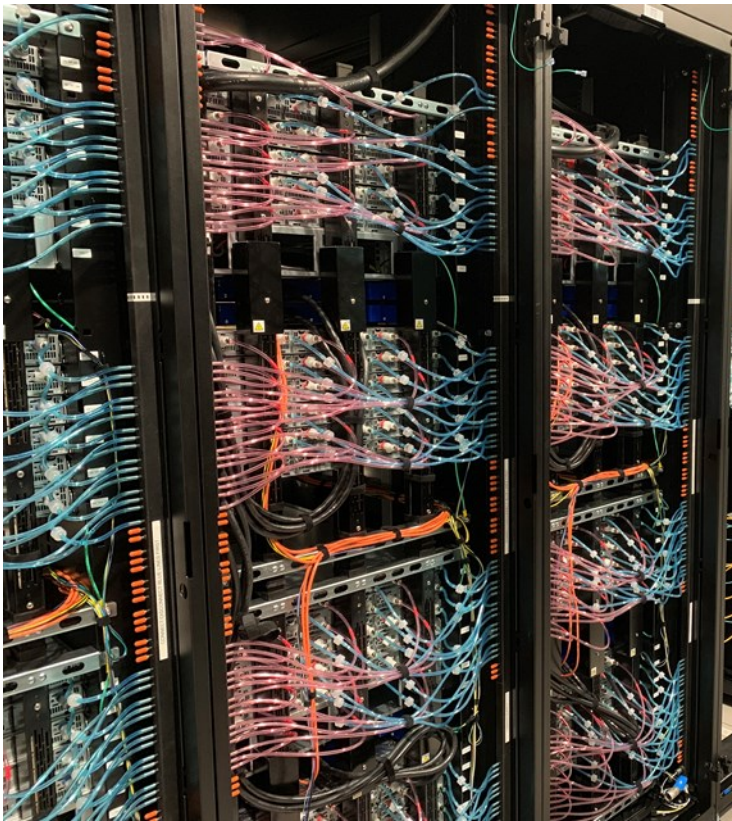


The Chillyne *Cool-Flo*® System is a direct-to-chip liquid cooling system that delivers coolant under negative pressure *in both directions*. Chillyne's technologies were designed specifically to eliminate the risks associated with liquid cooling while keeping deployment and operating costs low. The Chillyne system mitigates risk with its patented leak-proof design.

## ABOUT THE RACK MANIFOLD

Chillyne offers an OCP liquid-cooling rack manifolds to deliver coolant for over 100 servers. Chillyne's rack manifolds can remove 60 KW or more from an OCP rack. The negative pressure system allows the servers to be filled and connected or drained and disconnected while the system is in operation. No expensive connectors are required.



### Key Features

- Quick Disconnect Connectors that work while the system is in operation
- Manifold mounted temperature sensor to monitor coolant temperature
- Low flow resistance connectors, manifolds and tubing provides consistent cooling flow for distant racks 30ft (10m) or more from the CDU
- Inline rack manifold filtration (optional)
- Custom mounting features that allow integration with OCP rack PDU mounting points
- Corrosion resistant stainless steel construction
- A rack manifold flow meter flow meter can be combined with temperature sensors to provide data on heat absorbed via SNMP

**Custom manifolds available for any rack, any power**

## ADDITIONAL FEATURES

### Internal Server Manifold (GPU System)

Internal Server Manifold distributes flow to all heat sinks and GPU Cards. Individual Servers/Cards may be removed for service. The design doesn't need expensive connectors or hose clamps.

### Customizable Port Types and Port Configurations

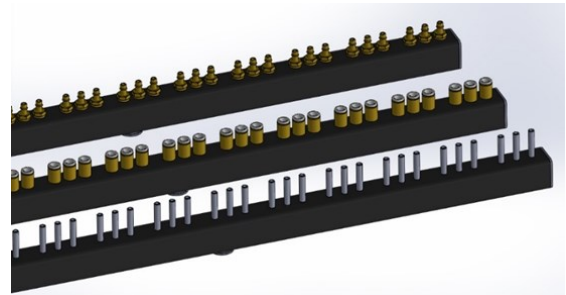
Various port types and port configurations including barbed, push-to-connect and tube stubs. Position and number of ports is configurable

### Flow Control Elements

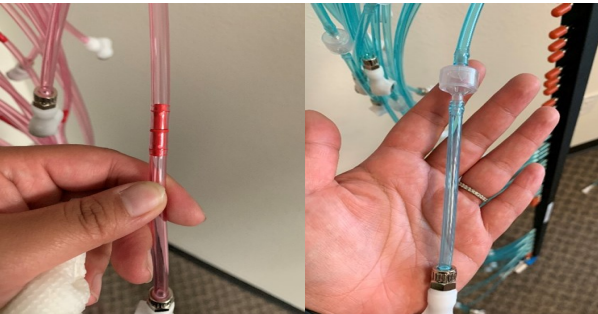
Patented air flow limiting valves that allow all the servers to be cooled even if one server is open to air



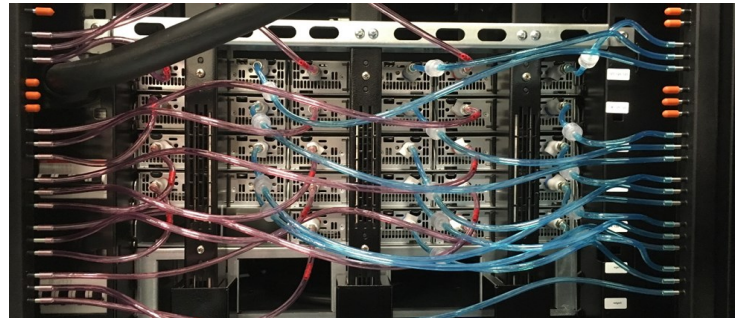
Chillydyne GPU System with Internal Server Manifold



Customizable port configurations



Chillydyne Flow Control Elements



OCP Rack Manifold Set-up

## LIQUID COOLING POWER SAVINGS

### Liquid Cooling Power Savings

Chillydyne's Cool-Flo System is an efficient and low cost liquid cooling system that reduces data center power consumption 3 ways:

- 75-100% reduction in HVAC power
- 75% reduction in server fan power
- 5-10% reduction in CPU power

This example shows a legacy data center power reduction of 45% with the Cool-Flo System. Any data center can bring their Power Usage Efficiency (PUE) down to 1.2 or less plus additional power savings at the server.

