

## GM2 SERIES DOME BIAS AUTOMATIC MANIFOLD

GENTEC® GM2 series automatic manifold system is designed to provide an uninterrupted gas supply without any manual adjustments. This system automatically switches over when the primary cylinder bank is depleted. Even in case of a power failure, the system continues to supply gas without interruption. The system is designed to meet the latest edition of NFPA 99 and CGA standards.



### Features

#### Automatic Changeover System

- Microprocessor controlled intelligent switchover control system with illuminating LED System Status ("IN USE"-green, "READY"-yellow, "EMPTY"-red)
- Fail-safe solenoid valves in event of power failure
- Dome Bias Regulator technology
- Input 110 VAC to 240 VAC, 50~60 Hz
- Fully enclosed, tamper-resistant metal cabinet
- Integral Alarm Buzzer
- One easy access 3-Way maintenance valve, reducing number of unnecessary valves for contamination and leak points
- Provision for RS 485 communication and Dry Contact Output, can be integrated to a central monitoring system
- Redesigned regulators for smooth flow characteristics
- Designed to maximize consumption of gas from each cylinder before automatic switchover
- High Flow System. Rated for 120 M<sup>3</sup>/h (4200 SCFH)\* to 170 M<sup>3</sup>/HR (6000 SCFH)\*\*

\* When delivery pressure is 50 psi

\*\* When delivery pressure is 180 psi

#### Pipeline

- Open-style manifold system, designed for future expansion needs
- Silver brazing on piping joints for maximum leak prevention
- Unique changeover valve provides uninterrupted supply of gas from primary and reserve banks
- Easy Installation and maintenance.
- Wall mount available.

### Specifications

GENTEC® GM2 Series automatic manifold systems shall be manufactured in an ISO 13485 certified facility. The systems shall be compliant with NFPA 99 and ISO 7396.

The GM2 Series automatic manifold systems shall be able to operate without electrical power (except for the heaters for nitrous oxide and carbon dioxide systems). Only the status indicator and alarms require electrical power, therefore in the event of a power failure, the system shall continue to supply gas without interruption. Specially designed solenoid valves will automatically set a default priority bank in event of power failure and continue to automatically changeover without power and signal from the microprocessor.

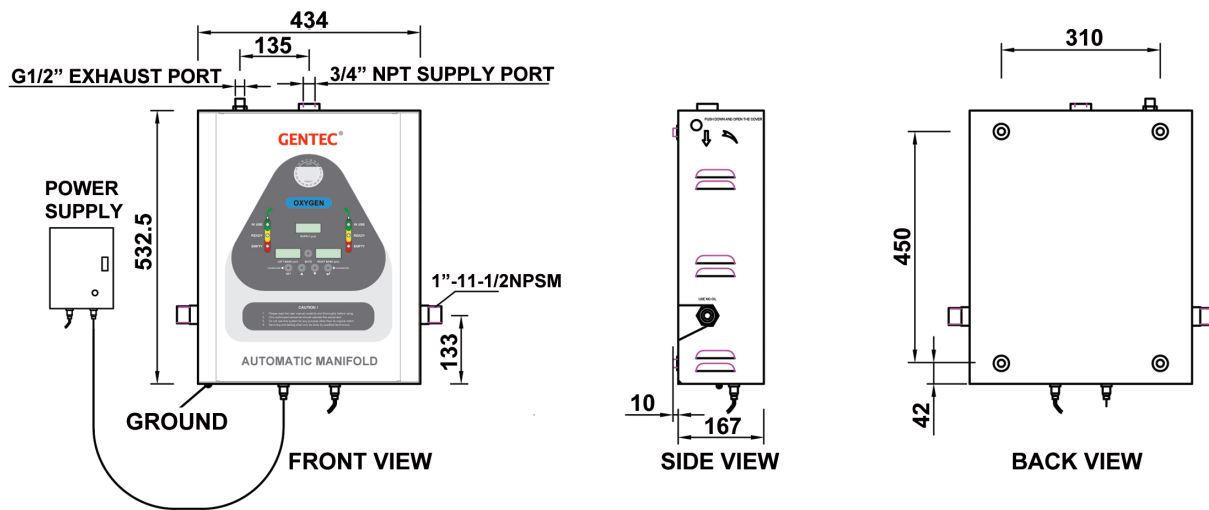
Header bars shall be made of silver brazed, rigid, brass pipe and fittings.

