



MSA Z-Gard® Sensors and Controllers

Product Line Overview





Z-Gard Sensors







Z-Gard Controllers





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Product Line Overview



Z-Gard S Sensor



A single, point diffusion sensor for the sensing of carbon monoxide, nitrogen dioxide and combustible gas (NEW!).

Z-Gard DS Sensor

A single, point diffusion sensor offering dual carbon monoxide and nitrogen dioxide sensing capabilities in one package.



Z-Gard CX II Controller



A highly configurable controller with up to 99 sensor inputs and 12 configurable relay outputs. The system supports 8 zones and has the option of communicating to building automation systems through BACNet.

Z-Gard C Controller

A flexible controller platform that can accept sensors communicating through 4-20 mA. The system supports up to eight sensor inputs.

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Product Line Overview



Z-Gard C 485 Controller

Platform accepts sensors communicating through RS485. Offers 8, 16 and 24 point configurations. Single and dual zone capability.

Z-Gard COmbo

A cost effective controller with integrated CO sensor. Includes 3 integrated relays, horn and reset button. Up to 7 RS-485 Z-Gard S sensors can interface with the device.

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Z-Gard S Sensor Configurations



- Available Gases and Range
 - Carbon Monoxide (CO) MOS 100 and 200 ppm FS
 - CO Electrochemical Senor 100 and 200 ppm FS
 - NO₂ Electrochemical Sensor 10 ppm FS
 - Combustible Gas 100% LEL FS
- Signal Output
 - 4-20 mA
 - RS 485 Digital Communication

MOS: Metal Oxide Sensor

FS: Full Scale

Sensor Specifications



Solid State CO	Detection Range	0 to 100 ppm or 0 to 200 ppm
	Accuracy	+/- 5%, Full Scale
	Humidity	25 – 95% RH
	Operating Temperature Range	0° to 40°C (4° to 104°F)
Electrochemical CO	Detection Range	0 to 100 ppm or 0 to 200 ppm
	Accuracy	+/- 5%, Full Scale
	Humidity	0 – 95% RH
	Operating Temperature Range	-20° to 40°C (-4° to 104°F)
Electrochemical NO ₂	Detection Range	0 to 10 ppm
	Accuracy	+/- 5%, Full Scale
	Humidity	0 – 95% RH
	Operating Temperature Range	0° to 40°C (4° to 104°F)
Catalytic Combustible	Detection Range	0 to 100% LEL
	Accuracy	+/- 5%, Full Scale
	Humidity	0 – 95% RH
	Operating Temperature Range	-20° to 40°C (-4° to 104°F)

Calibration Improvements



Calibration of the new Z-Gard S sensors is easier than ever!

- Calibration adjustment for zero and span occur automatically.
- •The user initiates zero calibration and span calibration through use of a magnet.
- •All the user then needs to do is apply zero and span gas at the appropriate times.







Controller Specifications



Z Gard C	Sensor Inputs	8 points
	Zones	single
	Signal Input	4-20 mA
	Output	4-20mA High Select
Z Gard C485	Sensor Inputs	8, 16, 24 points
	Zones	8,16: single; 16, 24: 2 zones
	Signal Input	RS 485
	Output	4-20mA High Select
Z Gard CXII	Sensor Inputs	Up to 99 points
	Zones	Up to 8
	Signal Input	RS 485
	Output	BACnet; ModBus
Z Gard COmbo	Sensor Inputs	CO on controller, plus 7 remote points
	Zones	N/A
	Signal Input	RS 485
	Output	4-20 mA High Select





- Hosts up to 99 Z-Gard sensors.
- User-programmable zoning; up to 8 discrete zones, each with voting assignment.



- 4 internal relays for caution, warning, alarm and fault with ability to attach additional relay modules.
- Integral buzzer and optional field-mountable strobe.
- Modbus RTU or BACnet MS/TP communication for seamless integration with commercial and building automation systems.

Marketing Assets



Go to www.msagasdetection.com to view all of the available literature on the Z-Gard Product Line

Product Brochures







MSA-U on Calibration



MSA-TV on Product Line



Sensors

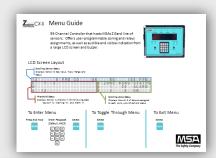
Controllers

COmbo

Product Line Presentation



CXII Menu Guide



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Applications and Industries



Industries

- Underground Parking
- Enclosed Truck Docks
- Vehicle Maintenance Facilities
- Airport and Courier Transfer Stations
- Transit Facilities

Applications

- Ventilation Control, Personal Safety
- Energy Management

MSA Value Contributors



MSA sales and technical support

Authorized field service representatives

Varied Product Mix

Fast turnaround time

On-line product training

HVAC experience