

Series GA-170 Gas Alarm

The Series GA-170 Gas Alarm system provides a reliable and simple solution for gas detection applications. The GA-170 Gas Alarm incorporates a simple modular design that can integrate a variety of gas sensor types with up to four sensors per alarm module. The digital alarm module is controlled through a user-friendly interface consisting of push-buttons and a two line, sixteen character, alphanumeric, backlit LCD Display. The digital alarm module is housed in a NEMA-4X enclosure, and includes visual and audible alarms. The electrochemical gas sensor(s) can be located up to 1000 feet (300 m) away from the alarm module. The alarm module includes common contact relays and adjustable alarm contact relays for each sensor. All sensor contact relays are user adjustable and High Alarms can be set as latching or non-latching and failsafe or nonfailsafe. Battery Back-Up is available as an option.



Configuration

Sensor configuration mode is entered using a password and then adjusted using push buttons. Latching and Failsafe alarm options are also password adjustable.

Operation

Simple menu driven, push-button controlled programming is performed on the alarm module. Alarm outputs are provided to activate external devices. A front panel push button function is used to acknowledge/deactivate latching alarms. A contact input is provided for remote acknowledge of latching alarms. Front Panel display and LED's provide continuous and clear operation status.

Maintenance

Gas sensors can be replaced and/or recalibrated through the push-button menu. Sensor types can be easily changed.

Calibration

Contact Hydro Instruments for calibration gas and sensor testing devices.

Highlights:

- Up to 4 Sensors
- User-friendly key pad interface for easy calibration and operation
- Available for Cl₂, SO₂, NH₃, H₂S, O₃, CIO₂, H₂, O₂, NO, NO₂, HCI
- Includes six alarm relavs
- Backlit Liquid Crystal Display (LCD) for easy reading. 2 line, 16 spaces
- Built-In 90 dB audible Alarm and Danger/Alarm LEDs
- Optional Battery Back-Up
- RS232 Output Option
- 4-20 mA Output Option
- Remote Acknowledge
- Password Protection





Digital Alarm Module:

NEMA 4X Enclosure 8" x 6" x 4"

Temperature Range 0°-55°C / 32°-131°F

Total Weight 7 lbs Weight with Battery 9 lbs

Relays:

Common AC Power Loss **5A SPDT** Common Sensor Failure **5A SPDT**

Each Channel

Low Alarm (Danger) **5A SPDT** High Alarm (Alarm) **5A DPDT Audible Alarm** 90dB

Power Requirement 120 V/240 V, 50-60 Hz

Power Consumption 20 W max.

Battery Back-Up (optional) 12 hours, 2.9 A•Hr, 12 VDC gel cell

External Acknowledge Input Contact Signal Output (optional) RS232, 4-20 mA Remote Acknowledge Input Contact

Warranty 1 year limited

Standard Gas Sensors:

Ammonia (NH₃): 0-100 PPM Chlorine (Cl₂): 0-10 PPM Chlorine Dioxide (CIO₂): 0-10 PPM * Ozone (O₂): 0-10 PPM * Sulfur Dioxide (SO₂): 0-30 PPM Hydrogen (H₂): 0-200 PPM Hydrogen Sulfide (H₂S): 0-100 PPM Nitric Oxide (NO): 0-100 PPM * Nitrogen Dioxide (NO₂): 0-100 PPM Oxygen (O₂): 0-25% Hydrogen Chloride (HCI): 0-10 PPM

Note: Other ranges are available.

Consult the factory.

Sensor:

Cable Type: 22 AWG shielded

Cable Length: 25 ft. std. (longer available)

Sensor Type: Electrochemical

Includes shipping cap and calibration ports.

Note: Single and Dual sensor units will have both Low Alarm and High Alarm relays for each sensor. Three and Four sensor units will only have one High Alarm relay per sensor.

Note: Add an "A" after the

number for each gas type

to indicate a side mounted

sensor enclosure.

Series GA-170 Gas Alarm Ordering Information

Model GA-170 - <u>A</u> - <u>B</u> - <u>C</u> - <u>D</u> - <u>E</u> - <u>F</u> - <u>G</u> - <u>H</u>

A. Sensor 1 Gas Type:

- 1 Chlorine (0-10 PPM)
- 2 Sulfur Dioxide (0-30 PPM)
- 3 Ammonia (0-100 PPM)
- 4 Other (consult factory)

B. Sensor 2 Gas Type:

- 1 Chlorine (0-10 PPM)
- 2 Sulfur Dioxide (0-30 PPM)
- 3 Ammonia (0-100 PPM)
- 4 Other (consult factory)
- 5 None

C. Sensor 3 Gas Type:

- 1 Chlorine (0-10 PPM)
- 2 Sulfur Dioxide (0-30 PPM)
- 3 Ammonia (0-100 PPM)
- 4 Other (consult factory)
- 5 None

D. Sensor 4 Gas Type:

- 1 Chlorine (0-10 PPM)
- 2 Sulfur Dioxide (0-30 PPM)
- 3 Ammonia (0-100 PPM)
- 4 Other (consult factory)
- 5 None

E. Power Requirements:

- 1 120 VAC, 50-60 Hz
- 2 240 VAC, 50-60 Hz

F. Battery Back-Up:

- 1 Not Included
- 2 Included

G. Sensor Cable Length:

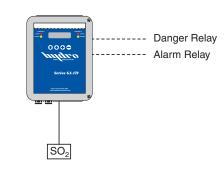
- 1 25 ft. (8 m) standard per sensor
- 2 Additional length

H. Output:

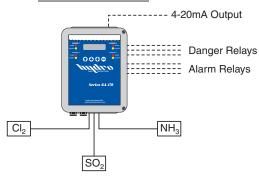
- 1 None
- 2 4-20 mA

Examples:

GA-170-2-5-5-5-1-1-1-1



GA-170-1-2-3-5-1-1-1-2



INSTRUMENTS

600 Emlen Way, Telford, PA 18969 Telephone: (215) 799-0980 • Fax: (215) 799-0984

Toll Free in the U.S.: 1 (888) 38-HYDRO

www.hydroinstruments.com • sales@hydroinstruments.com







BULLETIN GA-170 Rev. 3/13