

**Submittal Data Sheet**

**Project Information**

|               |                |
|---------------|----------------|
| Project _____ | Approval _____ |
|---------------|----------------|

**Specification**

The NFPA 99 compliant digital, fully automatic manifold shall be a Tri-Tech Medical Genesys™ series. No manual resetting of valves or levers shall be required. The unit shall switch from Primary to Secondary bank without fluctuation in line delivery pressure. Simultaneously, the Secondary in Use alarm shall be triggered by the manifold's microprocessor. The manifold shall continue to provide gas, in the event of a power failure, until both banks are depleted. After the switchover, the secondary bank shall then become the Primary. The manifold circuit board shall also trigger the "Emergency Reserve in Use" and the "Emergency Reserve Low" alarms when used with 14-3001 & 14-3002 transducers (supplied separately). The manifold shall be capable of being converted for lower or higher flow line regulators or for use with high pressure cylinders.



Model LLU12OX1L with RWP-9-4S shown above

The microprocessor based control panel shall incorporate LED's and an illuminated text display and shall provide electronic monitoring of circuits with up to 20 error, alarm or information messages displayed for ease of maintenance. The illuminated text display shall be readable even in poor lighting conditions. Analog gauges shall also be provided so that line and both bank pressures may be observed in the event of a power failure. The control panel shall also incorporate a set of LED's for each bank, green for "Bank in Use", amber for "Ready" and red for "Empty".

All manifold regulators, piping and control switching equipment shall be cleaned for use with oxygen service and installed in a steel powder coated cabinet (weatherproof version available) to provide protection and minimize tampering.

**Features**

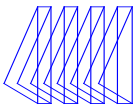
- Line pressure sensor may be mounted inside the cabinet or remotely located to eliminate the need for a high/low pressure switch for master alarm operation – no need to purchase a high/low pressure switch or DISS union.
- Electronic monitoring of circuits with up to 20 error, alarm or information messages.
- May be field converted for lower or higher flow line regulators or for use with high pressure cylinders.
- NFPA compliant models include 48-0023 ball valve
- Reserve Oxygen manifolds (sold separately – RWP or RSP series) supplied with copper pigtailed (stainless flexible pigtailed supplied for other gas services)
- Double "Z" bracket for one man installation
- Unit of measure switching (psi, kPa, BAR).
- Dual line pressure regulators
- Cabinet weight 65 lbs.
- Input power 120 VAC, 50 to 60 Hz.

**Flow Capacity**

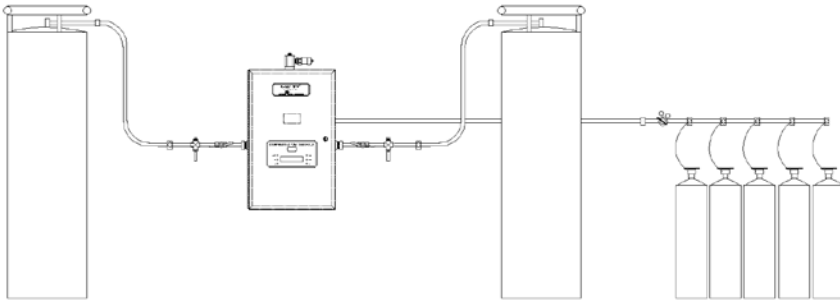
Note: External vaporizers may be required to achieve these flow rates. Typical portable bulk vessels without external vaporizers will provide 250 to 350 scfh (consult the specifications provided by the vessel manufacturer).

| Gas Service                     | Standard Line Regulators | High Capacity Line Regulators | Without Heaters       | With Heaters            |
|---------------------------------|--------------------------|-------------------------------|-----------------------|-------------------------|
| Oxygen                          | 500 SCFH<br>(236 l/min)  | 750 SCFH<br>(354 l/min)       | N/A                   | N/A                     |
| Nitrous Oxide or Carbon Dioxide | See →                    | N/A                           | 40 SCFH<br>(19 l/min) | 500 SCFH<br>(236 l/min) |
| Nitrogen                        | 750 SCFH<br>(354 l/min)  | 1,000 SCFH<br>(472 l/min)     | N/A                   | N/A                     |

