

# MEDICAL GAS HYBRID MANIFOLD



**Ohio Medical fully automatic hybrid manifolds may be used for high pressure, low pressure or a combination of both high pressure & low-pressure operations.**

All models are UL /cUL listed and include:

- Two parallel piped (right & left) final line regulators
- Emergency high-pressure port
- An economizer circuit
- Dry alarm contacts

Each model is supplied with a Manifold Control box that plugs into the cabinet. This controller includes a large, crystal clear, LCD, password protected touchscreen that showcases multiple LED's displaying cylinder volume contents, pipeline pressure readings, inlet gas priorities, switchover conditions and leak-detection for standby cylinders.

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## FEATURES

### 24/7 LEAK DETECTION

Will continuously monitor the reserve supply and provide leak indication lights if pressure is lost.

### CYLINDER MANAGEMENT

Select from high-pressure or low-pressure source, including three different relief valve settings.

### FULL-AUTOMATIC CHANGEOVER & EASY RESET

Once in-use side is depleted, the reserve side will flow uninterrupted, and the system will automatically switch to the reserve supply maintaining the integrity of the delivery gas supply. Manifold will reset the empty bank automatically on cylinder changeout.

### INTERNATIONAL POWER INPUT

AC 85 – 264V 50/60Hz 0.7A Class II  
Includes a 6' Power Cord with NEMA 5-15P plug

### GAS PRIORITY CONTROL

Can select a side being the primary supply when using a low- pressure and high-pressure mixed cylinder configuration by prioritizing the left or right bank.

### 3000 PSI

Maximum inlet

### AUTOMATIC ECONOMIZER

When low-pressure source is selected, the system will monitor and capture excess pressure on the reserve supply before reaching the programmed relief valve setting for each source.

### DELAYED SWITCHOVER

In the event the in-use bank reaches the switchover point with low-pressure cylinders, the reserve side will flow uninterrupted for 20 minutes, before declaring an empty alert.

### WIRELESS & LAN CONNECTIVITY

Connect to web-based telemetry using Wi-Fi network.

### SERIAL 232/485 CONNECTION

Connect to Modbus, or stream data using other protocols.

### WEATHERPROOF

Rated for IP65 location and can be placed outside in direct water spray or dusty conditions.

### GAS STATUS LEDS

- 3-LED status indicators for each gas bank
- 1- Economizer "ON" LED for each gas bank
- 1- "Leak Detected" LED for each gas bank

### ACCURATE PRESSURE DISPLAY

Improved inlet pressure reading and switchover setting to 1-PSI increments.



## Multi-Voltage Digital Manifold (Cabinet & Controller Only)

Part Numbers	Gas
263514	O <sub>2</sub>
263515	N <sub>2</sub> O
263518	N <sub>2</sub>
263516	Air
263517	CO <sub>2</sub>

Weight: 54 lbs (24.5 kg)

## Optional Heaters for N<sub>2</sub>O & CO<sub>2</sub>

Part Numbers	Description
263431	115v Heater, USA
263409	220v Heater

2 required

## LP Manifold Install Kits: w/75 psi relief valve

Part Numbers	Description
263463	1/2" Installation Kit for O <sub>2</sub> , N <sub>2</sub> O, Air & CO <sub>2</sub>
263583	3/4" Installation Kit for O <sub>2</sub> , N <sub>2</sub> O, Air & CO <sub>2</sub>
263585	1" Installation Kit for O <sub>2</sub> , N <sub>2</sub> O, Air & CO <sub>2</sub>
263587	1-1/4" Installation Kit for O <sub>2</sub> , N <sub>2</sub> O, Air & CO <sub>2</sub>

