

Z-Gard Controllers

Reliable microprocessor-based controllers for commercial applications

Z-Gard Controllers microprocessor-based monitoring systems are designed to solve many alarm and control applications. Z-Gard Controllers interface with MSA Z-Gard Sensors, providing real-time target gas readings. All Z-Gard Controllers provide easy installation and configuration, audible and visual feedback and seamless integration with commercial and building automation systems. All Z-Gard Controllers accept either 4-20 mA or RS-485 serial input from remote sensors.

Many output options are available to integrate with common commercial equipment, including PLC, PCS or building automation systems. Controllers include audible and visual LED alarm status indication. A wide variety of relay configurations are offered for warning, alarm and sensor fail. All Z-Gard Controllers incorporate digital readout to display the active channel's corresponding gas value.

Z-Gard C Controller

- Accepts eight Z-Gard Sensor inputs
- 4-20 mA signal input

Z-Gard C 485 Controller

- Accepts up to eight, 16 or 24 Z-Gard Sensor inputs
- Digital RS-485 serial communication protocol

Z-Gard CX II Controller

- Hosts series of Z Gard S Gas Sensors with RS-485 digital output
- Communicates to building automation system through Modbus or BACnet
- Supports customized applications via programmable operating parameters organized via menu interface keyboard

Z-Gard C Controller Specifications	
INPUT POINTS	8
POWER REQUIREMENTS	Power 110 VAC, 50/60 Hz ± 10% 220 VAC, 50/60 Hz ± 10%
	Current 2.50 A 1.25 A
ZONES	Single zone
SIGNAL INPUT	4-20 mA, 3-wire connection
NUMBER OF RELAYS	10; 8 programmable, 2 common
RELAY ACTION	10 A/125 VAC; 5 A/30 VDC Energized/non-energized; latching/non-latching
OPERATING TEMPERATURE RANGE	14°F to 104°F (-10°C to 40°C)
STORAGE TEMPERATURE	-4°F to 122°F (-20°C to 50°C)
DIGITAL READOUT	4-digital LED with sequential scanning features
ENCLOSURE	Standard – metal NEMA 12
WEIGHT	10.0 lb (4.5 kg)
DIMENSIONS	15" H x 12" W x 3.75" D (381 x 305 x 95 mm)
APPROVALS	cCSAus; C22.2 No.142-M1987, UL916



Z-Gard C 485 Controller Specifications	
POWER REQUIREMENTS 8- AND 16-POINT UNITS	Standard, 110 VAC, 50/60 Hz ±10% at 0.5 amps Optional, 220 VAC, 50/60 Hz ±10% at 0.25 amps
24-POINT UNIT	Standard, 110 VAC, 50/60 Hz ±10% at 1.0 amps Optional, 220 VAC, 50/60 Hz ±10% at 0.5 amps
ZONES 8-POINT 16-POINT 24-POINT	Only available as single zone Available as single or 2 zones Available with 2 zones
SENSOR SIGNAL INPUT	RS-485 serial network
RELAY CONTACTS RATING	10 A/125 VAC; 3 A/30 VDC Energized/non-energized; latching/non-latching
RELAY OUTPUTS PER ZONE	3; common warning, alarm and sensor fail
OPERATING TEMPERATURE	14°F to 104°F (-10°C to 40°C)
STORAGE TEMPERATURE	-4°F to 122°F (-20°C to 50°C)
DIGITAL READOUT	Point number plus 3½ digits
STATUS DISPLAY PER ZONE	Common LED for warning, alarm and sensor status
ALARM & WARNING SET-POINTS FIELD-ADJUSTABLE FACTORY-SET AT	Warning – 35% full scale Alarm at 50% full scale
ENCLOSURE STANDARD OPTIONAL	Metal NEMA 1 Fiberglass NEMA 4X design
WEIGHT 1-ZONE MODELS 2-ZONE MODELS	10 lb (4.5 kg) 15 lb.(6.8 kg)
DIMENSIONS 1-ZONE MODELS 2-ZONE MODELS	11.5”H x 10”W x 3.75” D (292 x 254 x 95 mm) 15”H x 12”W x 3.75” D (381 x 305 x 95 mm)
APPROVALS	cCSAus; C22.2 No.142-M1987, UL916

Z-Gard CX II Controller Specifications	
POWER REQUIREMENTS	17-27 VAC or 24-38 VDC, 0.3 A
ZONES	99 points; 8 configurable zones
SENSOR SIGNAL INPUT	RS-485 serial network
NUMBER OF RELAYS	4
RELAY ACTION	10 A/125 VAC ; 5 A/30 VDC Energized/non-energized; latching/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
OPERATING TEMPERATURE	14°F to 131°F (-10°C to 55°C)
STORAGE TEMPERATURE	-4°F to 131°F (-20°C to 55°C)
USER INTERFACE	Front panel monitor keypad provides menu-driven operating parameters
DIGITAL DISPLAY SCREEN	4-line x 40-character backlit LCD screen displays operating, alarm, and fault diagnostic system status
STATUS DISPLAY OK WARNING ALARM SENSOR FAIL	Common system LEDs Green Amber Red Red
AUTO-CONFIGURATION FEATURE	Digitally-recognized remote sensors: each device residing on RS-485 serial data bus shall be automatically assigned as a network node.
ALARM & WARNING SET-POINTS	Adjustable from 1 to 99% of operating range for each system sensor type
STROBES OPTIONS	Optional flashing strobes factory-mounted on enclosure top (works only with AC power).
SIGNAL OUTPUT	Modbus RTU; optional BACnet MS/TP
ENCLOSURE	Polycarbonate, NEMA 4X
WEIGHT	2.5 lbs (1.2 kg)
DIMENSIONS	7”H x 10”W x 3.75” D (178 x 254 x 95 mm)
APPROVALS	cETLus; C22.2 No.601010-1, UL 9010-1

