



Liquid Cooling Solutions

Accelerate time-to-deployment with plug-and-play liquid-cooled total solutions



✓ 5,000+ Racks Per Month Capacity

✓ 1,350+ Liquid Cooled Racks Per Month Capacity

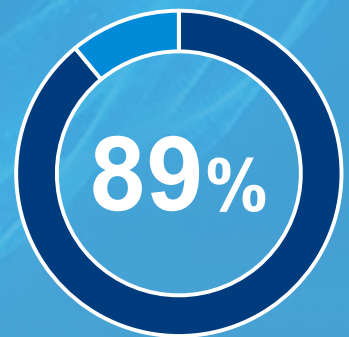
✓ Worldwide Manufacturing



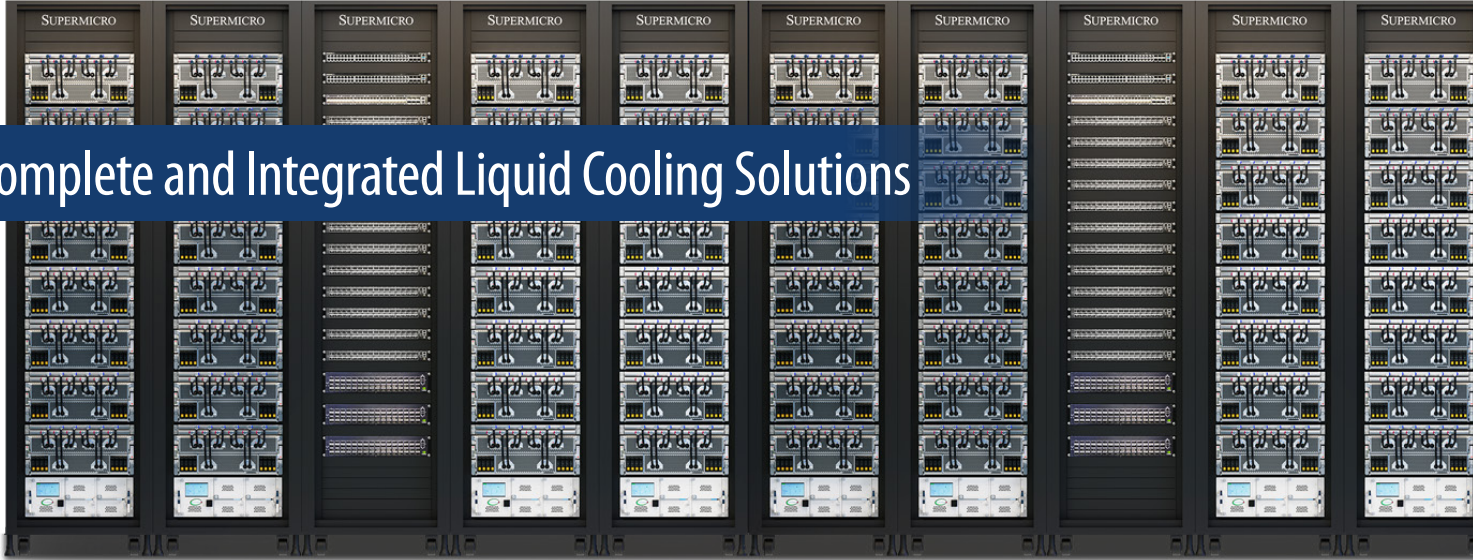
OPEX savings over 5 years from DLC Optimized Data Center & DLC GPU Servers*



Reduction in data center server noise



Reduction in operating costs through lower power draw at server



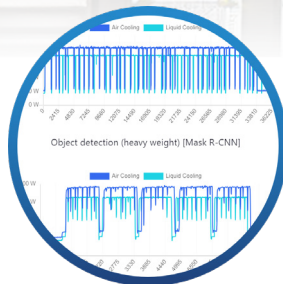
Complete and Integrated Liquid Cooling Solutions

Make Direct Liquid Cooling Infrastructure easy for customers to deploy and maintain, including the facility-side cooling tower.



Solution Integration

Supermicro's Rack Integration Services leverage application optimized motherboards, chassis, cooling subsystems, networking components, cluster management tools, energy-efficient power supply technologies, and compact enclosures to design and develop customized and enterprise solutions.