Pigtails with integral check valves shall be gas-specific, complete with CGA nut and nipple inlet and outlet fitting.

The system shall be furnished with a separate power supply to convert 220/110 V to 24 V output power.

Each manifold system shall be cleaned for oxygen service in strict accordance with CGA 4.1, and 100% factory tested for proper operation prior to shipment.

### Dimensions



## GM2D SERIES MEDICAL AUTOMATIC MANIFOLD SYSTEMS

GENTEC® GM2D series medical digital automatic manifold system is designed to provide an uninterrupted gas supply with an integrated circuit board. The fully automatic manifold system monitors cylinder bank pressure and controls the changeover when the primary cylinder bank is depleted, and eliminates the need to manually reset the valve. Even in case of a power failure, the system continues to supply gas without interruption. The system is compliant with NFPA 99 and ISO 7396, HTM 02-01 is optional.



### Features

#### Automatic Changeover System

- Fully enclosed, tamper-resistant metal cabinet. Stainless steel diaphragm regulator ensures steady gas flow.
- LED indicators provide system status ("IN USE"-green, "READY"-yellow, "EMPTY"-red).
- Patent pending changeover technology.
- Integral alarm. Remote alarm available.

#### Pipeline

- Open-style manifold system, designed for future expansion needs.
- Silver brazing on piping joints for maximum leak prevention.
- Unique changeover valve provides uninterrupted supply of gas from primary and reserve banks.
- Easy installation and maintenance.
- Wall mount available.

### Specifications

GENTEC® GM2D Series digital automatic manifold systems shall be manufactured by Genstar Technologies Co., Inc. in an ISO 13485 certified facility. The systems shall be compliant with NFPA 99, HTM 02-01 and ISO 7396.

The GM2D changeover system includes two primary regulators, gas specific cylinder connections, and a single-point power connection. Nitrous oxide and carbon dioxide changeover systems include pre-wired heaters.

The changeover system shall automatically switch to the reserve bank when the pressure in the primary bank falls to a predetermined level.

The GM2D Series automatic manifold systems shall be able to operate without electrical power (except for the heaters for nitrous oxide and carbon dioxide systems). Electrical power is used only to illuminate LED indicators and operate the changeover alarms. In the event of a power failure, the system shall continue to supply gas without interruption.

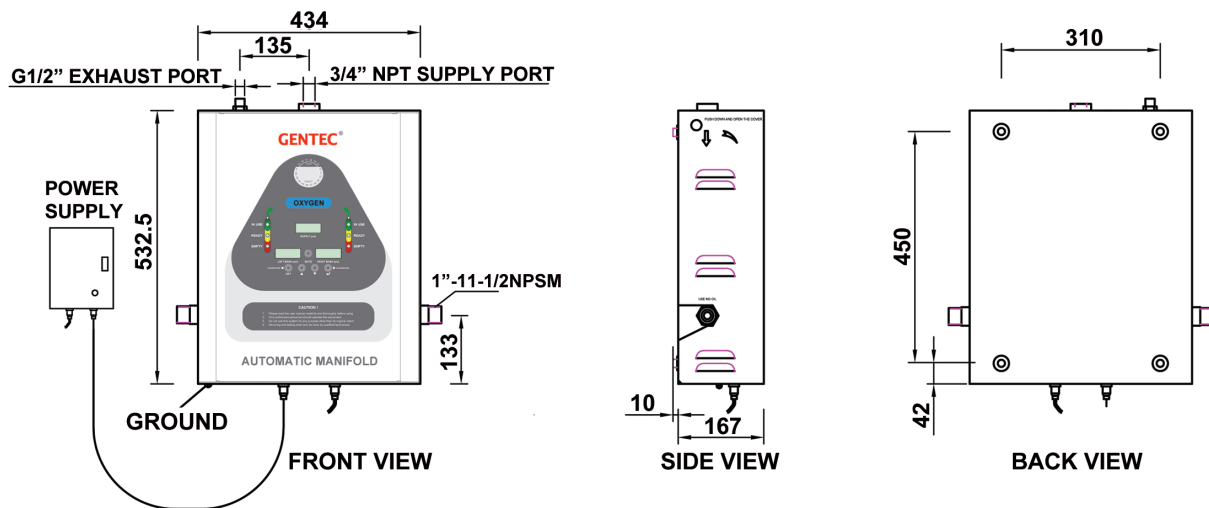
Header bars shall be made of silver brazed, rigid, brass pipe and fittings.

