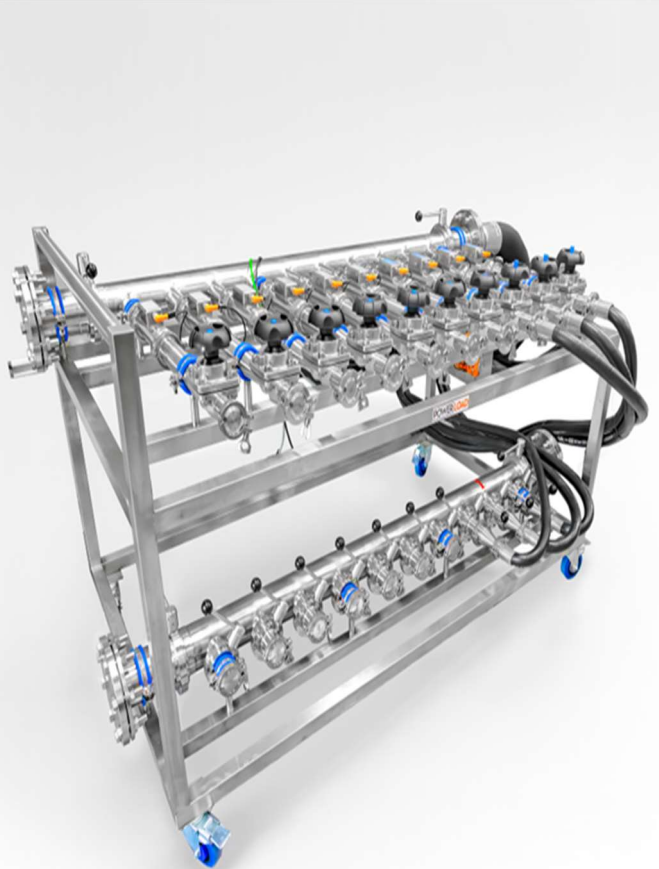


COMMISSIONING MANIFOLD TROLLEY

High-Capacity Fluid Distribution for Data Centre Load Bank Commissioning



OVERVIEW

The Powerload Commissioning Manifold Trolley is a high-capacity stainless steel fluid distribution system engineered to manage liquid cooling circuits for large-scale data centre commissioning. Featuring dual 4-inch manifolds, precision flow control, and digital monitoring, it enables engineers to distribute and regulate cooling fluids across multiple load banks simultaneously.

Developed for data centre engineers and commissioning professionals, it provides:

- Multi-circuit distribution with precision flow control
- Integrated monitoring via digital flow meters
- Bacnet interface for seamless integration with load bank systems
- Mobile, compact design for site flexibility

The trolley is built from high-grade stainless steel, ensuring reliability and compliance with commissioning standards.

KEY FEATURES

- Robust stainless-steel construction – 304-grade frame with 4" manifolds.
- Dual manifold design: inlet (top) and outlet (bottom) for efficient distribution.
- 10x regulated outlet/inlet circuits with Tri-clamp fittings.
- Digital flow meters for each circuit with I/O Link data collection.
- Digital pressure sensors to measure pressure drop.
- Bacnet interface for integration with load bank systems.
- Control panel with data connectivity and alarms.
- Mobility provided by 4 swivel lockable castors.
- Quick deployment with optional FD83 connectors and hoses.

TECHNICAL SPECIFICATIONS

Parameter	Specification
Overall Dimensions	1800mm (L) × 1000mm (W) × 900mm (H)
Frame	40×40×2mm SHS (304 Stainless Steel)
Handle Rail	1.5" stainless tube
Top Manifold	4" manifold, 10x 2" outlets reducing to 1.5" Tri-clamp, 2x 4" butterfly valves, 10x flow regulation valves, 10x digital flow meters, 11 digital pressure sensors
Bottom Manifold	4" manifold, 10x 2" inlets reducing to 1.5" Tri-clamp, 2x 4" butterfly valves, 10x 2" butterfly valves
Control Panel	I/O Link modules for flow meter data, Bacnet interface, 5m power / data lead
Mobility	4x swivel lockable castors
Options	20x FD83 connectors (Tri-clamp), 20x peroxide-cured 3m hoses
Weight	Empty – 230kg Full – 300kg
Fill Capacity	500L

APPLICATION IN DATA CENTRES

- Distribution of cooling fluids to multiple water-cooled load banks.
- Flow regulation and monitoring for commissioning processes.
- Integration with chilled water loops and CDU systems.
- Temporary or permanent fluid management during thermal testing.

SAFETY COMPLIANCE

- Digital flow monitoring with alarms for safe operation.
- Butterfly valves and secure Tri-clamp connections to prevent leaks.
- Anti-vibration pipe supports for stability during operation.
- CE certified components, compliant with data centre commissioning standards.