

# Hyper A+ Server AS -2125HS-TNR

2U Hyper with 24 hot-swap 2.5" NVMe/SATA bays and 1 PCIe 5.0 x16 slot



More details here

## Key Applications

Virtualization, Software-defined Storage, AI Inference and Machine Learning, Cloud Computing, Enterprise Server,

## Key Features

- Dual 4th Generation AMD EPYC™ 9004 Series Processors;
- 24 DIMM Up to 6TB ECC DDR5 RDIMM;
- 1 AIOM/OCP NIC 3.0 Slot  
For 24 SATA/SAS drive bay configuration: up to 4 PCIe 5.0 x16 expansion slots  
For 24 NVMe drive bay configuration: up to 1 PCIe 5.0 x16 expansion slots;
- 1600W Redundant Power Supplies (Titanium Level);
- 2 On-board PCIe 3.0 x4 M.2 NVMe 80mm/110mm (Boot);



<b>Form Factor</b>	2U Rackmount Enclosure: 437 x 88.9 x 760mm (17.2" x 3.5" x 29.9") Package: 605 x 263 x 1107mm (23.8" x 10.4" x 43.6")
<b>Processor</b>	Dual Socket SP5 AMD EPYC™ 9004 Series Processors Up to 256C/512T
<b>System Memory</b>	Slot Count: 24 DIMM slots Max Memory (1DPC): Up to 6TB 4800MT/s ECC DDR5 RDIMM
<b>Drive Bays Configuration</b>	Default: Total 24 bays <ul style="list-style-type: none"> <li>• 24 front fixed 2.5" NVMe*/SAS*/SATA* drive bays</li> </ul> (*NVMe/SAS/SATA support may require additional storage controller and/or cables) M.2: 2 M.2 PCIe 3.0 x4 NVMe slots (M-key 2280/22110)
<b>Expansion Slots</b>	Default <ul style="list-style-type: none"> <li>• 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible)</li> </ul> Option A* <ul style="list-style-type: none"> <li>• 1 PCIe 5.0 x16 (in x16) FHFL double-width slot</li> <li>• 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible)</li> </ul> Option B* <ul style="list-style-type: none"> <li>• 2 PCIe 5.0 x8 (in x16) FHFL slots</li> <li>• 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible)</li> </ul> Option C* <ul style="list-style-type: none"> <li>• 2 PCIe 5.0 x16 (in x16) FHFL double-width slots</li> <li>• 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible)</li> </ul> Option D* <ul style="list-style-type: none"> <li>• 1 PCIe 5.0 x16 (in x16) FHFL double-width slot</li> <li>• 2 PCIe 5.0 x8 (in x16) FHFL slots</li> <li>• 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible)</li> </ul> Option E* <ul style="list-style-type: none"> <li>• 4 PCIe 5.0 x8 (in x16) FHFL slots</li> <li>• 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible)</li> </ul> Option F* <ul style="list-style-type: none"> <li>• 4 PCIe 5.0 x16 (in x16) FHFL double-width slots</li> <li>• 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible)</li> </ul> Option G* <ul style="list-style-type: none"> <li>• 3 PCIe 5.0 x16 (in x16) FHFL double-width slots</li> <li>• 2 PCIe 5.0 x8 (in x16) FHFL slots</li> <li>• 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible)</li> </ul> Option H* <ul style="list-style-type: none"> <li>• 2 PCIe 5.0 x16 (in x16) FHFL double-width slots</li> <li>• 4 PCIe 5.0 x8 (in x16) FHFL slots</li> <li>• 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible)</li> </ul> Option I* <ul style="list-style-type: none"> <li>• 1 PCIe 5.0 x16 (in x16) FHFL double-width slot</li> </ul>

- 6 PCIe 5.0 x8 (in x16) FHFL slots
- 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible)

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**On-Board Devices**

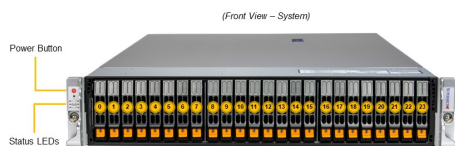
Chipset: System on Chip  
Network Connectivity: Via AIOM

