



sierra monitor corporation

Model 2050/2060

Ammonia and Halocarbon Gas Monitors

Cost effective gas alarm monitors for ammonia and halocarbon gases. Available as single channel monitors or part of multipoint alarm system

The Model 2050 Ammonia and Model 2060 Refrigerant/Halocarbon Gas Monitors are continuous duty, low cost stationary monitors for detection of high levels (50-500 PPM) of ammonia and halocarbon refrigerant gases. These monitors are primarily used in and around freezers, refrigerators, and compressor rooms to warn of leaks and dangerous levels of these gases.

An alarm is activated when the concentration of gas exceeds the user-adjustable level. An alarm condition activates the alarm light on the front of the monitor and generates an output signal. An output signal can activate a remote alarm through the Model 2102 Alarm Panel. The Model 2102 Dual Channel can be connected up to 500 feet from the monitors. Each monitor also has a 0.5 amp, dry contact relay replaces the output signal.

The monitors are housed in a polystyrene enclosure that is suitable for installation in freezer, refrigerator or other applications. Test connections and adjustment controls are located on the outside of the enclosure and are easily used, even when the operator is wearing hand protection.

Alarms

These monitors have two indicator lights on the front of the unit, a green "safe" indicator and a red "alarm" indicator. Three alarm conditions are possible. These can be detected visually at both the monitor and controller at all times.

- **Warm-up** - Interrupted (On/Off) "red/green" visual indication when power is first connected to the monitor, followed by a red light until warm-up is completed and the green light comes on.
- **Gas Alarm** - Sustained solid red light indicating the presence of gas at, or above, the pre-set threshold.



- **Sensor failure** - Interrupted (on/off) "red/green" visual indication after unit has been in operation, indicating either a failed sensor or that the monitor is not correctly calibrated.

The Model 2050 Ammonia monitor has a factory alarm setpoint of 100 ppm NH₃. This setpoint is user adjustable in the field over a range of 50 to 500 ppm NH₃. The Model 2050 calibration can be checked with Hydrogen gas.

The Model 2060 Halocarbon monitor can be calibrated with methane and the factory setpoint varies for the specific type of halocarbon present. The factory setpoint for R12 is 500 ppm while the setpoint for R134a is 50 ppm. See the specifications for more details.

Temperature Range

The Model 2050 and 2060 have temperature compensated circuitry to provide stabilization in temperatures ranging from -4° to 158°F.

Semiconductor-Type Sensor

A solid-state semiconductor-type sensor and associated electronic circuitry ensure trouble-free, long-term operation. There are no pumps, filters, or chemical cells to replace or maintain. Except periodic calibration to verify the alarm setting, no periodic maintenance is required after installation. The user may adjust the alarm level by using a different calibration gas concentration.

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SPECIFICATIONS

<p>Indicators: Green LED for Monitor "ON"/Safe Red LED for Alarm</p> <p>Sensor Type: Solid-state metal oxide semiconductor</p> <p>Alarm Setpoint:: 2050 Series 100 ppm NH₃ 2060 Series</p> <p style="margin-left: 20px;">R11 500 ppm R12 500 ppm R22 50 ppm R113 100 ppm R123 70 ppm R134a 50 ppm R141b 40 ppm R142b 40 ppm R500 40 ppm R502 70 ppm</p> <p style="margin-left: 20px;">User adjustable with calibration over range of 50 to 500 ppm</p>	<p>Calibration Gas: 2050 Series 80 ppm Hydrogen (H₂) 2060 Series 150 ppm Carbon Monoxide (CO)</p> <p>Power: 9-24 VDC, 250 mA</p> <p>Signal Output:: 2050-00/2060-00 Nominal 5 volt DC, source 25 mA. SAFE and ALARM Signals 0.5 AMP dry contact, 100 VDC, 130 VAC and audible</p> <p>Response Time: Less than 90 seconds</p> <p>Operating Temperature Range: -4° to 158°F (-20° to 70°C)</p> <p>Enclosure Material: Polystyrene</p> <p>Size: 5.6 x 3.1 x 2.1 in. (14.2 x 7.9 x 5.3 cm)</p> <p>Weight: 0.3 lb (0.15 Kg)</p>
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ORDERING INFORMATION

- 2050-00** Ammonia Gas Monitor
- 2060-00** Refrigerant/Halocarbon Gas Monitor
- 1200-26** Gas Sensor Calibrator w/2 gas cylinders of calibration gas
- 1290-10** Gas Cylinder - Carbon Monoxide, 150 ppm
- 1290-11** Gas Cylinder - Hydrogen, 80 ppm



OTHER PRODUCTS

- 2102-00** Dual Channel Alarm Panel

