

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 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);
- 24 Hot-swap 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 760mm (17.2" x 3.5" x 29.9") 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 3 double-width GPUs Supported GPU: NVIDIA PCIe: L40S
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 24 bays <ul style="list-style-type: none"> • 24 front hot-swap 2.5" NVMe*/SAS*/SATA* drive bays (*NVMe/SAS/SATA support may require additional storage controller and/or cables, please see the optional parts list for details) M.2: 2 M.2 PCIe 3.0 x4 NVMe slots (M-key 2280/22110)
Expansion Slots	Default <ul style="list-style-type: none"> • 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible) Option A* <ul style="list-style-type: none"> • 1 PCIe 5.0 x16 (in x16) FHFL double-width slot • 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible) Option B* <ul style="list-style-type: none"> • 2 PCIe 5.0 x8 (in x16) FHFL slots • 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible) Option C* <ul style="list-style-type: none"> • 2 PCIe 5.0 x16 (in x16) FHFL double-width slots • 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible) Option D* <ul style="list-style-type: none"> • 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* <ul style="list-style-type: none"> • 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

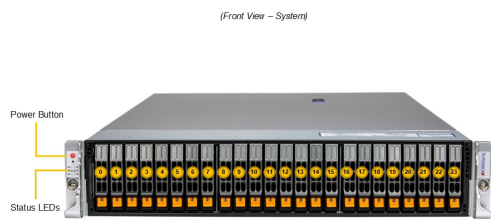
Via AIOM

Input / Output

LAN: 1 RJ45 1 GbE Dedicated BMC LAN port

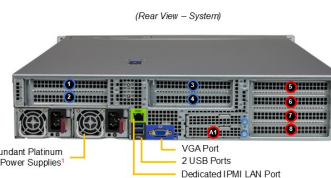
USB: 2 USB 3.0 ports(rear)

Video: 1 VGA port



Drive Bay	Description
0 - 23	24 Hot-swap 2.5" NVMe/SAS/SATA Drive Bays*

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



Slot Description		Slot Description		Slot Description	
Option 1	Option 2	Option 1	Option 2	Option 1	Option 2
1	PCIe 5.0 x16 FH (10.5 L)	PCIe 5.0 x8 FH (10.5 L)	PCIe 5.0 x8 FH (10.5 L)	1	PCIe 5.0 x16 FH (10.5 L)
2	Not available	PCIe 5.0 x8 FH (10.5 L)	Not available	2	Not available
3	PCIe 5.0 x16 FH (10.5 L)	Not available	PCIe 5.0 x8 FH (10.5 L)	3	PCIe 5.0 x16 FH (10.5 L)
4	Not available	Not available	Not available	4	Not available
5	PCIe 5.0 x8 FH (10.5 L)	Not available	PCIe 5.0 x8 FH (10.5 L)	5	PCIe 5.0 x8 FH (10.5 L)
6	Not available	Not available	Not available	6	Not available
7	PCIe 5.0 x8 FH (10.5 L)	Not available	PCIe 5.0 x8 FH (10.5 L)	7	PCIe 5.0 x8 FH (10.5 L)
8	Not available	Not available	Not available	8	Not available
9	PCIe 5.0 x8 FH (10.5 L)	Not available	PCIe 5.0 x8 FH (10.5 L)	9	PCIe 5.0 x8 FH (10.5 L)
10	Not available	Not available	Not available	10	Not available
11	PCIe 5.0 x8 FH (10.5 L)	Not available	PCIe 5.0 x8 FH (10.5 L)	11	PCIe 5.0 x8 FH (10.5 L)
12	Not available	Not available	Not available	12	Not available
13	PCIe 5.0 x8 FH (10.5 L)	Not available	PCIe 5.0 x8 FH (10.5 L)	13	PCIe 5.0 x8 FH (10.5 L)
14	Not available	Not available	Not available	14	Not available
15	PCIe 5.0 x8 FH (10.5 L)	Not available	PCIe 5.0 x8 FH (10.5 L)	15	PCIe 5.0 x8 FH (10.5 L)
16	Not available	Not available	Not available	16	Not available
17	PCIe 5.0 x8 FH (10.5 L)	Not available	PCIe 5.0 x8 FH (10.5 L)	17	PCIe 5.0 x8 FH (10.5 L)
18	Not available	Not available	Not available	18	Not available
19	PCIe 5.0 x8 FH (10.5 L)	Not available	PCIe 5.0 x8 FH (10.5 L)	19	PCIe 5.0 x8 FH (10.5 L)
20	Not available	Not available	Not available	20	Not available
21	PCIe 5.0 x8 FH (10.5 L)	Not available	PCIe 5.0 x8 FH (10.5 L)	21	PCIe 5.0 x8 FH (10.5 L)
22	Not available	Not available	Not available	22	Not available
23	PCIe 5.0 x8 FH (10.5 L)	Not available	PCIe 5.0 x8 FH (10.5 L)	23	PCIe 5.0 x8 FH (10.5 L)
24	Not available	Not available	Not available	24	Not available

* All recommendations based on configuration and application load
 * Slots 1, 2, 5, 6, 7, 8 are not available with 24 NVMe configuration

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® (SCC); 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: 72 lbs (32.7 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: -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	Super H13DSH
Chassis	CSE-HS219-R1K63P-A