

# The MultiGard™ Multipoint Gas Sampling System





Simple, reliable gas sampling system uses a common set of analyzers for up to 32 locations. Efficient, cost-effective, and easy to maintain.

- ➔ Includes up to four sensors/analyzers
- ➔ Modular construction allows simple installation and maintenance
- ➔ Easy setup via front touch-screen panel display
- ➔ Auto-standardization
- ➔ Common or discrete alarm and fault relays
- ➔ Gas flow failure indication
- ➔ Flexible sample point order
- ➔ Adaptable sampling time
- ➔ Options include relays and readouts

### MultiGard Gas Sampling System

- Gas samples are drawn from remote locations and delivered to customer-selectable internal analyzers.
- Maintenance and calibration are simplified because all maintenance is performed at a single location.

### Efficiency

- Efficient, cost effective gas detection method
- Gas samples are sequentially delivered to internal analyzers.
- Timesharing the analyzers between many monitored locations provides significant cost savings.
- This system can include up to four analyzers, reducing floor space, eliminating multiple systems, duplicate tubing, and unnecessary maintenance.

### Reliability

- Reliability is enhanced through the use of a single set of analyzers.
- Maintenance and calibration are simplified because all maintenance is performed at a single location.
- All calibrations are completed at the Multigard System analyzer(s), with no need to enter the monitored area.
- Manual or auto-standardization of sensors or analyzers when desired

### Control

To alert personnel, four common relays are provided. Additional user-configurable relays are available for discrete alarms. A local printer can print out alarms along with the date and time.

### Adaptability

- Multigard System adapts to provide optimum time for a given analyzer.
- Each location can have a different sample transport time.
- Critical sampling points can be sampled more frequently.
- A dual- sequencer system can be used, in which up to two analyzers are dedicated to each half of the sampling points

### Connectivity

The MultiGard System directly connects to Allen-Bradley's (AB) Ethernet or Data Highway Plus™ networks, industry-standards which permit communication to other equipment or controllers. Via these data highways, the MultiGard Gas Sampling System links to any system running iFix from Intellution, RSVIEW from Rockwell (AB), Wonder-ware or other popular software.

### Accessibility

The MultiGard Gas Sampling System has an "internet-connect" option which allows secure viewing via almost any personal computer in the world.



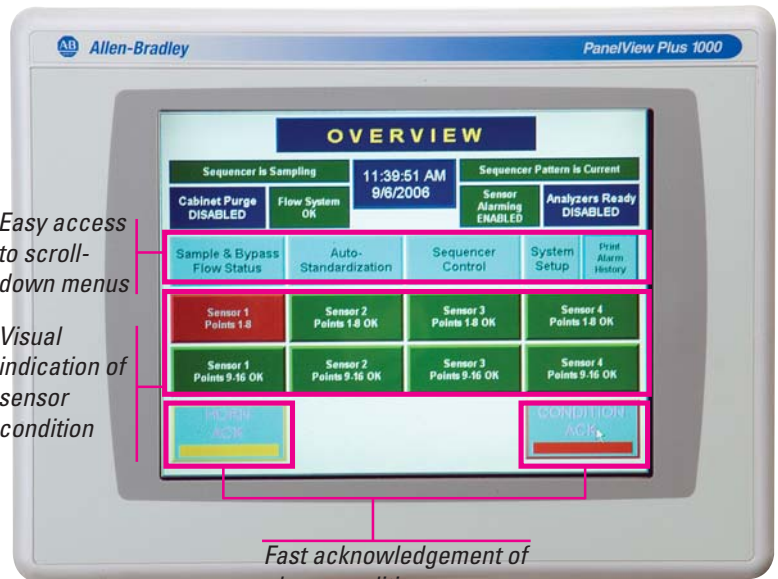
## Security

- A password is needed to change any system parameter.
- Internal battery will keep all data intact for up to two years.

