

# SuperCDU-1500

## Liquid-to-Liquid Coolant Distribution Unit

The increasing demand for high-performance computing and advanced GPUs highlights the limitations of air-cooling. Delta's SuperCDU offers a superior alternative, providing effective separation of facility and secondary circuits as well as precise control over flow, pressure, temperature, and coolant quality. It excels in managing high-density thermal load, maximizing computing power while minimizing data center PUE. The SuperCDU ensures operational reliability by preventing condensation and guarantees quality with its stainless steel plumbing and coolant filtration. Embrace the future of high-performance computing with Delta's SuperCDU!



### Cost Effective

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- Maximize energy saving: cuts power consumption, surpassing traditional air cooling
- Space optimization: compact design enables closer server placement further reducing Capex
- Flexible integration: supports direct-to-chip and Rear Door Heat Exchanger (RDHx) application, adapting to existing setups and blending air and liquid cooling for future upgrades

### High Reliability

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- Uninterrupted operation: dual power feed with ATS ensures continuous SuperCDU operation
- Optimized redundancy design ensures no single point of failure in the system
- Leak detection: instant alarms with configurable response for efficient pumping action
- Durable construction: stainless steel plumbing with 50-micron filters for long-term coolant quality

### Easy Management

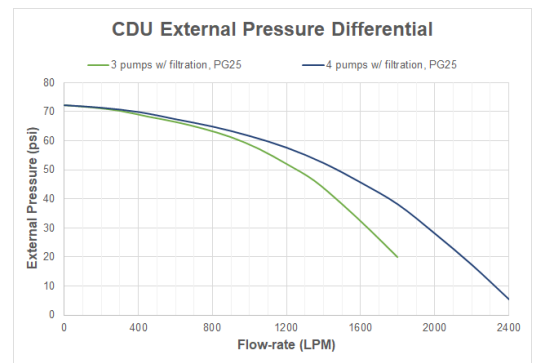
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- Intuitive interface: 10-inch color touchscreen displays real-time system status
- Efficient control: group and manual control enhance system management and reliability

# Technical Specifications

Model	SuperCDU-1500
Nominal Cooling Capacity	1500 kW @5°C approach, 1500 LPM secondary flow rate, 1500 LPM primary flow rate, 1.00 LPM/kW 1377 kW @4°C approach, 1200 LPM secondary flow rate, 1200 LPM primary flow rate, 0.87 LPM/kW 1210 kW @4°C approach, 1350 LPM secondary flow rate, 1200 LPM primary flow rate, 1.12 LPM/kW 1170 kW @4°C approach, 1400 LPM secondary flow rate, 1200 LPM primary flow rate, 1.20 LPM/kW 1035 kW @4°C approach, 1500 LPM secondary flow rate, 1200 LPM primary flow rate, 1.45 LPM/kW
<b>PRIMARY SIDE</b>	
Coolant Type	Water
Nominal Coolant Flow Rate	1200 LPM, 27°C primary inlet temperature
Operating Pressure Drop	13.5 psi @1200 LPM water flow rate
Coolant Filter	500µ with bypass to enable cleaning
<b>SECONDARY SIDE</b>	
Coolant Type	25%PG
Nominal Coolant Flow Rate	4x pumps: 1500 LPM @49.0 psi external pressure differential 3x pumps: 1500 LPM @37.5 psi external pressure differential
Approach Temperature	5°C
Coolant Filter	50µ redundant to enable cleaning
External Pressure Drop	49 psi
<b>POWER SUPPLY</b>	
Nominal Power Supply Voltage	380/400/415/480 Vac, 3P3W+PE
Operating Voltage Range	342-528 Vac
Frequency	50/60 Hz
Maximum Over Current Protection (MOCP)	70A
Full Load Ampere (FLA)	54A
Dual Power Feed	Standard
Power Feed Location	Top
<b>DEPLOYMENT</b>	
Primary Connection	4 in. sanitary ferrule
Secondary Connection	4 in. sanitary ferrule
Primary and Secondary Connection Location	Top
<b>PHYSICAL</b>	
Dimensions (W x D x H)	1200 x 1200 x 2300 mm (47.2 x 47.2 x 90.6 inch)
Net Weight	With Coolant 1900 kg (4188.8 lb) Without Coolant 1600 kg (3527.4 lb)
<b>COMMUNICATION INTERFACE</b>	
Display	10" touch panel
Protocols	SNMP, Modbus RTU, Modbus TCP
Monitoring	Primary Side: Temp. (Inlet/Outlet), Flow, Pressure (Inlet, Filter ΔP) Secondary Side: Temp. (Supply/Return), Flow, Pressure (Supply, Return, Filter ΔP) Dew-point Temp.
<b>CONFORMANCE</b>	
Safety	CE, UL/CSA 60335
<b>FEATURES</b>	
Leak Detection	Standard
Pump Redundancy	3x pump (N+1), 4x pump (N) run modes
Temperature/Pressure Sensor Redundancy	Standard
Integrated Variable Frequency Drivers (VFD's)	Standard
Expansion Vessel Redundancy	4x redundant 8L expansion vessels
Auto-restart Function	Standard

All specifications are subject to change without prior notice.



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