

Z-Gard S & DS Sensors

Reliable sensors for commercial applications

The Z-Gard S Sensor detects the presence of carbon monoxide, nitrogen dioxide and combustible gases in air.

The Z-Gard DS Sensor detects the presence of carbon monoxide and nitrogen dioxide gases in parking garages, vehicle storage areas or wherever these two toxic gases can be found.

Both sensors employ solid state, electrochemical or catalytic sensors that generate an output signal proportional to calibrated operating range. All Z-Gard S and DS Sensors are available with 4-20 mA analog output or addressable RS-485 digital signal. Z-Gard Sensors with RS-485 digital output are specifically designed to operate as a system with any Z-Gard C 485 or Z-Gard CXII Controller. Z-Gard Sensors with 4-20 mA can be installed as stand-alone sensors typically integrated with the Z-Gard C Controller or common commercial equipment including PLC, DCS or building automation systems.

Features

- Two sensor output options: 4-20 mA analog output or RS-485 digital signal
- Sensor status is shown by green OK LED, indicating proper device operation
- Switch drive output to percentages of full scale. This feature is useful for testing remote devices that may be connected to sensor output.
- Easy, non-intrusive one-person calibration of zero and span



Specifications	
SOLID STATE CARBON MONOXIDE	
DETECTION RANGE	0 to 100 ppm or 0 to 200 ppm
ACCURACY	±5%, full scale
HUMIDITY	25 - 95% RH
OPERATING TEMPERATURE RANGE	32°F to 104°F (0°C to 40°C)
ELECTROCHEMICAL CARBON MONOXIDE	
DETECTION RANGE	0 to 100 ppm or 0 to 200 ppm
ACCURACY	±5%, full scale
HUMIDITY	0 - 95% RH
OPERATING TEMPERATURE RANGE	-4°F to 104°F (-20°C to 40°C)
ELECTROCHEMICAL NITROGEN DIOXIDE	
DETECTION RANGE	0 to 10 ppm
ACCURACY	±5%, full scale
HUMIDITY	0 - 95% RH
OPERATING TEMPERATURE RANGE	32°F to 104°F (0°C to 40°C)
CATALYTIC COMBUSTIBLE	
DETECTION RANGE	0 - 100% LEL
ACCURACY	±5%, full scale
HUMIDITY	0 - 95% RH
OPERATING TEMPERATURE RANGE	-4°F to 104°F (-20°C to 40°C)
4-20 MA SENSORS	
OPERATING POWER	24 VAC or DC, 150 mA (250 mA for combustible sensor)
SIGNAL OUTPUT	4-20 mA, 3-wire non-isolated, 4-wire isolated
RS-485 SENSORS	
OPERATING POWER	24 VAC or DC, 100 mA (250 mA for combustible sensor)
SIGNAL OUTPUT	RS-485, network connection
ALL Z-GARD S SENSORS	
CALIBRATION	Factory-calibrated. Sensor can also be field-calibrated
ENCLOSURE	Powder-coated metal double-gang box with 3/4" conduit opening
DIMENSIONS	5.5" H x 5.5" W x 2.2" D (140 x 140 x 56 mm)
CERTIFICATION	cCSAus C22.2 NO. 61010-1; Fire, Shock and Safety
Z-GARD DS SENSORS	
CALIBRATION	Factory-calibrated. Sensor can also be field-calibrated.
ENCLOSURE	Polycarbonate enclosure
DIMENSIONS	10.5" H x 8.5" W x 4.5" D (267 x 216 x 114 mm)
CERTIFICATION	cCSAus C22.2 NO. 61010-1; Fire, Shock and Safety