## Typical Applications

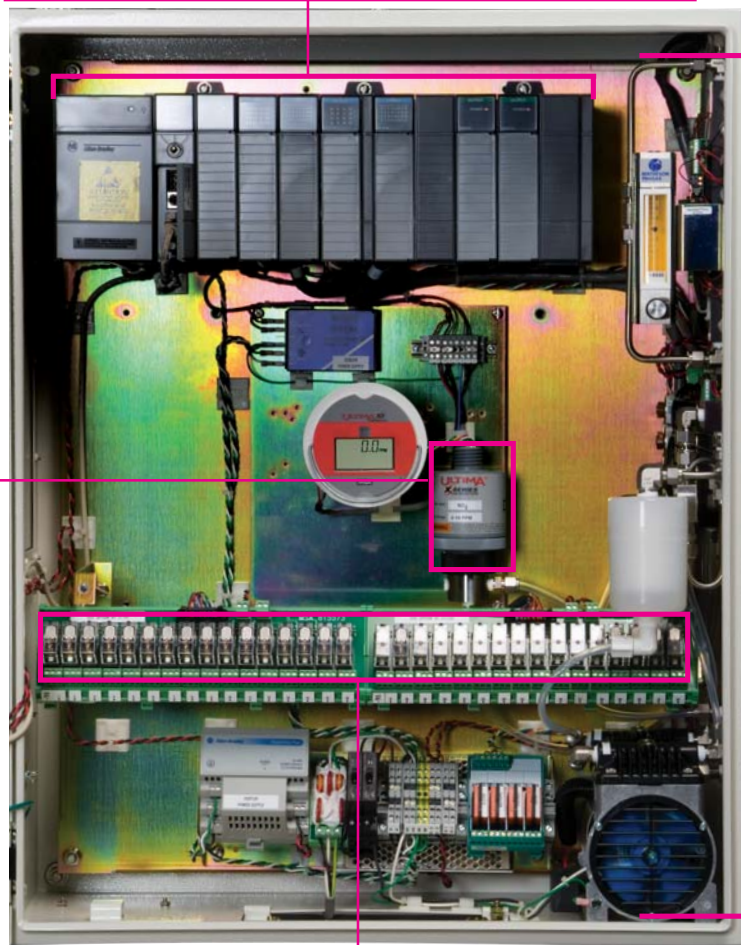
- Parking garage ventilation systems
- Curing or finishing processes
- Process control
- LNG or CNG transport ships
- Perimeter monitoring
- Ambient or IAQ (indoor air quality) monitoring
- Solid foam production
- Hydrogen furnaces
- Semiconductor manufacturing
- Aerosol packaging
- Food & beverage
- Bus, vehicle facilities, and tunnels

Overview screen provides quick visual indication of MultiGard System status



Connectivity to other equipment or controllers through data highway

Choice of up to four sensors/analyzers



Optional relays provide alarm and fault indication for all sample points

## Specifications

### Enclosure:

Area classification: General purpose for non-hazardous areas enclosure rating:

8/16 point	NEMA 12
24/32 point	NEMA 12
Dual 8 point	NEMA 1
Dual 16 point	NEMA 1

### Dimensions in. (mm) (nominal):

8/16/dual 8 – 24" (609.6) W x 30" (762) H x 12" (304.8) D, weight 125 lbs. (56.7 kg)  
24/32/dual 16 – 30" (762) W x 30" (762) H x 12" (304.8) D, weight 150 lbs. (68 kg)

### Operator Interface:

Type: integrated color TFT touch-screen display  
Size: 8/16 point - 6" diagonal (optional 10.5" diagonal)  
24/32/dual 8/dual 16 - 10.5" diagonal

### Power Requirements:

5 amp @ 115 VAC, 60 Hz, single sequencer systems  
10 amp @ 115 VAC, 60 Hz, dual sequencer systems  
Electrical entry through gasketed gland plate

### Outputs:

Two levels of alarm:

- Common alarms: Form C contacts (SPDT), 8 amp, 250 VAC optional user-configurable
- Discrete alarms: Form C contacts (SPDT), 10 amp, 250 VAC optional user-configurable

solid state outputs: 100 mA @ 24 VDC, sinking

### Flow System:

Scheme: Look ahead bypass connections: 1/8 NPT sample line tubing: 500' max. w/0.250" OD tubing  
Sample line flow rate: (0.175" ID tubing): 20 SCFH (10 lpm) typical, no-load 10 SCFH (5 lpm) typical, full load

### Temperature:

Operating: 32° - 95° F (0° - 35° C) Non-operating: 14° - 140° F (-10° - 60°C) Sample: 0° - 140° F (-17° - 60° C)

### Humidity:

30 to 85% RH non-condensing

**Analyzers are not reflected in above specifications**

## Ordering Information

A Multigard Gas Sampling System ATO order form is available in the MSA Preferred Products Catalog. To order a catalog, call 1-800-MSA-INST (1-800-672-4678).



**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.



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