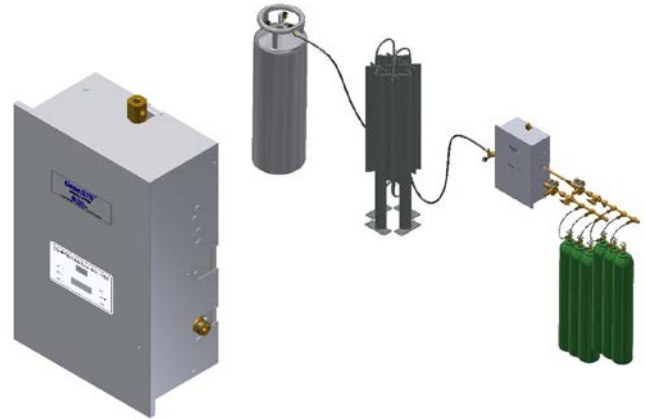
**Submittal Data Sheet****Applications**

Hyperbaric chambers, emergency preparedness, where space is not sufficient for a bulk tank, back-feeding during shut downs. Ideal for applications warranting the use of portable or micro-bulk cryogenic liquid gas vessels.

**Specification**

The NFPA 99 compliant digital, fully automatic manifold shall be a Tri-Tech Medical *Genesys™* PLX35series. No manual resetting of valves or levers shall be required. The unit shall provide gas from the left (vapor withdrawal from portable bulk or bulk vessel) until the pressure from the left inlet bank is depleted. The unit shall switch from primary (left) to secondary (right) bank without fluctuation in line delivery pressure. Simultaneously, the “Secondary in Use” alarm shall be triggered by the manifolds microprocessor. After the switchover, the secondary (right) bank shall then become the “Bank in Use”. When the left bank is replenished the manifold shall automatically resume providing gas from the left bank and designate the left bank as the primary and the right bank as the secondary bank. In the event of a power failure or should both the primary and secondary banks become depleted the manifold shall continue to provide gas until both the primary and secondary banks are depleted at which time the manifold will automatically provide gas from the emergency reserve bank until all three banks are depleted. The manifold microprocessor shall trigger the “Secondary in Use”, “Right Bank (secondary) “Low, High Line Pressure” and “Low Line Pressure” alarms without the need for additional pressure switches or transducers. The manifold microprocessor shall also trigger the “Emergency Reserve in Use” and “Emergency Reserve Low” alarms when used with transducers supplied separately. In Oxygen, the manifold shall be capable of providing 3,500 SCFH @ 50 psi with a 5 psi pressure drop from a single portable bulk vessel delivering 95 psi thru a sufficiently sized vaporizer.

The control cabinet shall also incorporate economizer gas circuits for both banks. The economizer circuits will allow the head pressure of the reserve bank to be utilized instead of venting to atmosphere so long as there is sufficient system gas usage. In addition, the system shall incorporate economizer software which recognizes and utilizes small amounts of liquid remaining in vessels that have been depleted.



The control panel shall incorporate a text display, displaying pressures for the Left Bank, the Right Bank, delivery

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 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”.

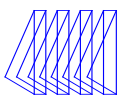
Analog gauges are also provided so that all above pressure zones may be observed in the event of a power failure. All manifold regulators, piping and control switching equipment shall be cleaned for use with oxygen service and installed in weatherproof painted aluminum cabinet to provide protection and minimize tampering.

