



**1** Must all gas run through a humidifier assembly to ensure proper sensor calibration?

**A** No; the need to ensure that humidified gas reaches the sensor during calibration is required for only the solid state carbon monoxide sensor. The calibration kit for Z-Gard Gas Monitors A-CAL-49 now includes nafion tubing to replace the humidifier assembly. This tubing can also be purchased separately as P/N 813628.

**2** What are the benefits of MSA's new calibration procedure?

**A** The time needed for calibration has been cut in half making it a superior process! It has been streamlined, requiring only a magnet to set the unit into calibration mode; no additional tools or access inside the enclosure is needed.

**3** What size wire should run between the sensors and controller?

**A** A two-wire conductor is required to run power, whether DC or AC is used. A two-wire conductor is also required for communication lines, plus shield. One four-wire conductor can also be used in most cases.

**4** Can power wiring and communication wiring run within the same conduit?

**A** It is not a best practice, but yes, power and communication wire can run within the same conduit. There is little concern if the power source used is DC. If the power source used is AC, the installer should monitor for potential signal line noise.

**5** Is the Z-Gard Monitor BACNet BTL-listed?

**A** For speed to market, MSA has decided not to have this instrument BTL-listed; instead MSA has opted for internal verification alongside of field test sites. To date, MSA has successfully integrated into a number of BAS through BACNet.

**6** Are Z-Gard CXII Gas Monitor relays and remote relays field- or factory-programmed?

**A** These relays are field-programmed.

**7** Does the LEL sensor work for H<sub>2</sub> applications?

**A** Yes.



## 8 Does the Z-Gard PR Sensor for the Z-Gard CXII Gas Monitor have the ability exceed to 31 points?

- A** The Z-Gard PR Sensor is a sensor with isolated power and communication. All sensors using the new calibration procedure (determined by confirming presence of the calibration magnet decal) can support up to 99 sensors on one trunk line of the Z-Gard CXII Gas Monitor.

## 9 Does the Z-Gard CXII Gas Monitor auto-configure sensors?

- A** Yes, the great benefit of using the Z-Gard CXII Gas Monitor with RS485 or RS485-PR sensors is this monitor's ability to auto-configure the sensor point. All that is required is setup of each sensor using dip switches to a unique address, and a few menu selections from the Z-Gard CXII Gas Monitor.

## 10 Can a Z-Gard CXII Gas Monitor be retrofitted?

- A** Yes, a Z-Gard CXII Gas Monitor can be retrofitted into an existing installation that has a Z-Gard C485 or CX Monitor. Please note that a separate power supply (DC if used to power existing sensors) must be provided.

## 11 How are remote relay modules integrated into the Z-Gard CXII Gas Monitor controller system?

- A** Up to eight remote relay modules are available with the Z-Gard CXII Gas Monitor. Each relay is assigned a unique address and is recognized by the system through the Z-Gard CXII Gas Monitor menu. All zoning of sensors and alarms is carried out at the Z-Gard CXII Gas Monitor.

## 12 What is the best solution for specific applications such as gas monitoring within auto dealerships and firehouses?

- A** The Z-Gard Combo Gas Monitor is an excellent practical solution, as this monitor's single integrated CO sensor can support up to seven additional sensor points, effectively allowing users to install a very cost-effective controller system.

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.



ID 0720-152-MC / February 2014  
© MSA 2014 Printed in U.S.A.

**MSA Corporate Center**  
1000 Cranberry Woods Drive  
Cranberry Township, PA 16066 USA  
Phone 724-776-8600  
Fax 724-776-8600  
[www.MSAafety.com](http://www.MSAafety.com)

**U.S. Customer Service Center**  
Phone 1-800-MSA-INST  
Fax 1-800-967-0398

**MSA Canada**  
Phone 1-800-672-2222  
Fax 1-800-967-0398

**MSA Mexico**  
Phone 01 800 672 7222  
Fax 52 - 44 2227 3943

**MSA International**  
Phone 724-776-8626  
Toll Free 1-800-672-7777  
Fax 724-741-1559  
Email [msa.international@msafety.com](mailto:msa.international@msafety.com)

**Offices and representatives worldwide**  
For further information: