

Liquid Distribution Unit (CDU)

- Liquid to Liquid

Haiwu Liquid Cooling Distribution Unit (CDU) series is designed to deliver advanced cooling solutions. Its equipment composition includes, but is not limited to, the following components: a plate heat exchanger, secondary side circulation pump, constant pressure refill system, expansion tank, filter, control valves, temperature and humidity sensors, pressure sensors, temperature sensors, flow sensors, PLC control system, touchscreen, and power module. The system is further enhanced by the Haiwu intelligent control system, enabling smart optimization and precise operational adjustments.



Applications

- SuperComputing Data Centers
- AI Data Centers
- Integrated Data Centers
- City-Brain Data Centers and other high power density scenarios

Key Features

- Seamless main/backup power switching with uninterrupted main control. Core components (e.g., pumps) retain their state during power outages and rapidly resume operation upon power restoration.
- Redundant configuration of critical devices, including pumps and sensors, for enhanced reliability.
- High-precision filtration prevents system blockages, ensuring stable performance of server cold plates.
- Wet materials are fully compatible, utilizing corrosion-resistant materials such as 304 stainless steel, PTFE, EPDM, and FKM

Key Values

- An automatic refill system streamlines maintenance efforts
- Online upgrades available for the CDU system
- Online maintainance for key components
- Complete water-electricity isolation enhances safety and reliability
- Maintains dynamic balance, intelligently adjusts as needed, and provides precise control
- Includes an anti-condensation feature to prevent any condensation issues in the system

Technical Parameters

Specification				In-row CDU （Liquid to Liquid）				
Model	DR0150	DR0150	DR0150	DR0600	DR0750	DR0900	DR1350	DR2000
Capacity （kW）	150	300	450	600	750	900	1350	2000
Dimension (Single Pump)（mm）	600×1200×2000			900×1200×2000			1200×1200×2000	1200×1600×2200
Design conditions				Secondary side supply/return：40/50℃； Primary Side supply/return：35/45℃.				
Secondary Side Coolant				Specified Coolant by Customers				
Primary Side Coolant				Softened water, glycol solution, PG-25, etc.				
Power Supply Standard					380V 3Ph 50Hz			
Power Architecture					2N （ATS as optional）			
COMMs Protocol					Modbus(SNMP as optional)			

Specification	In-rack CDU (Liquid to Liquid)			
Model	DD045A	DD045	DD080	DD0120
Capacity (kW)	15~45	45	80	120
Primary side supply/return (°C)	35/ 47			
Secondary side supply/return (°C)	40/ 52.5			
Pump	1+1 Redundancy			
Secondary Side Coolant	Specified Coolant by Customers			
Primary Side Coolant	Softened water, glycol solution, PG-25, etcl			
Power Supply Standard	220V 1Ph 50Hz	48V(DC)		
Power Architecture	2N architecture , PDU		busbar	
Dimension	19" rack (4U)		21" rack (4U)	
COMMs Protocol	Modbus(SNMP as optional)			

Note: For CDU selection, please consult the manufacturer's technical staff.