Testing and Validation

The Supermicro process involves a rigorous set of test and validation phases that ensure the most optimized and vetted solution for environments where liquid cooling is required for maximum performance. Supermicro delivers Fully validated and tested solutions at system (L10), rack (L11) and cluster (L12) levels.



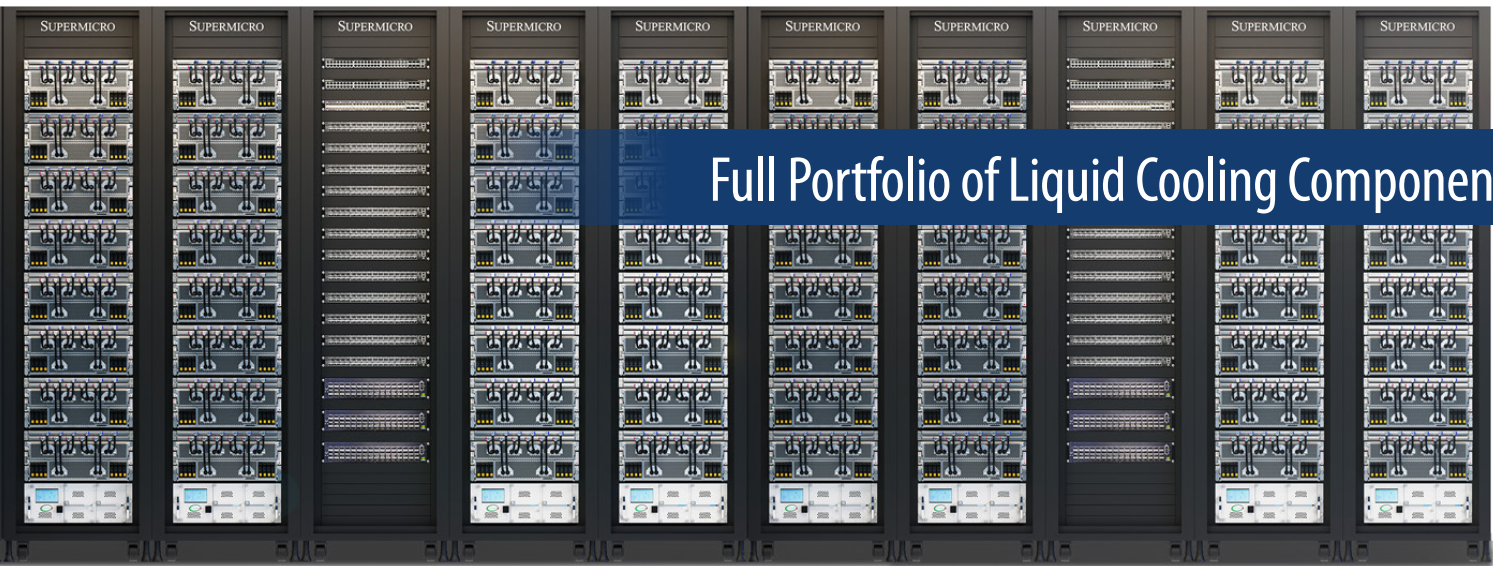
Deployment

Supermicro delivers a complete solution, including servers, racks, networking, liquid cooling components, and liquid cooling tower which speeds up time to deployment and results in higher quality of the entire infrastructure. Supermicro offers accelerated lead times based on in-stock inventory with deployment in weeks versus years.



Service Management

The Supermicro SuperCloud Composer's LCCM (Liquid Cooling Consult Module) is a powerful service that collects vital information on physical assets and sensor data from the CPU/GPU to the CDU to the Cooling Tower, including including pressure, humidity, pump, valve status, and more. CDU data is presented in real-time, enabling operators to monitor operating efficiency of their liquid cooled environment.



Full Portfolio of Liquid Cooling Components

The complete rack-scale solution is available directly from Supermicro, reducing lead times and eliminating multiple vendor contact points.