**Features - Benefits**

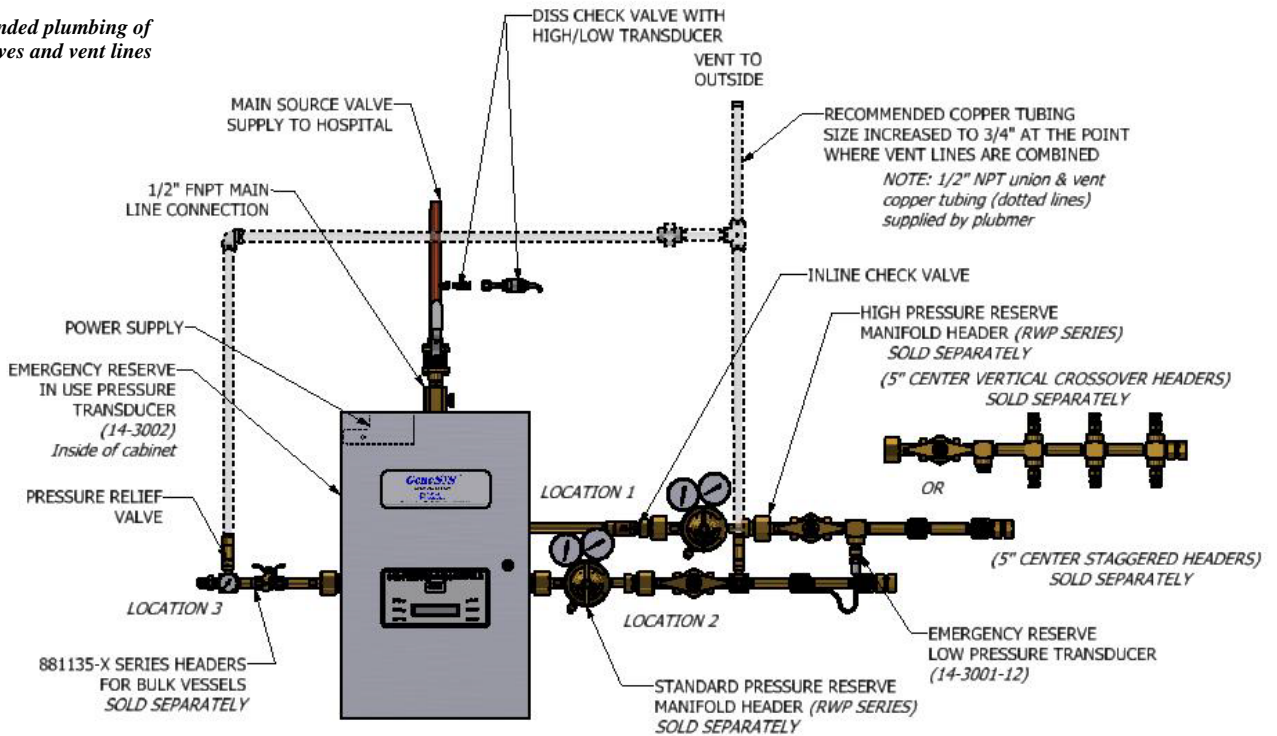
- **Five-year parts and one year labor limited warranty\***
- Fully automatic – no resetting of valves or levers
- Input power 120 to 240 VAC, 50 to 60 Hz - single point connection
- 400 psi differential rated solenoid – can’t lock up
- Economizer circuits for maximum efficiency of gas use
- Unit of measure switching (psi, kPa, BAR).
- Includes 3/4" source or main line ball valve with copper tube extension.
- Dual line pressure regulators
- Built for expansion by adding header extensions.
- Cabinet weight 89 lbs.
- May be converted from low or medium pressure liquid portable bulk vessel use to use with high pressure cylinders.
- 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.

\* See Terms and Conditions, Document No. 99-0477, on our Website at: <https://tri-techmedical.com> for complete details.

*Genesys* is a registered trademark of Tri-Tech Medical Inc Patented



*Recommended plumbing of  
Relief Valves and vent lines*

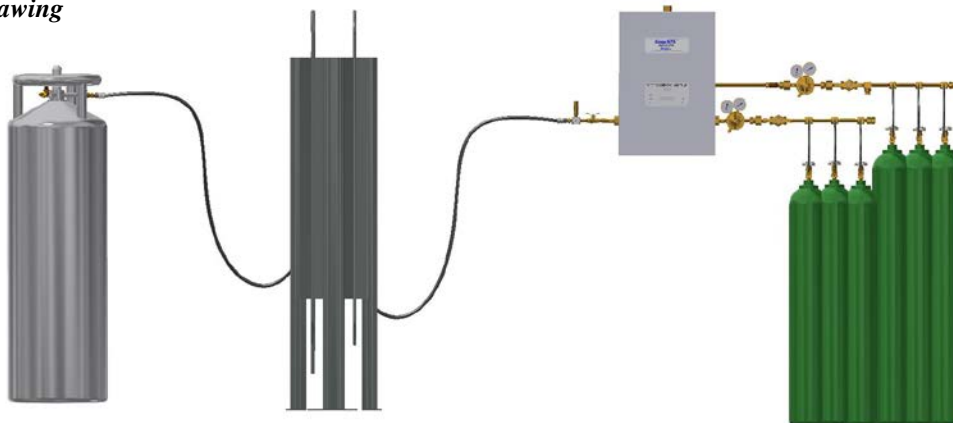


**Design Lengths**

**Manifold Cabinet Only**

Cabinet only is 17.2" W x 26.6" H x 10.5" D

**Dimensional Drawing**

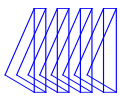


Typical installation shown above primary (left bank), secondary (right bank) and emergency reserve bank