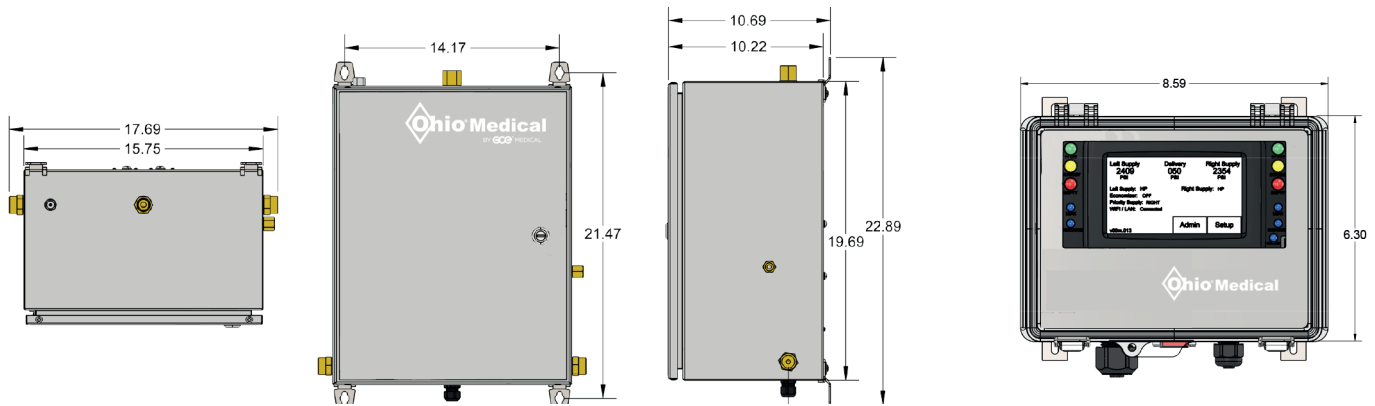
## HP Manifold Install Kits: w/250 psi relief valve

Part Numbers	Description
263464	1/2" Installation Kit for N <sub>2</sub>
263584	3/4" Installation Kit for N <sub>2</sub>
263586	1" Installation Kit for N <sub>2</sub>
263588	1-1/4" Installation Kit for N <sub>2</sub>

Installation kits are available to help simplify piping of the manifold. Both low pressure and high-pressure kits are offered with a range of shutoff valve sizes. Each kit includes a relief valve, pipe away adapter, and lockable shutoff valve. Individual components can also be ordered.

Part Numbers	Description
232600	75 psi Relief Valve
232604	250 psi Relief Valve
232602	1/2" Pipe Adaptor
261600-05	1/2" Locking Source Valve
261600-07	3/4" Locking Source Valve
261600-10	1" Locking Source Valve
261600-12	1-1/4" Locking Source Valve

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## APPLICATIONS

### CONTINUOUS FLOW WITHOUT POWER

Provide a continuous flow of gas to patients and equipment where uninterrupted flow is critical. During a power loss, dual normally open solenoid valves will continue flowing gas from both primary inlets.

### HOSPITAL · SURGERY CENTERS · ACUTE CARE

Perfect for small or large health centers who adhere to the NFPA 99 source of standards.

### DELIVERY PRESSURE

Models up to 200 psig delivery depending on gas type.

### HYPERBARIC CHAMBERS

Supply pressurized oxygen to patients for decompression sickness and serious infections in either a room or a tube for treatment.

### NURSING FACILITIES · HOSPICE

Providing a steady and controlled flow of oxygen for patient use within the facility.

### VETERINARY HOSPITALS

### EQUINE HOSPITALS

## MATERIALS

### MECHANICAL ENCLOSURE

Steel powder coated enclosure with latch, Rated IP65.

### CONTROLLER ENCLOSURE

Polycarbonate with lockable latches, Rated IP65.

### REGULATORS

Brass bar stock and fabric reinforced neoprene diaphragms encapsulated PTFE seat.

### TUBING

3/8" stainless steel tubing with 2-ferrule tube connections.

### SOLENOID VALVES

Brass, 24 VDC coils reduce heat exchange and damage to seals.

### PIGTAILS

Flexible Stainless-Steel Teflon® or Tefzel® inner core, or rigid copper cleaned, capped, & bagged.

### CLEANING

Meets CGA G-4.1.

## SYSTEM INCLUDES

### UL cUL LISTED

Gas Panel  
Manifold Controller

### CYLINDER CONNECTIONS

Flexible stainless steel / rigid cooper pigtaills with gas specific CGA connections on both ends. CGA specific check valve adapters are included at header inlet.

### HEADERS

Expandable heavy wall brass. Rated 3000 PSIG working pressure.

### SHUTOFF VALVES

Header master valves provide a layer of protection when replacing high-pressure cylinders.

