

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 95 dB 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 or 24 VDC
Battery Backup: (optional)	12 hours, 2.9Ahr, 12VDC gel cell
Sensor Outputs:	4-20mA (isolated)
Communication:	Modbus (RS485) Profibus optionally supported
Data Logging (optional):	MicroSDHC (internal)
Remote Acknowledge:	Input contact
Warranty:	1 year limited

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)	0-2 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.

Sensor

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

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