

# Hyper A+ Server AS -2025HS-TNR

2U Hyper with 12 hot-swap 3.5" NVMe/SAS/SATA bays and up to 4 PCIe 5.0 x16 slots



More details here

## Key Applications

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

## Key Features

- Dual AMD EPYC™ 9004/9005\* Series Processors  
(\*AMD EPYC™ 9005 series drop-in support requires board revision 2.x);
- Support up to DDR5 24 DIMM slots (1DPC);
- Optional PCIe slot configurations up to 8 PCIe 5.0 x8 or 4 PCIe 5.0 x16 slots or mix and match  
Flexible networking options with 1 AIOM networking slot (OCP NIC 3.0 compatible);
- 12 Hot-swap 3.5"/2.5" NVMe/SATA/SAS drive bays  
2 M.2 PCIe 3.0 NVMe slots;
- 1600W Redundant Power Supplies (Titanium Level);



Form Factor	2U Rackmount Enclosure: 437 x 88.9 x 803mm (17.2" x 3.5" x 31.6") Package: 605 x 263 x 1107mm (23.8" x 10.4" x 43.6")
Processor	Dual processor(s) AMD EPYC™ 9004/9005 Series Processors (* AMD EPYC™ 9005 Series drop-in support requires board revision 2.x) Up to 320C/640T
GPU	Max GPU Count: Up to 2 double-width or 2 single-width GPUs Supported GPU: NVIDIA PCIe: H100, L40, RTX A6000, RTX A5000, RTX A2000, RTX 6000 Ada Generation, RTX 4000, L40S, L4, A40, A16, A100 CPU-GPU Interconnect: PCIe 5.0 x16 CPU-to-GPU Interconnect GPU-GPU Interconnect: PCIe
System Memory	Slot Count: 24 DIMM slots Max Memory (1DPC): Up to 6TB 4800MT/s ECC DDR5 RDIMM (AMD EPYC™ 9004 Series Processor) Max Memory (1DPC): Up to 9TB 6000MT/s ECC DDR5 RDIMM (AMD EPYC™ 9005 Series Processor)
Drive Bays Configuration	Default: Total 12 bays <ul style="list-style-type: none"> <li>• 12 front hot-swap 3.5"/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)
Expansion Slots	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*

- 4 PCIe 5.0 x16 (in x16) FHFL double-width slots
- 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible)

Option G\*

- 3 PCIe 5.0 x16 (in x16) FHFL double-width slots
- 2 PCIe 5.0 x8 (in x16) FHFL slots
- 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible)

Option H\*

- 2 PCIe 5.0 x16 (in x16) FHFL double-width slots
- 4 PCIe 5.0 x8 (in x16) FHFL slots
- 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible)

Option I\*

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

---

**On-Board Devices**

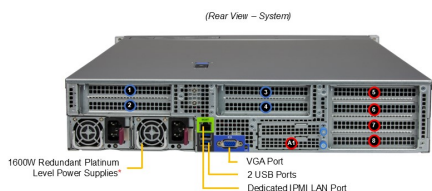
Chipset: System on Chip  
Network Connectivity: Via AIOM

---

**Input / Output**

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

---



Slot Description		
Option 1	Option 2	Slot Description
PCIe 5.0 x16 FH (10.5L)	PCIe 5.0 x8 FH (10.5L)	PCIe 5.0 x16 AIOM (OCP 3.0)
Not available	PCIe 5.0 x8 FH (10.5L)	

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

\*Full redundancy based on configuration and application used

CPU1 CPU2

Drive Bay	Description
1-12	12 Hot-swap 3.5" NVMe/SAS/SATA Drive Bays

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

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: 69 lbs (31.3 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: -30°C to 60°C (-22°F to 140°F) Operating Relative Humidity: 8% to 80% (non-condensing) Non-operating Relative Humidity: 8% to 90% (non-condensing)
Motherboard	<a href="#">Super H13DSH</a>
Chassis	<a href="#">CSE-HS829-R1K63P-A</a>