

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;
- Dual Titanium Level 1600W redundant power supplies
(Power supply full redundancy based on configuration and application load);

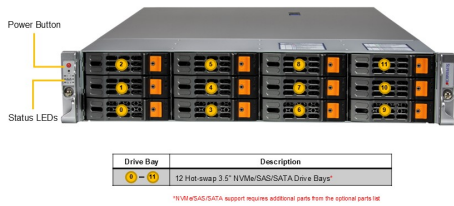


Form Factor	2U Enclosure: 437 x 88.9 x 803mm (17.2" x 3.5" x 31.6") Package: 605 x 263 x 1107mm (23.8" x 10.4" x 43.6")
Processor	Dual processor(s) AMD EPYC™ 9004/9005 Series Processors (* AMD EPYC™ 9005 Series drop-in support requires board revision 2.x) Up to 320C/640T
GPU	Max GPU Count: Up to 2 double-width or 2 single-width GPUs Supported GPU: NVIDIA PCIe: H100, H100 NVL, A16, A30, A40, L4, L40S, RTX 4000, RTX 6000 Ada Generation, A100, RTX A4000, RTX A4500, RTX A5000, RTX A6000, T1000, RTX A5500, L40, RTX A2000 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 • 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

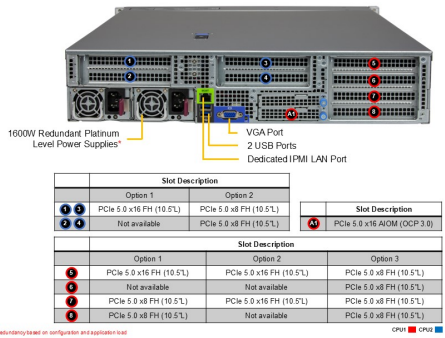
- 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible)
- Option F*
- 4 PCIe 5.0 x16 (in x16) FHFL double-width slots
 - 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible)
- Option G*
- 3 PCIe 5.0 x16 (in x16) FHFL double-width slots
 - 2 PCIe 5.0 x8 (in x16) FHFL slots
 - 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible)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



(Rear View – System)



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 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

