

Z GARD® DS SENSOR

Economical and Reliable Gas Sensors for Detection of Carbon Monoxide and Nitrogen Dioxide



The Z Gard DS Sensor is designed to detect the presence of carbon monoxide and nitrogen dioxide gases in parking garages, vehicle storage areas or wherever else these two toxic gases could be found. The sensors employ electrochemical sensors, which generate a representative output signal proportional to the calibrated operating range. Z Gard DS Sensors are available with two output versions; an addressable RS-485 digital signal or a version with separate 4-20mA analog outputs for the two gases. The Z Gard DS Sensor with RS-485 digital output is specifically designed to operate with any Z Gard C 485 Controller, operating as a system. The Z Gard DS Sensor with 4-20mA outputs can be installed as a stand-alone sensor typically integrated with the Z Gard C Controller or common commercial equipment including PLC, DCS or building automation systems.

- Plastic NEMA 4X enclosure.
- Housing includes separate field-replaceable electrochemical sensors for carbon monoxide and nitrogen dioxide.
- Two sensor output options: 4-20mA analog outputs or a RS-485 digital signal.
- Sensor status is shown by the green OK LEDs, indicating that the device is operating properly.
- Jumpers to drive the output to percentages of full-scale. This feature is useful for testing remote devices, which may be connected to the sensor output.

Specifications

Z Gard DS Sensor

Detection Range

Carbon monoxide	Standard- 0-100 ppm
Nitrogen dioxide	Standard- 0-10 ppm

Sensors Plug-in, electrochemical sensing elements

Accuracy ±5%, full scale (FS)

Humidity 0 - 95% RH

Temperature

Operating	0° to 40°C (32° to 104°F)
Storage	-10° to 50°C (14° to 122°F)

All Z Gard DS Sensors

Calibration Factory-calibrated. Sensors can also be field-calibrated.

Standard Enclosure Plastic enclosure

Dimensions 10.5" W x 8.5" L x 4.5" D

Certification ENTELA (to CSA Standards)

Z Gard DS 4-20mA Sensors

Operating Power 24 VAC or DC 100mA used with MSA Z Gard Controllers or commercial DCS and PLC devices
24 VAC 100mA used with commercial DCS and PLC devices

Signal Outputs 4-20mA analog, 3-wire, point-to-point connection

Z Gard DS RS-485 Sensors

Operating Power 24 VDC, 100mA used with MSA Z-Gard C Controllers

Signal Output RS-485, 4-wire network connection

Function Selection Network Address jumpers, 1 to 127

Ordering Information

Z Gard DS Sensor with 4-20mA Outputs

MSA P/N 10063811

Z Gard DS Sensor with RS-485 Output

MSA P/N 10063812

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.

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