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**Input / Output**

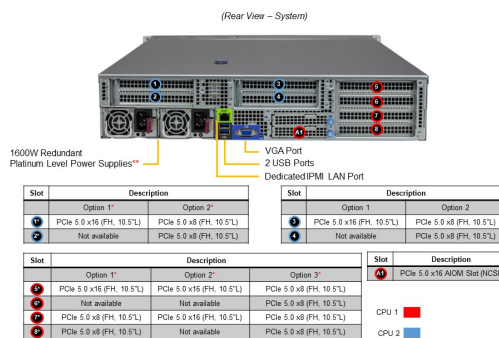
LAN: 1 RJ45 1 GbE Dedicated BMC LAN port  
USB: 2 USB 3.0 ports(rear)  
Video: 1 VGA port

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Slot	Description
1-24	2.5" Hot-Swap NVMe/SAS/SATA Drive Bays*

\*NVMe/SAS/SATA support requires additional parts in optional parts list



Slot	Option 1	Option 2	Slot	Option 1	Option 2
1	PCIe 5.0 x16 (FH, 10.5L)	PCIe 5.0 x8 (FH, 10.5L)	3	PCIe 5.0 x16 (FH, 10.5L)	PCIe 5.0 x8 (FH, 10.5L)
2	Not available	PCIe 5.0 x8 (FH, 10.5L)	4	Not available	PCIe 5.0 x8 (FH, 10.5L)

Slot	Option 1	Option 2	Option 3	Slot	Description
1	PCIe 5.0 x16 (FH, 10.5L)	PCIe 5.0 x16 (FH, 10.5L)	PCIe 5.0 x8 (FH, 10.5L)	4	PCIe 5.0 x16 AOM Slot (HCS)
2	Not available	Not available	PCIe 5.0 x8 (FH, 10.5L)		
3	PCIe 5.0 x8 (FH, 10.5L)	PCIe 5.0 x16 (FH, 10.5L)	PCIe 5.0 x8 (FH, 10.5L)		CPU 1
4	PCIe 5.0 x8 (FH, 10.5L)	Not available	PCIe 5.0 x8 (FH, 10.5L)		CPU 2

\* Slots 1, 2, 5, 6, 7, 8 are not available with 24 NVMe Configuration  
 \*\* Full redundancy based on configuration and application load

System Cooling	Fans: 4x 8cm heavy duty fans with optimal fan speed control Air Shroud: 2 Air Shrouds
Power Supply	2x 1600W Redundant Titanium Level (96%) power supplies
System BIOS	BIOS Type: AMI 32MB SPI Flash EEPROM BIOS Features: ACPI 6.4 Plug and Play (PnP) SMBIOS 3.5 or later UEFI 2.8 USB Keyboard support
Management	SuperCloud Composer; Supermicro Server Manager (SSM); Supermicro Update Manager (SUM); Supermicro SuperDoctor® 5 (SD5); Super Diagnostics Offline (SDO); Supermicro Thin-Agent Service (TAS); OOB Management Package (SFT-OOB-LIC); SuperServer Automation Assistant (SAA) New!
PC Health Monitoring	FAN: Fans with tachometer monitoring Status monitor for speed control Pulse Width Modulated (PWM) fan connectors Temperature: Monitoring for CPU and chassis environment Thermal Control for fan connectors Voltage: System temperature, Memory temperature, CPU temperature, 3.3V standby, +5V standby, +5V, +3.3V, +12V, CPU thermal trip support
Dimensions and Weight	Weight: Gross Weight: 72 lbs (32.7 kg) Net Weight: 39 lbs (17.7 kg) Available Color: Black front & silver body
Operating Environment	Operating Temperature: 10°C ~ 35°C (50°F ~ 95°F) Non-operating Temperature: -40°C to 70°C (-40°F to 158°F) Operating Relative Humidity: 8% to 90% (non-condensing) Non-operating Relative Humidity: 5% to 95% (non-condensing)
Motherboard	<a href="#">Super H13DSH</a>
Chassis	CSE-HS219-R1K63P-A