

SAFEGUARD Alarm Controller

16 Channel Modbus® Master Display
and Alarm Monitor / Controller



- 8 channel display mode and boards allows for economical configuration for smaller systems.

- Dual Modbus RS-485 serial ports for simultaneous master / slave operation.

- Alarm Zoning feature available – monitor specific zones at the same time or entire areas.

- Relay Acknowledge feature allows silencing of external audible devices during alarm.

- Graphic LCD readout displays monitored data as trends, bar graphs and engineering units.

- Standard A SPDT common alarm relays for HORN, HIGH, WARN & FAULT. Optional discrete channel alarm relays also available.

- Alarm event printer interface

- Cal Mode offers pushbutton zero /span calibration.

- Authorization Mode allows locking of critical configuration variables.

- Magnetic keypad available for nonintrusive operation in potentially hazardous locations.

- NEMA 4X enclosure wallmount, basic wallmount and rackmount options available.

The Net Safety SafeGuard Alarm Controller is designed as a cost-effective mini-system controller alternative to expensive PLC systems. The SafeGuard comes standard with a centralized, easy-to-read LCD providing simultaneous status on 16 channel inputs as well as several expansion options including Mimic Display capabilities and HMI software packages. The SafeGuard can be equipped for any application, indoors or out, with your choice of a basic wallmount, a weather-proof fiberglass enclosure or rack panel mounting.

The SafeGuard is easy to configure and user friendly. Measurement ranges in engineering units, adjustable alarm set-points, dual serial interfaces and many other features combine to allow the SafeGuard to satisfy the needs of many demanding applications. It is widely used for centralizing the display and alarm processing functions in critical flame and gas detection applications.

An RS-485 Modbus slave port allows up to 128 SafeGuard's to be multidropped onto a single data highway for interrogation by another Modbus master. SafeGuard's may also be cascaded by connecting one unit's master port to another's slave port. SafeGuard options such as discrete alarm relays per channel or 4-20mA I/O are added by connecting appropriate 8 channel boards (2 required for more than 8 channels) to the economical I²C expansion bus. Familiar "telephone style" cables and connectors interface to this bus. Versatile, expandable, and a wide range of system configuration options – satisfying the most demanding user applications.

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BCR-0038-00-003

SPECIFICATIONS

Electrical

Voltage Range	10 - 30 Vdc
Power Consumption	12 watts max @ 24 Vdc

Display

128 x 240 pixel graphic LCD with backlight displays bar graphs, trends and engineering units. 52 discrete LED's indicate alarm status for 3 alarms per 16 channels and common relays

Environmental

Temperature	Operating temperature range: -25°C to + 60°C (-13°F to +140°F)
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Mounting

NEMA 4X fiberglass Enclosure wallmount, Basic wallmount, 1/2 length 19 inch rackmount

Outputs

SERIAL PORTS: Master & Slave RS-485 half or full duplex ports equipped with Tx / Rx LED's. Protocol = Modbus® RTU
 ANALOG: 10 bit 4-20mA output. Max load 800 ohms with nominal 24 Vdc power supply
 DISCRETE ALARM RELAYS: 5 amp 30 Vdc or 250VAC resistive Form C

Approvals

CSA C22.2 No 1010.1 & 152 for combustibles & ISA S82.02
 UL 1604 / C22.2 No 213 (Div 2 Groups A,B,C,D)
 EN55011 & EN61000 **CE**

Inputs

Compatible with all Net Safety Analog Output Flame and Gas Detectors

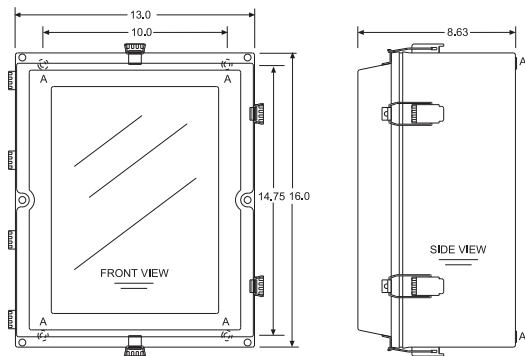
Warranty

2 years

MOUNTING OPTIONS/DIMENSIONS

WALL MOUNT ENCLOSURE

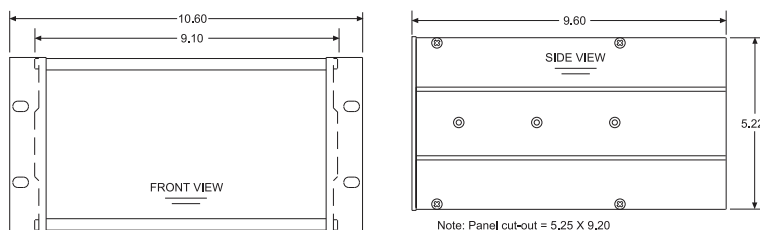
* dimension in inches



Note: 4 'A' mounting holes are .31 dia.

RACK / MOUNT PANEL

* 19" Rack spreader plates and panel mount bezel not shown



Note: Panel cut-out = 5.25 X 9.20

ORDERING INFORMATION

Part Number | Description

- SGX-SM | Basic wallmount (against flat surface) [shipping weight: 4lbs.]
- SGX-PM | Rackmount (includes bezel/rack hardware) [shipping weight: 8lbs.]
- SGX-N4 | NEMA 4X Enclosure wallmount, Div. 2 (Fiberglass) [shipping weight: 14lbs.]

OPTIONAL CONFIGURATIONS

Part Number | Description

- SG10-0158 | 8 channel analog (4-20mA) input board c/w terminals
- SG10-0167 | 8 channel analog (4-20mA) output board
- SG10-0195 | 8 channel discrete relay (5A form C) output board
- SG10-0189 | NEMA 4X expansion plate (adds up to 4 option positions)
- SG10-0172 | 85-240VAC universal input 150W 24VDC power supply
- SG10-0208 | 19" rack (supports 1 or 2 SGX-SM controllers)



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