

meta brain[®] server i24G7

New Generation High-Density Multi-Node Server

[Using Intel processors]



Overview

i24G7 is latest 2U 4-node server which is optimized for data center and high-speed computing. i24G7 is powered by 8 5th/4th Gen Intel[®] Xeon[®] Scalable Processors with liquid cooling solution covering CPU, memory and VR module, meet low PUE requirements. i24G7 is optimized in terms of heat dissipation, power supply, monitoring and management to meet the requirements of customers for the ultimate performance experience and new generation of high-density energy-saving data centers.

Description of Applicable Models

Model of Server	Model of Node	Front/Rear Access	Cooling
i24-M7-A0-R0-00	NS5170-M7-A0-R0-00	Rear	Air Cooling
i24-M7-C0-R0-00	NS5170-M7-C0-R0-00	Rear	Liquid cooling

Product Features

Extreme Performance

- Industry-leading CPU computing power, Powered by 8 5th/4th Gen Intel® Xeon® Scalable Processors in 2U space
- Up to 4TB DDR5 Memory and NDR InfiniBand, suppressing latency and breaking the obstacles of memory bandwidth

Intelligent Maintenance

- Precise water leakage detection, leakage node can be located accurately and powered off automatically, effectively reducing risks
- 3D dynamic management for cabinet environment monitoring temperature, humidity and leakage information in real time, achieving intelligent maintenance

High Efficiency Liquid Cooling

- Reliable full cold-plate liquid cooling design for CPU+DIMM+VR, meet low PUE requirements
- Less cooling devices deployment in data center, significantly optimizing datacenter TCO

Flexible Deployment

- Intelligent O&M hustle-free deployment, supporting integrated delivery of the rack-scale systems, greatly simplifying the deployment process
- The air-liquid CDU and liquid-liquid CDU solutions, achieving all-in-one delivery of liquid-cooled data center

Product Specifications

Model	i24-M7-A0-R0-00 (Air cooling) / i24-M7-C0-R0-00 (Liquid cooling)
Specifications	4 independent hot-swappable nodes in 2U Chassis
Storage	Config 1: 8*2.5 inches SATA/NVMe SSD (7mm)
	Config 2: 4*2.5 inches SAS/NVMe SSD (15mm)
PSU	4*2200W Platinum/Titanium PSUs, support N+N redundancy
Cooling	Air cooling: Four or five 8086 fans in the front of the chassis, N+1 redundancy
	Liquid cooling: 2x8080 fans in the front of the chassis, N+1 redundancy, node liquid cooling
Chassis	447mm(W)*87mm(H)*896mm(D), without chassis lugs
	447mm(W)*87mm(H)*921mm(D), with lugs
Operating temperature	Air cooling: 5℃~40℃
	Liquid cooling: 5℃~45℃
Weight	net weight: <51kg (fully equipped);
	gross weight: <75kg (host+package+rail+accessory+pallet)
	Air cooling and liquid cooling are different, refer to the technical white paper for details
Node	NS5170-M7-A0-R0-00 (Air cooling) / NS5170-M7-C0-R0-00 (Liquid cooling)
Specifications	1U half-width 2-socket compute node
CPU	2*5th/4th Gen Intel® Xeon® Scalable Processors per node, TDP 350W, 4 UPI links
Chipset	Intel® C740
Memory	16 DDR5 RDIMM per node, up to 5600MHz
PCIe expansion	Air cooling: 1 PCIe 5.0 x16+1 PCIe 4.0 x16 slots per node
	Liquid cooling: 1 PCIe 5.0 x16 slot per node
IO	Front: 2*USB2.0, 1*VGA, 1*PWR button, 1*UID
	Rear: 1*RJ45, 1*UID, 1*RST button, 1*micro USB for debug, 1*micro USB
Storage	Config 1: 2*2.5 inches SATA/NVMe SSD(7mm) per node
	Config 2: 1*2.5 inches SAS/NVMe SSD(15mm) per node
	2*SATA/PCIe M.2 per node
Raid	Support Raid controller cards with Raid levels 0/1, and support VROC
BMC	Aspeed AST2600
TPM	TPM2.0
NIC	1*OCP3.0 card per node, can also support PCIe network card
OS	Windows Server2019/2022, Red Hat Enterprise Linux8.6/9, Debian9.x, CentOS8.5, VMware ESXi7.0/8.0, Ubuntu22.4