Pigtails shall be gas-specific, complete with CGA nut and nipple inlet and outlet fitting. Reverse flow outlet check valve shall be optional. Pigtails for oxygen and nitrous oxide applications are of 24" or 36" semi-rigid copper. Pigtails for carbon dioxide, nitrogen, and medical air applications are of 24" or 36" flexible stainless steel.

The system shall be furnished with a separate power supply to convert 220/110 V to 24 V output power.

Each manifold system shall be cleaned for oxygen service in strict accordance with CGA 4.1, and 100% factory tested for proper operation prior to shipment.

### Dimensions



### Ordering Information

Please follow the instructions below to select the correct model number.

<b>55</b>	<b>1</b>	<b>2</b>	<b>MD</b>	<b>X</b>	<b>0 * 0</b>	<b>1</b>
Automatic manifold system series prefix	Manifold system layout	Cylinder valve spacing	Medical Digital	Gas Service	Number of cylinders	Type of mounting

Manifold System Layout	
1	Standard Layout
2	"L" shape Layout
3	"U" shape Layout
4	Crossover Layout
5	Staggered Layout

Gas Service	
X	Oxygen
A	Medical Air
IA	Instrument Air
N <sub>2</sub> O	Nitrous Oxide
IN	Nitrogen
C	Carbon Dioxide

Cylinder Spacing (Center to Center)	
1	5"
2	10"
3	13"
4	18"

Number of Cylinders	
Null	Single Changeover Box
5*5	Left * Right Number of cylinders (filters and master shutoff valves included)

Type of Mounting	
1	Wall Mount
2	Floor Mount

Example: 5512MDX-5\*5-1 indicates a 5\*5 oxygen cylinder digital automatic manifold system. Distance between two cylinders is 10" on standard horizontal layout.

Example: 5512MDX-0\*0 indicates a changeover system with filters and master shutoff valves.

Series Number	Gas Service	Inlet Pressure (psi)	Delivery Flow (m <sup>3</sup> /h)	Delivery Pressure (psi)	Outlet Connection	Inlet Connection	Power
GM2DX	Oxygen	150-3000	100	60	3/4" NPT attachment to the union	Pigtail, CGA540	110 / 220 V, 100 VA
GM2DA	Medical Air	150-3000	100	60	3/4" NPT attachment to the union	Pigtail, CGA346	110 / 220 V, 100 VA
GM2DIA	Instrument Air	250-3000	100	180	3/4" NPT attachment to the union	Pigtail, CGA346	110 / 220 V, 100 VA
GM2DN <sub>2</sub> O	Nitrous Oxide	150-3000	50	60	3/4" NPT attachment to the union	Pigtail, CGA326	110 / 220 V, 100 VA
GM2DIN	Inert Gas	250-3000	100	180	3/4" NPT attachment to the union	Pigtail, CGA580	110 / 220 V, 100 VA
GM2DC	Carbon Dioxide	150-3000	50	60	3/4" NPT attachment to the union	Pigtail, CGA320	110 / 220 V, 100 VA