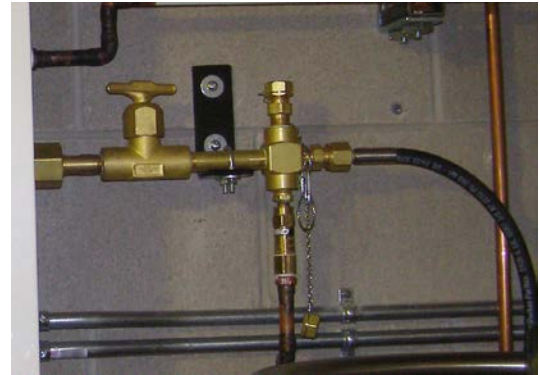
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**Dimensional Drawing**



Typical installation shown above  
Cabinet dimensions 26 1/4" H x 17" W x 9" D



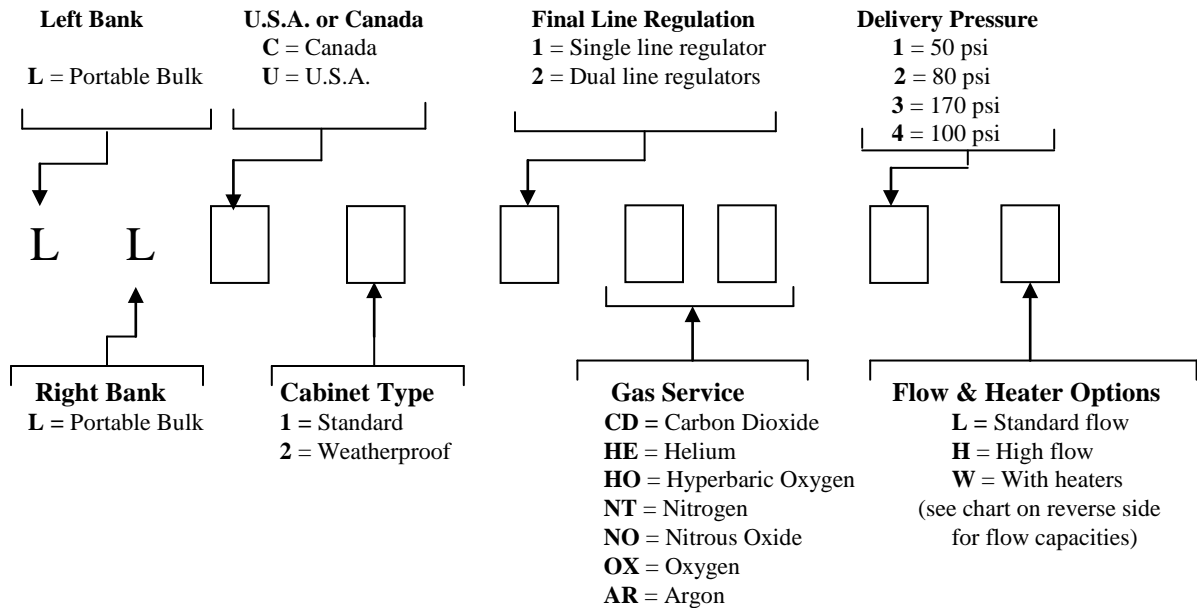
20" header length  
(Header pictured above accommodates 2 - 72" flexible pigtails for 2 portable bulk vessels + relief valve with pipe away)

**Design Lengths**

| TOTAL NUMBER OF CYLINDERS  | 2                 | 4                 | 6                 |
|--|-------------------|-------------------|-------------------|
| Cabinet width + left header width + right header width only – no vessels | 4'-9"<br>(1.45 m) | 4'-9"<br>(1.45 m) | 6'-0"<br>(1.72 m) |

\* See Separate Manifold Header Literature for Header Part Numbers

**How to Order:** Easy to use modular ordering system. Fill in the 7 blanks to specify the manifold that meets *your* needs.



**Example:**

LLU22OX1L = Portable bulk vessel x Portable bulk vessel Genesys™ Manifold, Weatherproof Cabinet, Dual Line Regulators, CGA 540 Oxygen service, 50 psi delivery, Standard flow

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