### MOUNTING HARDWARE

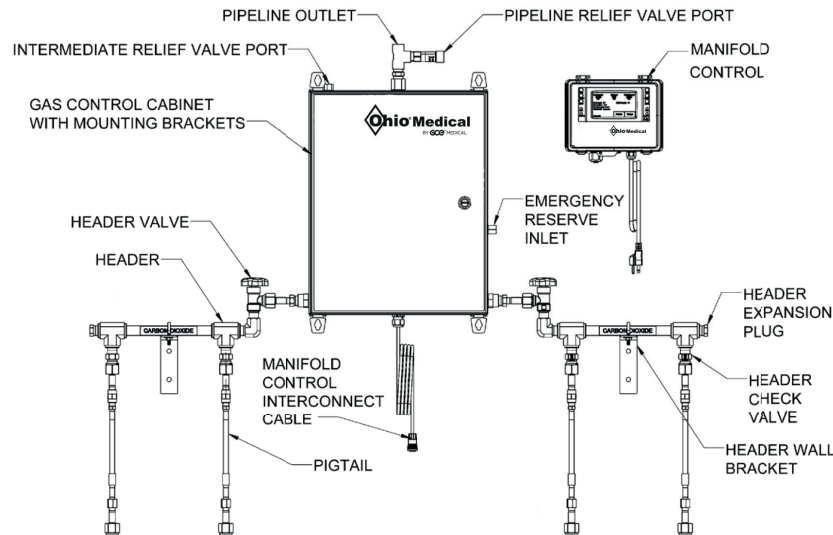
Wall mounting brackets for gas panel, controller, and headers.

## SPACE SAVER HEADER BARS

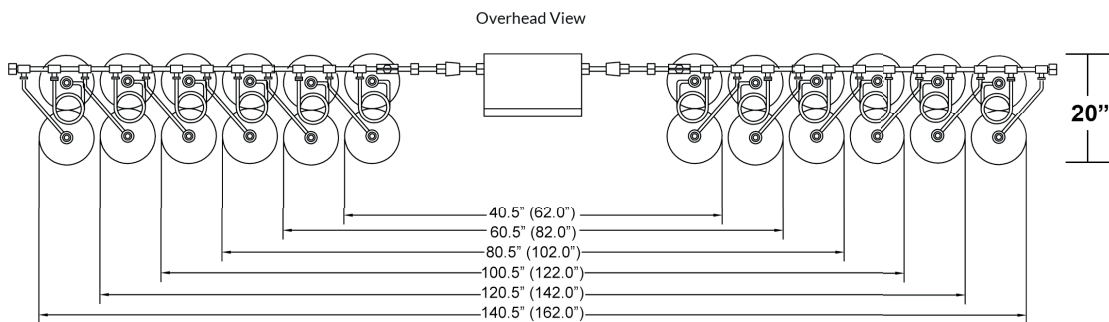
Space saver header bars are ideal for manifold applications where space is limited. The modular header bars feature dual ports, allowing for optimum cylinder placement. The complete kits include the following components for each side of the manifold: Main shutoff valve; header bar segments with check valves at each connection port; 36" flexible pigtails, except for high pressure oxygen, which are 24" copper; mounting brackets. The kits can be used for low- or high-pressure gases, except for low pressure oxygen. The header bars can be expanded in the future if additional capacity is required.

Kit	O <sub>2</sub>	N <sub>2</sub> O	N <sub>2</sub>	Air	CO <sub>2</sub>	Length*
1 x 1	261694-01	261695-01	261696-01	261697-01	261698-01	43.3"
2 x 2	261694-02	261695-02	261696-02	261697-02	261698-02	52.1"
3 x 3	261694-03	261695-03	261696-03	261697-03	261698-03	63.1"
4 x 4	261694-04	261695-04	261696-04	261697-04	261698-04	51.7"
5 x 5	261694-05	261695-05	261696-05	261697-05	261698-05	63.1"
6 x 6	261694-06	261695-06	261696-06	261697-06	261698-06	71.9"
7 x 7	261694-07	261695-07	261696-07	261697-07	261698-07	73.1"
8 x 8	261694-08	261695-08	261696-08	261697-08	261698-08	71.4"
9 x 9	261694-09	261695-09	261696-09	261697-09	261698-09	92.9"
10 x 10	261694-10	261695-10	261696-10	261697-10	261698-10	101.7"
11 x 11	261694-11	261695-11	261696-11	261697-11	261698-11	112.6"
12 x 12	261694-12	261695-12	261696-12	261697-12	261698-12	111.4"
13 x 13	261694-13	261695-13	261696-13	261697-13	261698-13	122.4"
14 x 14	261694-14	261695-14	261696-14	261697-14	261698-14	131.2"

\*Length is for both sides of header bar connected to an 18" wide manifold cabinet.  
Total horizontal space will be dependant upon cylinder placement.



### DIMENSIONAL DRAWING



Dimensions in parentheses are with optional Heaters.