Liquid-Cooled Systems

Features	<ul style="list-style-type: none"> • Full portfolio of liquid-cooled systems available across multiple product families and form factors • Custom cold plates for wide range of CPUs and GPUs
Product Families with Liquid Cooling Options	<ul style="list-style-type: none"> AI-Optimized GPU Servers SuperBlade® BigTwin® FatTwin® Hyper
Cold Plate Supporting List	<ul style="list-style-type: none"> Latest Intel® Xeon® processors Latest AMD EPYC™ processors NVIDIA HGX™ H100 8-GPU NVIDIA HGX™ H100 4-GPU NVIDIA GH200 Grace™ Hopper Superchip AMD Instinct™ MI300X DIMM module



Cooling Distribution Unit

Features	<ul style="list-style-type: none"> • Maximum uptime and redundancy • Peak operating • 1.002 pPUE
Form Factor	4U Rackmount
Dimension	480mm (W) x 1160.7mm (D) x 177mm (H)
Cooling Capacity	100kW Support up to 45°C facility water
Coolant	Propylene glycol 25 wt%
Pump	1+1 Redundant, hot-swappable Over 99% uptime
Power	1+1 Redundant, hot-swappable PSUs



Manifold

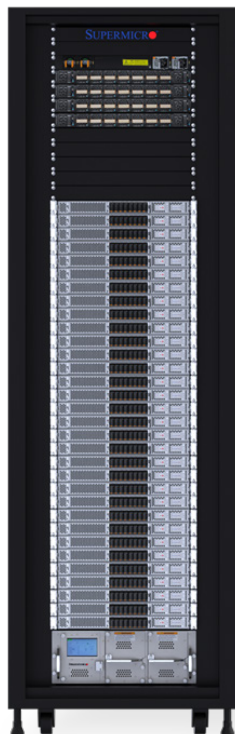
Features	• Optimized flow distribution
CDM Types	Vertical CDM Horizontal CDM
Rack Unit Support	Vertical CDM: 42U and 48U Horizontal CDM: 1U
Sensors	Liquid level sensor
QDC (Quick Disconnect Coupling)	Non-spill design One-handed QDC operation Low liquid flow resistance Color coding



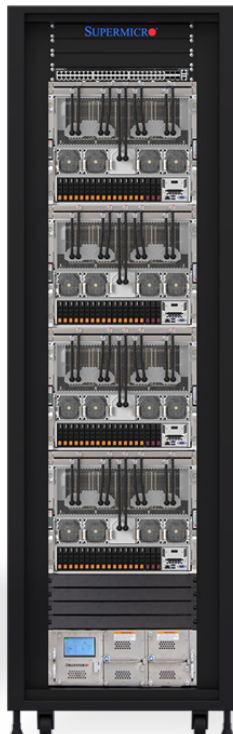
Cooling Tower

Cooling capacity	Available in different sizes with multiple cell configurations up to a maximum of 10MW per unit
Redundancy	Each cell can be used separately, enabling cooling tower redundancy
Design	Closed-loop design to optimize system reliability
Water Temperature	High Temperature Fills (>60°C) – Higher temperature water can be returned to the cooling tower enabling higher efficiency
Power consumption	Low power consumption with 6.2kW/MW of cooling

Liquid Cooled Rack Configurations



Supermicro NVIDIA MGX Systems with GH200



8U Supermicro NVIDIA HGX 8-GPU Systems



4U Supermicro NVIDIA HGX 8-GPU Systems



Supermicro Blade Systems

Additional Liquid-Cooled Rack Configurations Available

48U Rack Components

(Note: not all components listed. Configurations may vary)

Product	Qty
Supermicro ARS-111GL-DNHR-LCC	32
CDU	1
Vertical CDM	1

Product	Qty
Supermicro 8U NVIDIA HGX 8-GPU Server	4
CDU	1
Vertical CDM	1
Horizontal CDM	4

Product	Qty
Supermicro 4U NVIDIA HGX 8-GPU Server	8
CDU	1
Vertical CDM	1
Horizontal CDM	8

Product	Qty
SuperBlade® Enclosure	4
SBI-421E-1T3N	80
CDU	1
Vertical CDM	1
Horizontal CDM	8

www.supermicro.com/liquid-cooling

©Super Micro Computer, Inc. Specifications subject to change without notice. All other brands and names are the property of their respective owners. All logos, brand names, campaign statements and product images contained herein are copyrighted and may not be reprinted and/or reproduced, in whole or in part, without express written permission by Supermicro Corporate Marketing.