

Bluearth

CDU4175 L2A

175kW

The 175 kW / 52U L2A Sidecar CDU is a liquid-to-air (L2A) cooling solution capable of meeting the cooling requirements of the **NVIDIA Vera Rubin NVL72** platform. It delivers up to 175 kW of cooling capacity at $\Delta T_D = 10$, making it ideal for high-density AI and HPC applications.

It's unique L2A architecture provides high cooling capacity without requiring changes to existing data center infrastructures. The infrastructure-free installation and rapid deployment enables hybrid liquid cooling deployments in conventional air-cooled facilities.



ADVANTAGE



ULTRA-HIGH DEPLOYMENT DENSITY

- Optimized for the ideal balance between compact dimensions and cooling performance.
- Delivers up to 175 kW of cooling capacity at $\Delta T_D = 10$, or 125 kW at $\Delta T_D = 5$, within a width of only 900 mm.



INTELLIGENT MONITORING

- The CDU comes standard with an intelligent control system.
- It supports local and remote system parameter configuration, operating status monitoring, runtime recording, and alarm information inquiry. System parameters and fault data are automatically stored and retained after power loss.



HOT-SWAPPABLE DESIGN

- The pumps and filters feature a hot-swappable design.
- Tool-free maintenance can be performed on site without system shutdown.



PUMP REDUNDANCY

- Each CDU is equipped with two pumps, supporting cyclic operation and automatic switchover in case of failure.



INTELLIGENT CONTROL

- Supports both Constant Flow and Constant Pressure operating modes.
- Allows flexible system configuration to meet different deployment requirements.



MODULAR DESIGN

- Supports both standalone and parallel operation.
- A single CDU supports a fully loaded NVIDIA GB300 NVL72 system.
- Two CDUs operating in parallel can support the cooling requirements of NVIDIA Vera Rubin NVL72, including the next-generation Ultra version.

SPECIFICATION

Technical parameter		175kW/52U L2A Sidecar CDU
General	Solution type	L/A Air cooled
	Cooling capacity	175kW @ Approach temp. 10°C Primary flow rate: 22000 CFM Secondary flow rate: 175LPM
	Dimension	Assembly:900(W) x 1300(D) x 2300(H) mm
	Secondary liquid	Propylene glycol 25wt%
	Noise	<85db
	Pump	1+1
	Liquid volume	Assembly: 38 L CDU: 10 L Tank: 28 L
	Operating temperature	Ambient: 35°C PG25: 45°C/60°C
	Weight	Assembly: 485/501 kg RPU: 95/100 kg radiator: 120/135 kg
	Floor loading (kg / m2)-wet	Assembly: 625kg
Power supply	Power consumption	12.5 kW
	Power input	3P 380V~415VAC 50/60Hz
	Power redundancy	N+1
mPUE		1.10
Primary side	Piping connections	2" Hose barb fitting
	Flow rate	< 22000 CFM
Secondary side	Piping connections	2" Sanitary clamp
	Flow rate	< 175 LPM
	Design pressure	< 2bar
System interface		1x RJ45 – ethernet, 4x M12 – external leak / liquid level
Communication platform		HMI, SNMP, Modbus
Monitoring		4x Temperature: • secondary inlet / outlet • ambient / dew point 4x Pressure: secondary inlet / outlet 1x Flow rate: secondary 5x Leak detection: internal, external 2x Liquid level: external Power meter