Supermicro Dry Cooler

Infrastructure-Scale Facility Water Cooling Designed for Low-PUE/WUE Data Centers

Optimized for AI and HPC Data Centers

- **Scalable Cooling Capacity:** Supports 1 MW to 50 MW*
- **Flexible, Modular Design:** Enables fast deployment, easy scaling, and future growth with minimal disruption
- **Power & Water Efficiency:** Cuts energy and water usage — reducing costs and ideal for water-scarce regions
- **Closed-Loop Design:** Boosts reliability, prevents contamination, and reduces maintenance needs
- **Adiabatic Pre-Cooling:** Ensures performance in hot climates with minimal extra water
- **Multiple Integration Protocol Support:** Redfish®, SNMP, Web-based UI, and Supermicro SuperCloud Composer® (SCC) ready

Efficient Cooling Solution Ideal for Water-Constrained Regions

Supermicro's Dry Cooler delivers an ultra-efficient, lower-PUE/WUE cooling solution designed specifically for water-scarce environments. The fully closed-loop primary system eliminates water consumption entirely while providing exceptional thermal performance and unwavering reliaibility across diverse ambient conditions. Equipped with advanced EC fans and intelligent variable-speed controls, it dynamically optimizes airflow and power usage for significant energy savings, lower operating costs, and enhanced long-term reliability, making it ideal for high-density AI and HPC data centers.

Adiabatic Cooling for High-Temperature and Variable Environments

Supermicro Dry Cooler leverages advanced adiabatic-assisted pre-cooling technology to deliver outstanding efficiency and reliability in high-temperature or seasonally variable climates. When adiabatic mode is activated, a water spray cools the incoming air before it reaches the heat exchanger, significantly enhancing cooling performance and maintaining optimal operating temperatures even during extreme heat waves. Furthermore, a fully customizable design can adapt to local climate conditions, ensureing reliable, high-efficiency cooling performance year-round.

Modular Design for Flexible, Rapid Deployment

Supermicro's Dry Cooler provides a highly efficient primary-loop heat rejection system, empowering customers to precisely scale cooling capacity from 1 MW to 50 MW to meet their exact requirements. Delivered in fully pre-assembled, factory-tested 40-foot containerized modules, these solutions enable rapid deployment with minimal on-site installation time. The modular, infrastructure-scale design offers exceptional flexibility, allowing seamless relocation, reconfiguration, or expansion as data center needs evolve.

Centralized Management and Monitoring

Supermicro's Dry Cooler features advanced control and monitoring capabilities, including a built-in touchscreen, Web UI, and support for SuperCloud Composer (SCC) for centralized management. It also supports industry-standard protocols, such as SNMP and Redfish, to enable seamless integration with existing data center platforms. Additionally, real-time monitoring of temperature, pressure, flow rate, and pump status ensures optimal and stable performance.

*Note: Higher cooling capacity is possible with adequate site resources

Dry Cooler	LCS-SDCT-010W1001
Application Type	Closed-loop
Cooling Capacity	1 MW to 50 MW*
Redundancy	N+1 redundant fans
Power Consumption (Max)	19 kW
Dimensions	2,450 (W) x 12,200 (D) x 2,900 (H) mm
Weight	26,000 kg
Protocols	• SNMP v2c • Ethernet/Web-based UI • Redfish • RESTful API

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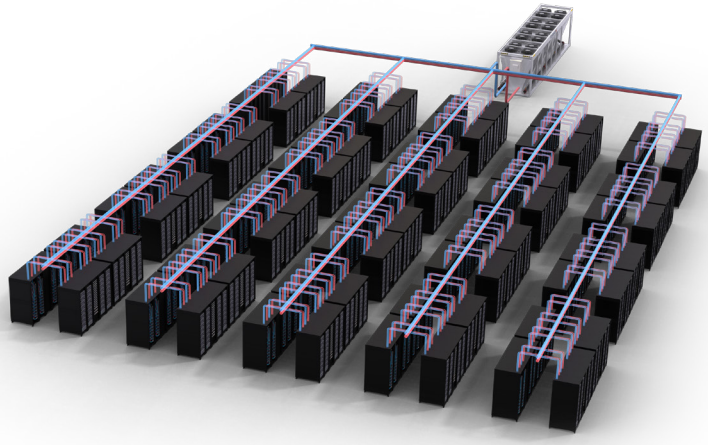

Learn More About Supermicro Direct Liquid Cooling & Data Center Building Block Solutions®

Supermicro's Data Center Building Block Solutions (DCBBS) delivers complete, modular AI infrastructure. Built from validated components and sub-systems, DCBBS provides end-to-end deployment flexibility — from individual GPUs and networking switches to complete racks, site infrastructure, management software, and professional services.

In-Rack CDU

In-Row CDU

L2A Sidecar CDU

Water Cooling Tower

Dry Cooler

Rear Door Heat Exchanger