

INSTALLATION GUIDE

Gas Monitors



Scan the QR code to view the Operating Manual: See section 3 for installation, section 4 for operation, and section 6 for maintenance.



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For gases with a **lighter density to air**:
Ammonia (NH₃), Methane (CH₄), Hydrogen (H₂), install at 1 to 3 ft (0.3 to 0.9 m) from the ceiling or highest point.

For gases with a **similar density to air**:
Carbon monoxide (CO), Carbon dioxide (CO₂), Oxygen leak (O₂), Oxygen depletion (O₂) to monitor Argon (Ar), Helium (He), or Nitrogen (N₂), install at 3 to 7 ft (1 to 2 m) from the floor.

Nitrogen dioxide (NO₂): If diesel exhaust is under vehicles install at 3 to 7 ft (1 to 3 m) from the floor. If diesel exhaust is over vehicles install at half the ceiling height and above the vehicle exhaust.

For gases with a **heavier density to air**:
Propane (C₃H₈), Hydrogen sulfide (H₂S), Chlorine (CL₂), Refrigerants, install at 1 to 2 ft (0.3 to 0.5 m) from the floor or lowest point.

Maximum 50 ft (15 m) radius for air quality monitoring
Maximum 30 ft (10 m) radius for leak detection monitoring
See operations manual for more information.

Important. All wiring must conform to local building codes, regulations and laws. If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

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Sensor B

Sensor A

Mounting Holes

Path for Wires

1) General:

- a) Do not obstruct the gas monitor.
- b) Do not ground the AC/DC 24 V power supply.

2) Power:

- a) Use 18...20 AWG (2.5...0.5 mm²) single pair cable for power
- b) Maintain the same polarity (AC/DC 24 V) for all devices.

2) Communication (CAN bus, BACnet MS/TP):

- a) Use 22...24 AWG (0.34...0.25 mm²) twisted pair, shielded jacketed, low capacitance cable for communication
- b) Maintain the same polarity for all devices.
- c) All devices must be connected in series
- d) Switch end of line (EOL) jumpers to "On" on first and list devices on the network.

EOL

22Gxx-5A & C-22G-5A

1 SPDT dry relay contact

AN1 Sensor A (Top Sensor)
AN2 Sensor B (Bottom Sensor)

4...20 mA
2...10 V

* Default 2...10 V

CAN bus End of Line Jumper
* Default Off

BACnet MS/TP End of Line Jumper
* Needs to be set to "On" on the first and last device on the network.

Binary Input

Shield (no connect)
BACnet MS/TP Network

Transformer 24 V AC/DC
5 VA/W for each unit
Independent circuit 120/240 V AC

AC/DC Supply

To magnetic starter coil or control relay coil for ventilation

To other units

22Gxx-5B & C-22G-5B

2 SPDT dry contact relays

Relay 1
Relay 2

AN1 Sensor A (Top Sensor)
AN2 Sensor B (Bottom Sensor)

4...20 mA
2...10 V

* Default Off

CAN bus End of Line Jumper
* Needs to be set to "On" on the first and last device on the network.

BACnet MS/TP End of Line Jumper
* Needs to be set to "On" on the first and last device on the network.

Binary Input

Shield (on 1st unit only)
L Low
H High
CAN bus Network

Transformer 24 V AC/DC
5 VA/W for each unit
Independent circuit 120 V AC

AC/DC Supply

To magnetic starter coil or control relay coil for ventilation

To other units

22Gxx-5C & C-22G-5C

CAN bus End of Line Jumper
* Default Off

* Needs to be set to "On" on the first and last device on the network.

Binary Input

Shield (on 1st unit only)
L Low
H High
CAN bus Network

Transformer 24 V AC/DC
3 VA/W for each unit
Independent circuit 120 V AC

To other units