

| | |
|---|---|
| Power Supply: | 110 VAC/60 Hz or 220 VAC/50 Hz; 11W max. |
| Power Monitoring: | Green LED |
| Visual Alarm: | Red LED |
| Audible Alarm: | Internal buzzer (with onboard mute button) |
| Fault Monitoring: | Yes: (Red LED On, Green LED Off, Siren Off) |
| Relays: | 2 Relays: each rated 1 Amp @ 24 VDC |
| Alarm Delay: | Selectable: 0, 5, 10 or 15 minutes |
| IP Rating: | IP30 |
| Sensor Type / Life: | Semiconductor (multi-gas) / 5-8 year life |
| Temperature Range: | -4° to 122°F -20° to 50°C |
| Humidity Range: | 0-95% Non-condensing |
| Calibration: | Annual test or calibration recommended. Refer to manual for sensor specific instructions |
| Warm-up Delay: | 5 mins. initially |
| Approvals: | CE • IEC/EN 61010 • UL/CSA 61010-1 |
| Dimensions & Weight: (enclosure types) | 5.8" x 3.47" x 2.44" • 1lb. 6oz. 147 x 88 x 62mm • 633g |

IAM-100 Gas Types & Detection Ranges

Semiconductor Sensor - Threshold Ranges

| | |
|---|-----------------------------------|
| Refrigerants: | |
| HFCs: <i>including R-134a, R-410a, R-404a, R-507, R-407</i> | at ≥ 1,000 ppm or at ≥ 10,000 ppm |
| HCFCs: <i>including R-22</i> | at ≥ 1,000 ppm or at ≥ 10,000 ppm |
| CFCs: <i>including R-11</i> | at ≥ 1,000 ppm or at ≥ 10,000 ppm |
| Hydrocarbons: <i>including Methane, Natural Gas, Propane Butane, LPG, Hydrogen Isobutane</i> | at ≥ 5,000 ppm |
| VOCs: <i>including Acetone, Chloroform, Ethanol, Methanol, Methyl and Methylene Chloride, Ethyl and Ethylene Chloride</i> | at ≥ 1,000 ppm |

IAM-Controller Technical Specifications

| | |
|---|---|
| Power Supply: | 110 VAC/60 Hz or 220 VAC/50 Hz; 11W max. |
| Power Monitoring: | Green LED |
| Visual Alarm: | Red LED |
| Audible Alarm: | External buzzer (with onboard mute button) |
| Fault Monitoring: | Yes: (Red LED On, Green LED Off, Siren Off) |
| Relays: | 2 Relays: each rated 10 Amp @ 110/220 VAC |
| IP Rating: | IP51 |
| Max Cable Distance: (controller - transmitter) | 300 m (984 ft.); 16-24 AWG |
| Approvals: | CE • UL/CSA 61010 |
| Dimensions & Weight: (enclosure types) | Standard 10.3" x 10.4" x 3.3" • 5lb. 12oz. IP30 262 x 265 x 84mm • 2.6kg |

IAM-100 Ordering Information

IAM-100 Common Configurations

| | | |
|------------------|-----------------|---|
| 6201-1107 | R-410a | 1,000 ppm • Standard Housing • 110 VAC powered |
| 6201-1143 | R-410a | 10,000 ppm • Standard Housing • 110 VAC powered |
| 6201-5107 | R-410a | 1,000 ppm • Remote w/faceplate • 110 VAC powered |
| 6201-5143 | R-410a | 10,000 ppm • Remote w/faceplate • 110 VAC powered |
| 6202-1107 | R-410a | 1,000 ppm • Standard Housing • 220 VAC powered |
| 6202-1143 | R-410a | 10,000 ppm • Standard Housing • 220 VAC powered |
| 6202-5107 | R-410a | 1,000 ppm • Remote w/faceplate • 220 VAC powered |
| 6202-5143 | R-410a | 10,000 ppm • Remote w/faceplate • 220 VAC powered |
| 6201-1103 | R-404a | 1,000 ppm • Standard Housing • 110 VAC powered |
| 6201-1113 | R-290 | 5,000 ppm • Standard Housing • 110 VAC powered |
| 6201-1101 | R-134a | 1,000 ppm • Standard Housing • 110 VAC powered |
| 6201-1105 | R-407a | 1,000 ppm • Standard Housing • 110 VAC powered |
| 6201-5114 | CH ₄ | 5,000 ppm • Remote w/faceplate • 110 VAC powered |
| 6201-5119 | H ₂ | 5,000 ppm • Remote w/faceplate • 110 VAC powered |
| 6201-5120 | Ethylene | 5,000 ppm • Remote w/faceplate • 110 VAC powered |
| 6201-5121 | VOC | 1,000 ppm • Remote w/faceplate • 110 VAC powered |
| 6201-5151 | LPG | 5,000 ppm • Remote w/faceplate • 110 VAC powered |
| 6202-5114 | CH ₄ | 5,000 ppm • Remote w/faceplate • 220 VAC powered |
| 6202-5119 | H ₂ | 5,000 ppm • Remote w/faceplate • 220 VAC powered |
| 6202-5120 | Ethylene | 5,000 ppm • Remote w/faceplate • 220 VAC powered |
| 6202-5121 | VOC | 1,000 ppm • Remote w/faceplate • 220 VAC powered |
| 6202-5151 | LPG | 5,000 ppm • Remote w/faceplate • 220 VAC powered |

IAM-Controller Ordering Information

IAM-Controller Options

| | |
|------------------|-----------------|
| 6700-0100 | 110 VAC powered |
| 6700-0101 | 220 VAC powered |

Distributed By:



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