

Z GARD® CX CONTROLLER

Economical and Reliable Microprocessor-Based Controller



The Z Gard CX Controller is a microprocessor-based alarm monitoring system, designed to interface with remote MSA Z Gard Sensors. The monitor provides programmable operating parameters, which are organized by a menu interface keypad.

Up to 40 remote gas sensors are connected via RS-485 serial communication ports managed by the Z Gard CX Controller network. The monitor acting as the host governs the digital RS-485 serial communication and automatically coordinates the remote devices.

- ➔ Large LCD screen, audible/visual indication and relay contact outputs.
- ➔ Auto-recognition of sensors – The controller automatically recognizes the number of remote gas sensors that are communicating with the system. All of the remote devices (gas sensors and relay modules) that are validated with a unique address code will be identified.
- ➔ Designed to host a series of MSA Z Gard S gas sensors with RS-485 digital output. These sensors are supported on a 4-wire data bus (network).

- ➔ Keypad on the front panel permits the user to program the monitor for customized applications.
- ➔ Password-protected to prevent unauthorized access.
- ➔ Auto-recognition of failed communication - If any active remote device should fail to communicate on the RS-485 network, the System OK LED will turn OFF and the fail relay will de-activate.
- ➔ Zoning- user-programmable, up to 9 discreet zones.
- ➔ Voting- each zone is capable of voting assignment.
- ➔ Visual and audible alarm indications.
- ➔ Programmable alarm relays - Can be configured for normally-energized or de-energized (the fault relay is always normally-energized) and latching or non-latching.
- ➔ Up to 7 optional remote relay modules can be coupled with the controller.
- ➔ Time Delays - Menu selected OFF delays, adjustable from 0 to 600 seconds for Warning and Alarm.

Specifications

Power Requirements

Standard:	120VAC, 50/60 Hz \pm 10% at 2.5 amps
Optional:	220VAC, 50/60 Hz \pm 10% at 1.25 amps

Remote Sensor Power 24VDC @ 100mA, maximum of 40 MSA Z Gard S Gas Sensors

Temperature

Operating	-10° to 40°C (14° to 104°F)
Storage Temperature	-20° to 50°C (-4° to 122°F)

User Interface Keypad on the front panel of the monitor with menu driven operating parameters

Digital Display Screen 4-line x 40-character backlit LCD screen displays the operating, alarm and fault diagnostic status of the system.

Status Display Common LEDs for System OK- green, Warning- amber, Alarm- red and Sensor Fail- red

Network Communication RS-485, 4-wire serial communication for remote gas sensors and auxiliary modules

Auto-Configuration Feature Digitally-recognized remote devices (sensors and auxiliary modules). Each device residing on the RS-485 serial data bus shall be automatically assigned as a node on the network.

Alarm & Warning Set-points Adjustable from 1 to 99% of operating range for each system sensor type

Number of Relays

Standard	12 standard programmable Warning and Alarm relays, SPDT
Auxiliary Relays	1 common Fault relay, SPDT, normally-energized (sensor fail) 1 common Warning relay, SPDT 1 common Alarm relay, SPDT 1 common External Audible relay, SPDT

Relay Contacts Rating 10 amps 1/8 H.P., 125VAC
6 Amps 1/8 H.P., 277VAC
5 Amps, 30VDC

Relay Action All programmable relays can be defined as normally-energized or de-energized and latching or non-latching

Relay Time Delays Menu-selected OFF delays, adjustable from 0 to 600 seconds for Warning and Alarm, effectively common to all active channels

Set-up and Calibration Pre-configured at factory or configurable by user

Audible Alarm Audible alarm device, 93dB @ 0.3 meters

Pushbutton Alarm Reset and Silence feature

Remote Relay Modules Up to 7 optional RRM's can be coupled with the controller. Each relay module provides a complement of 16 relays that can be assigned with a function or mimic the operating parameters, directed by the host Z Gard CX Controller

Strobes Options Optional flashing strobes factory-mounted on the top of the enclosure.

Enclosure Metal, NEMA 1

Weight 7.4 lbs. (7.9 kg)

Dimensions 15" H (381 mm) x 12" W (305 mm) x 3.75" D (95 mm)

Certification ENTELA (to CSA Standards)

Ordering Information

MSA P/N 10063790 Z Gard CX Controller with keypad - up to 40 points.

For more information on Z Gard S Sensors, see datasheet 07-2087.

Other accessories available- contact your local sales office for details.

Note: This Data Sheet contains only a general description of the product shown. While uses and performance capabilities are described, under no circumstances should the product be used except by qualified, trained personnel, and not until the instructions, labels or other literature accompanying the product have been carefully read and understood and the precautions therein set forth followed. Only they contain the complete and detailed information concerning this product.

**Data Sheet 07-2085-MC
June 2006**

© MSA 2006 Printed in U.S.A.



Corporate Headquarters
P.O. Box 426, Pittsburgh, PA 15230 USA
Phone 412-967-3000
www.MSAGasdetection.com

U.S. Customer Service Center
Phone 1-800-MSA-INST
Fax 1-724-776-3280

MSA Canada
Phone 412-620-4225
Fax 412-620-9697

MSA Mexico
Phone 52-55 21 22 5770
Fax 52-55 5359 4330

MSA International
Phone 412-967-3354
FAX 412-967-3451

Offices and representatives worldwide

For further information:

MSA
The Safety Company