

MultiGard™ 5000

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.

*Because every life has a **purpose...***

MultiGard 5000 **Multipoint Gas Sampling System**



Features

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



MultiGard 5000 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.
- Bypass flow system minimizes sampling cycle time

Reliability

- Reliability is enhanced through the use of a single set of analyzers, reducing replacement cost and lowering cost of ownership
- Maintenance and calibration are simplified because all maintenance is performed at a single location.
- All calibrations are completed at the MultiGard 5000 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. Gas concentrations and alarm settings can be exported to a flash drive in .CSV format.

Flexibility

- MultiGard 5000 System adapts to provide optimum time for a given analyzer.
- Each location can have a different sample transport time (based on line length).
- Critical sampling points can be sampled more frequently.
- An optional dual- sequencer system can be used, in which up to two analyzers are dedicated to each half of the sampling points
- Data stored on SD card for easy transfer.

Connectivity

- The MultiGard 5000 System directly connects to Modbus TCP or BACnet IP networks, industry-standards which permit communication to other equipment or controllers. Via these protocols, the MultiGard 5000 Gas Sampling System links to most distributed communication system networks.
- Remote option allows viewing of current readings and controlling of the system settings from any location.

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

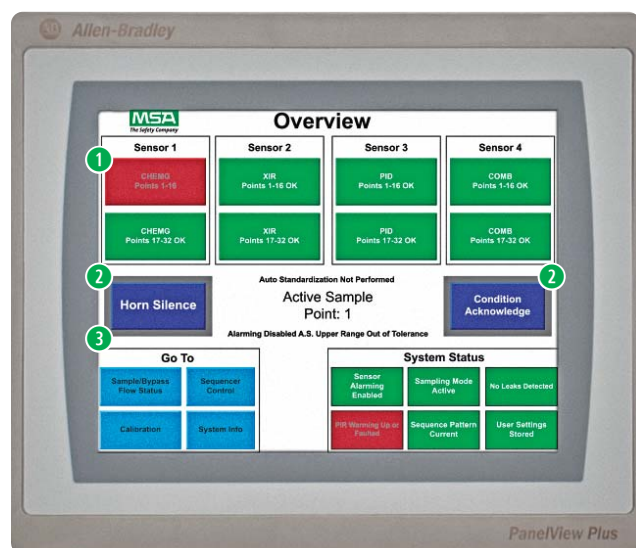


Security

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



Overview screen provides quick visual indication of MultiGard 5000 System status



- 1 Visual indication of sensor condition
- 2 Fast acknowledgement of alarm conditions
- 3 Easy access to scroll-down menus



- 1 Flow scheme designed to meet specific application
- 2 Choice of up to four sensors/analyzers
- 3 Optional relays provide alarm and fault indication for all sample points

MultiGard 5000 Multipoint Gas Sampling System



Specifications	
ENCLOSURE	NEMA, General purpose for non-hazardous areas enclosure rating
DIMENSIONS	
8/16/DUAL 8	24" x 30" x 12" (609.6 x 762 x 304.8 mm) W x H x D
24/32/DUAL 16	30" x 30" x 12" (762 x 762 x 304.8 mm) W x H x D
WEIGHT	
8/16/DUAL 8	125 lbs. (56.7 kg)
24/32/DUAL 16	150 lbs. (68 kg)
OPERATOR INTERFACE	
TYPE	Integrated color TFT touch-screen display
SIZE	10.5" (267 mm) 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	
COMMON RELAYS	Form C contacts (SPDT), 8 amp, 250 VAC optional user-configurable
DISCRETE RELAYS	Form C contacts (SPDT), 10 amp, 250 VAC optional user-configurable
SOLID STATE OUTPUTS	100 mA @ 24 VDC, sinking
FLOW SYSTEM	
LOOK AHEAD BYPASS CONNECTIONS	1/8 NPT
SAMPLE LINE TUBING	500 ft. (152 m) max. w/0.250" (6.35 mm) OD, 0.175" (4.4 mm) ID tubing (Longer line lengths possible with custom pumps. Consult factory)
SAMPLE LINE FLOW RATE	0.175" (4.4 mm) 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	5 to 85% RH non-condensing*

*Analyzers are not reflected in above specifications

Ordering Information

MultiGard 5000 Gas Sampling System ATO order form is available upon request.



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.



MSA – The Safety Company
1000 Cranberry Woods Drive
Cranberry Township, PA 16066 USA
Phone 724-776-8600
www.MSAsafety.com

U.S. Customer Service Center
Phone 1-800-MSA-2222
Fax 1-800-967-0398

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

MSA Mexico
Phone 01 800 672 7222

ID 0706-006-MC / August 2017

© MSA 2017 Printed in U.S.A.

MSAsafety.com/detection