

# Z-Gard® C 485 Controller

Reliable Microprocessor-Based Controllers for Commercial Applications



The Z-Gard C 485 Controller accepts RS-485 from remote Z-Gard sensors. The controller automatically detects attached sensors and determines their full-scale value. Set points and readout displays are automatically adjusted to match the sensor operating range. Ideal for protection in small to mid-sized single and dual zone applications.



## Key Product Features

- Accepts up to 8, 16 or 24 Z-Gard Sensor with RS-485 digital inputs
- Large LED readout display scans through active channels at 2-second intervals
- Available with one or two zones
  - 2-zone option accepts sensor inputs in two groups
  - 2-zone alarm feature with function jumper selection can be used to program alarm relay action and number of remote sensors

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## Z-Gard C 485 Controller Features

### Outputs

A variety of output options are available to integrate with common commercial equipment, including PLCs or building automation systems. Controllers include audible and visual LED alarm status indication. Relay configurations are available for warning, alarm and fault alert. Z-Gard C 485 Controllers include a LED digital readout to display the active channel and corresponding gas value.

### Other Outputs

- Status LEDs provide quick indication of system status.
- Audible alarm featuring reset and local alarm silence pushbutton.
- 4-20 mA high select option provides analog output signal derived from highest gas concentration level reported by remote sensors. This signal represents readings from 0-100% full scale.

| Features                                                                    | Z-Gard C 485                                                                                                                                                        |
|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>INPUT POINTS</b>                                                         | 8, 16, 24                                                                                                                                                           |
| <b>AVAILABLE ZONES</b>                                                      | Single zone units 8 & 16; Dual zone units 16 & 24                                                                                                                   |
| <b>SIGNAL INPUT</b>                                                         | Z-Gard RS-485                                                                                                                                                       |
| <b>AUDIBLE ALARM</b>                                                        | Unit mounted with local reset                                                                                                                                       |
| <b>RELAY OUTPUTS</b>                                                        | 3 per zone, Form C                                                                                                                                                  |
| <b>DISPLAY</b>                                                              | 4-digit LED                                                                                                                                                         |
| <b>ENCLOSURE</b>                                                            | Metal NEMA 1                                                                                                                                                        |
| <b>STROBE</b>                                                               | N/A                                                                                                                                                                 |
| <b>SIGNAL OUTPUT</b>                                                        | 4-20 mA high select                                                                                                                                                 |
| Specifications                                                              |                                                                                                                                                                     |
| <b>POWER REQUIREMENTS</b><br>8- AND 16-POINT UNITS<br>24-POINT UNIT         | Standard, 110 VAC, 50/60 Hz $\pm$ 10% at 0.5 amps<br>Standard, 110 VAC VAC, 50/60 Hz $\pm$ 10% at 1.0 amps<br>Optional, 220 VAC, 50/60 Hz $\pm$ 10% at 0.5 amps     |
| <b>ZONES</b>                                                                | 8-point controllers are only available as single zone<br>16-point controllers are available as single or 2 zones<br>24-point controllers are available with 2 zones |
| <b>SENSOR SIGNAL INPUT</b>                                                  | RS-485 serial network from Z-Gard sensors                                                                                                                           |
| <b>RELAY CONTACTS RATING</b>                                                | 10 A/125 VAC; 3 A/30 VDC<br>Energized/non-energized; Latching/non-latching                                                                                          |
| <b>RELAY OUTPUTS PER ZONE</b>                                               | 3; common warning, alarm and fault                                                                                                                                  |
| <b>OPERATING TEMPERATURE</b>                                                | 14 to 104 °F (-10 to 40 °C)                                                                                                                                         |
| <b>STORAGE TEMPERATURE</b>                                                  | -4 to 122 °F (-20 to 50 °C)                                                                                                                                         |
| <b>DIGITAL READOUT</b>                                                      | Point number plus 3-1/2 digits                                                                                                                                      |
| <b>STATUS DISPLAY PER ZONE</b>                                              | Common LED for warning, alarm, and sensor status, plus LEDs for power and system OK                                                                                 |
| <b>ALARM &amp; WARNING SET-POINTS</b><br>FIELD-ADJUSTABLE<br>FACTORY-SET AT | Warning – 35% full scale<br>Alarm at 50% full scale                                                                                                                 |
| <b>ENCLOSURE</b>                                                            | Standard – metal NEMA 1                                                                                                                                             |
| <b>WEIGHT</b><br>1-ZONE MODELS<br>2-ZONE MODELS                             | 10 lb. (4.5 kg)<br>15 lb. (6.8 kg)                                                                                                                                  |
| <b>DIMENSIONS</b><br>1-ZONE MODELS<br>2-ZONE MODELS                         | 11.5" H (292 mm) x 10" W (254 mm) x 3.75" D (95 mm)<br>15" H (381 mm) x 12" W (305 mm) x 3.75" D (95 mm)                                                            |
| <b>APPROVALS</b>                                                            | cCSAus; C22.2 No.142-M1987, UL916                                                                                                                                   |

Note: This Bulletin contains only a general description of the products shown. While uses and performance capabilities are described, under no circumstances shall the products be used by untrained or unqualified individuals and not until the product instructions including any warnings or cautions provided have been thoroughly read and understood. Only they contain the complete and detailed information concerning proper use and care of these products. Specifications subject to change without notice.



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