

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.xx);
- Support up to DDR5 24 DIMM slots (1DPC), speed up to 6400MT/s
(Please check System Memory Section for detail);
- 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;
- Dual 1600W Redundant Titanium Level power supplies
(Power supply full redundancy based on configuration and application load);



Form Factor	2U 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, H100 NVL, A100, A16, A30, A40, L4, L40, L40S, RTX 4000, RTX 5000 Ada, RTX 6000 Ada Generation, RTX A2000, RTX A4000, RTX A4500, RTX A5000, RTX A5500, RTX A6000, T1000 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, MB R1.x/R2.0/R2.01) Max Memory (1DPC): Up to 6TB 6000MT/s ECC DDR5 RDIMM (AMD EPYC™ 9005 Series Processor, MB R2.0) Max Memory (1DPC): Up to 6TB 6400MT/s ECC DDR5 RDIMM (AMD EPYC™ 9005 Series Processor, MB R2.01)
Drive Bays Configuration	Default: Total 12 bays • 12 front hot-swap 3.5"/2.5" NVMe*/SAS*/SATA* drive bays (*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 • 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible) Option A* • 1 PCIe 5.0 x16 (in x16) FHFL double-width slot • 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible) Option B* • 2 PCIe 5.0 x8 (in x16) FHFL slots • 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible) Option C* • 2 PCIe 5.0 x16 (in x16) FHFL double-width slots • 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible) Option D* • 1 PCIe 5.0 x16 (in x16) FHFL double-width slot • 2 PCIe 5.0 x8 (in x16) FHFL slots

- 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible)
- Option E*
- 4 PCIe 5.0 x8 (in x16) FHFL slots
 - 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible)
- 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

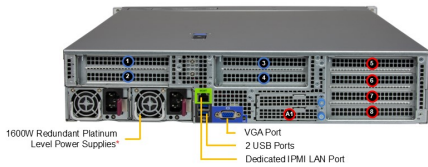
(Front View – System)



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

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

(Rear View – System)



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

CPU1 CPU2

System Cooling

Fans: Up to 4x 8cm heavy duty fans with optimal fan speed control
Air Shroud: 2 Air Shrouds

Power Supply

2x 1600W Redundant (1 + 1) 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
Pulse Width Modulated (PWM) fan connectors
Status monitor for speed control
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 to 35°C (50°F to 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

[Super H13DSH](#)

Chassis

CSE-HS829-R1K63P-A