



## 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

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

## Sensor

<b>Enclosure:</b>	4"x4"x2"
<b>Cable Type:</b>	22 AWG shielded
<b>Cable Length:</b>	25 ft. standard (longer available)
<b>Sensor Type:</b>	Electrochemical

## Available Gas Sensors

Ammonia (NH <sub>3</sub> )	0-100 PPM
Carbon Monoxide (CO)	0-5000 PPM
Chlorine (Cl <sub>2</sub> )	0-10 PPM
Chlorine Dioxide (ClO <sub>2</sub> )	0-10 PPM
Hydrogen (H <sub>2</sub> )	0-5000 PPM
Hydrogen Chloride (HCl)	0-100 PPM
Hydrogen Sulfide (H <sub>2</sub> S)	0-50 PPM
Nitrogen Dioxide (NO <sub>2</sub> )	0-20 PPM
Ozone (O <sub>3</sub> )	0-10 PPM
Sulfur Dioxide (SO <sub>2</sub> )	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 <sub>2</sub> ) sensors, 0-10 PPM (# = 0 to 16)
B. Sulfur Dioxide Gas Sensors	#	No. of Sulfur Dioxide Gas (SO <sub>2</sub> ) sensors, 0-30 PPM (# = 0 to 16)
C. Ammonia Gas Sensors	#	No. of Ammonia Gas (NH <sub>3</sub> ) 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