



Series GA-180 Gas Alarm

The Series GA-180 Gas Alarm system provides a reliable solution for gas detection applications. The GA-180 Gas Alarm incorporates a modular design that can integrate a variety of gas sensor types—up to 16 in total, in any combination. The digital alarm controller is configured through a user-friendly four push button interface and a two line x twenty character, alpha-numeric, backlit LCD display. The digital alarm controller is housed in a NEMA4X enclosure and includes visual and audible alarms. The electrochemical gas sensor(s) can be located up 1000 ft. (300m) away from the alarm controller.

Features

- Up to 16 sensors in any combination
- Individual sensor alarm relays (*user adjustable, latching & non-latching, failsafe & non-failsafe*)
- Multiple common alarm relays
- Scanning display of all sensor readings
- Isolated 4-20mA outputs for sensors
- Password protected configuration
- Modbus (RS485) communication
- Internal data logging available
- Modular circuitry
- Integral 90dB horn
- Battery backup available
- Temperature monitoring available (*rising & falling alarms*)

Operation

Simple menu driven, push-button controlled setup is performed through the controller. Alarm outputs are provided to activate external devices. A front panel push-button function is used to acknowledge/deactivate alarms as well as having a contact input for remote acknowledgement. Controller display and LED's provide real-time and clear operation status.

Maintenance

Gas sensors can easily be replaced and/or recalibrated through the controller. For calibration procedures please refer the GA-180 O&M manual. Gas sensors do NOT require the addition of or replacement of electrolyte.



Controller

| | |
|-----------------------------------|----------------------------------|
| Enclosure: | 11"x9"x5" |
| Temperature Range: | -4-131°F (-20-55°C) |
| Relays: | 10A SPDT (standard) |
| Audible Horn: | 90dB |
| Power: (universal): | 120-240VAC 50/60Hz |
| Battery Backup: (optional) | 12 hours, 2.9Ahr, 12VDC gel cell |
| Sensor Outputs: | 4-20mA (isolated) |
| Communication: | Modbus (RS485) |
| Data Logging (optional): | MicroSDHC (internal) |
| Remote Acknowledge: | Input contact |
| Warranty: | 1 year limited |

Sensor

| | |
|----------------------|------------------------------------|
| Enclosure: | 4"x4"x2" |
| Cable Type: | 22 AWG shielded |
| Cable Length: | 25 ft. standard (longer available) |
| Sensor Type: | Electrochemical |

Available Gas Sensors

| | |
|--------------------------------------|------------|
| Ammonia (NH ₃) | 0-100 PPM |
| Carbon Monoxide (CO) | 0-5000 PPM |
| Chlorine (Cl ₂) | 0-10 PPM |
| Chlorine Dioxide (ClO ₂) | 0-10 PPM |
| Hydrogen (H ₂) | 0-5000 PPM |
| Hydrogen Chloride (HCl) | 0-100 PPM |
| Hydrogen Sulfide (H ₂ S) | 0-50 PPM |
| Nitrogen Dioxide (NO ₂) | 0-20 PPM |
| Ozone (O ₃) | 0-10 PPM |
| Sulfur Dioxide (SO ₂) | 0-30 PPM |

Note: Other sensors and ranges are available. Consult Hydro Instruments for options.

GA-180 Ordering Information

Model: GA-180—A—B—C—D—E—F—G—H—I

| Position | Feature | Description |
|-------------------------------|---------|---|
| A. Chlorine Gas Sensors | # | No. of Chlorine Gas (Cl ₂) sensors, 0-10 PPM (# = 0 to 16) |
| B. Sulfur Dioxide Gas Sensors | # | No. of Sulfur Dioxide Gas (SO ₂) sensors, 0-30 PPM (# = 0 to 16) |
| C. Ammonia Gas Sensors | # | No. of Ammonia Gas (NH ₃) sensors, 0-100 PPM (# = 0 to 16) |
| D. Other | # | No. of non-standard sensors (# = 0 to 16) (Consult Hydro Instruments for pricing—Specify type when ordering) |
| E. Sensor Cable | 1 | Standard—25 ft. cable per sensor |
| | 2 | Elongated sensor cable(s) (Specify cable length for each sensor when ordering) |
| F. Battery Backup | 1 | Not included |
| | 2 | Installed |
| G. Output Wiring | 1 | Not included |
| | 2 | Pre-wired 4-20mA output(s) (Specify cable length for each output when ordering) |
| H. Thermocouple | 1 | Not included |
| | 2 | Installed—Standard 10 ft. cable |
| | 3 | Installed—Elongated thermocouple cable (Specify cable length when ordering) |
| I. Data Logger | 1 | Not Included |
| | 2 | Installed |