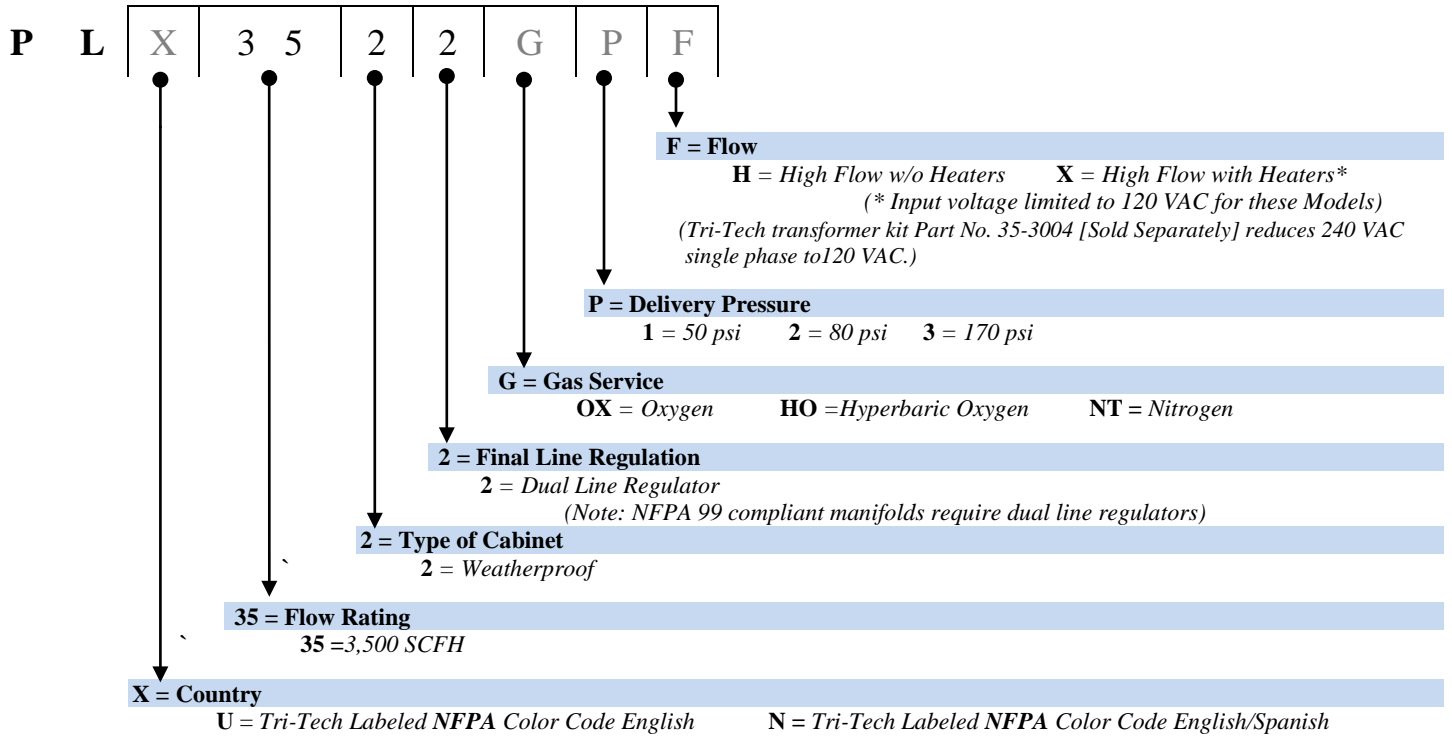
*Note: One 3,500 SCFH vaporizer is also required to operate this system. Vaporizer is not included and to be provided by others.*

<b>Emergency Reserve Header</b>	<b>RWP series header Specify Cabinet Location 1</b>
<b>Right Bank Headers</b>	<b>RWP series headers Specify Cabinet Location 2</b>

For Manifold Headers Configuration part numbers, see literatures **RWP series - 99-0325**, **CS/CV series - 99-0466**, and **881135-X series - 99-0629**



**How to Order:** Easy to use modular ordering system. Fill in the 4 blanks to specify the manifold that meets **your** needs.



**Example: PLU3522OX1H** = Genesys™ Preferential Logic Manifold U.S.A. version, Weatherproof Cabinet, Dual Line Regulators, 3,500 SCFH Oxygen gas service, 50 psi delivery, High flow