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.

600 Emlen Way, Telford, PA 18969 ● Telephone: (215) 799-0980 ● Fax: (215) 799-0984
US Toll Free: (888) 38-HYDRO ● www.hydroinstruments.com ● sales@hydroinstruments.com

Bulletin GA-180 Rev. 9/8/2025

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_2S)	0-50 PPM
Nitrogen Dioxide (NO_2)	0-20 PPM
Oxygen (O_2)	0-25%
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

Build No.	GA-180- A B C D E F G H I J	
Position	**Feature**	**Description**
A. Chlorine Gas Sensors	#	Number of Chlorine gas sensors
B. Sulfur Dioxide Gas Sensors	#	Number of Sulfur Dioxide gas sensors
C. Ammonia Gas Sensors	#	Number of Ammonia gas sensors
D. Other Gas Sensors	#	Number of non-standard gas sensors (Consult Hydro Instruments—Specify gas type when ordering.)
E. Sensor Signal Cable	1	Standard (25 ft. cable per sensor)
	2	Elongated sensor cable
F. Battery Backup	1	None
	2	Installed
G. Signal Output Wiring	1	None
	2	Pre-wired 4-20mA output
H. Thermocouple	1	None
	2	Installed with standard cable (10 ft. cable standard)
	3	Elongated thermocouple cable
I. Data Logger	1	None
	2	Installed
J. Power	-	AC Power (100-240 VAC, 50/60 Hz universal power supply.)
	DC	DC Power (24 VDC input.)

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