Parts List

Optional Parts List

Data Cable Options

Part Number	-				
Qty	-				
Description	-				
12 NVME					
Part Number	CBL-KIT-2025HS-TNR-12N				
Qty	1				
Description	12 NVME cable kit				
12 SAS					
Part Number	AOC-S3816L-L16iT (/products/accessories/addon/AOC-S3816L-L16iT_S3808L-L8iT.php) , OR AOC-S3916L-H16iR	CBL-SAST-1201F-100	CBL-SAST-1276F-100	CBL-CDAT-0845-48	
Qty	1	1	1	1	
Description	16 int 12Gb/s SAS3 ports,x8 Gen4, HBA/ AOC with SAS3916 controller (U3) and 240PD RAID Key	SlimSAS x8 (STR) to SLL x4 STR,FFC,90CM	Slimline x8 (LE) to 2x Slimline x4 (STR),FFC,76/76CM	I2C,1x4F,PH2.5 to PH1.25,48cm,26AWG	
12 SATA					
Part Number	CBL-MCIO-1255S4Y	CBL-CDAT-0845-48			
Qty	2	1			
Description	MCIO x8 to 2 SlimSAS x4, STR, 55cm, 30AWG	I2C,1x4F,PH2.5 to PH1.25,48cm,26AWG			
4 NVME + 8 SATA					
Part Number	CBL-MCIO-1255S4Y	CBL-MCIO-1250M5-Z	CBL-MCIO-1245M5		
Qty	1	1	1		
Description	MCIO x8 to 2 SlimSAS x4, STR, 55cm, 30AWG	MCIO x8 (STR to STR),50cm,30AWG	MCIO x8 (STR to STR),45cm,85OHM		
8 NVME + 4 SAS					
Part Number	AOC-S3808L-L8iT OR AOC-S3908L-H8iR	CBL-MCIO-1250M5-Z	CBL-MCIO-1245M5	CBL-SAST-1201F-100	
Qty	1	1	3	1	
Description	8 int 12Gb/s SAS3 ports, x8 Gen4, HBA/ 8 int 12Gb/s ports, x8 Gen4, ROC- LP, 240 HDD w/exp	MCIO x8 (STR to STR),50cm,30AWG	MCIO x8 (STR to STR),45cm,85OHM	SlimSAS x8 (STR) to SLL x4 STR,FFC,90CM,100 OHM	
8 NVME + 4 SATA					
Part Number	CBL-MCIO-1255S4Y	CBL-MCIO-1250M5-Z	CBL-MCIO-1245M5		
Qty	1	1	3		
Description	MCIO x8 to 2 SlimSAS x4, STR, 55cm, 30AWG	MCIO x8 (STR to STR),50cm,30AWG	MCIO x8 (STR to STR),45cm,85OHM		
Cable Arm					
Part Number	MCP-290-11901-0N	MCP-290-00168-0N (***Requires MCP-290-11901-0N ***)			
Qty	1	1			
Description	41" ball-bearing rail set for Hyper servers	Cable Management Arm, 1U height, 7.5" deep cable arm ***Requires MCP-290-11901-0N ***			
Chassis Rear Handle Kit					
Part Number	MCP-290-21907-0N				
Qty	1				
Description	Hyper 2U rear handle kit for immersion cooling				
Drive Bay Dummy Cover					
Part Number	MCP-290-82521-0B				
Qty	-				
Description	Dummy cover for one 3.5" drive bay				
PCIe Slot 1 (1x16)					
Part Number	LBL-4000	MCP-240-21108-0N	CBL-PWEX-1136YB-25	CBL-MCIO-1233M5R or CBL-MCIO-1255M5R(12 NVME Configuration Only)	CBL-MCIO-1226M5R or CBL-MCIO-1255M5R(12 NVME Configuration Only)
Qty	RSC-H-68G5 1	1	1	1	1
Description	Cabled PCIe Slot Warning Label 1U LHS Hyper Riser card with one PCIe 5.0 X16	Riser Bracket(2-slot) for RSC-H-68G5	MicroHi(2x4 to 2x2Y),PH3.0,25/25cm,YRB,8.5A/p,18MM	MCIO x8 (STR to RA),33cm,85OHM/ MCIO X8 (STR to RA), 55cm, 30AWG,85Ohm	MCIO x8 (STR to RA),26CM,85OHM/ MCIO X8 (STR to RA), 55cm, 30AWG,85Ohm
PCIe slot 1+2 (2x8)					
Part Number	RSC-H-68G5	MCP-240-21108-0N	CBL-PWEX-1136-40	CBL-MCIO-1233M5R or CBL-MCIO-1255M5R(12 NVME configuration)	CBL-MCIO-1232M5 or CBL-MCIO-1245M5(12 NVME configuration)
Qty	1	1	1	1	1

Description	1U LHS Hyper Riser card with one PCIe 5.0 X16	Riser Bracket(2-slot) for RSC-H-68G5	MicroHi,(2X2 to 2X4) P3.0,40CM,10A/pin,16AWG	MCIO x8 (STR to RA),33cm,85OHM/ MCIO X8 (STR to RA), 55cm, 30AWG,85Ohm	MCIO x8 (STR to STR),32cm,85OHM/ MCIO X8 (STR to RA), 55cm, 30AWG,85Ohm
PCIe Slot 3 (1x16)					
Part Number	MCP-120-82927-0N MCP-240-21108-0N	RSC-H-68G5	LBL-4000	CBL-PWEX-1136YB-25	CBL-GNZ4-1227M5YRR16
Qty	1 1	1	1	1	1
Description	Middle riser support bracket Riser Bracket(2-slot) for RSC-H-68G5	1U LHS Hyper Riser card with one PCIe 5.0 X16	Cabled PCIe Slot Warning Label	MicroHi(2x4 to 2x2Y),PH3.0,25/25cm,YRB,8.5A/p,18AWG	GENZ 4C STR to 2 MCIO x8 RA/RA 27/21cm
PCIe slot 3+4 (2x8)					
Part Number	CBL-GNZ4-1227M5YR21	CBL-PWEX-1136YB-25	MCP-120-82927-0N	MCP-240-21108-0N	RSC-H-68G5
Qty	1	1	1	1	1
Description	GENZ 4C STR to 2 MCIO x8 STR/RA 27/21cm	MicroHi(2x4 to 2x2Y),PH3.0,25/25cm,YRB,8.5A/p,18AWG	Middle riser support bracket	Riser Bracket(2-slot) for RSC-H-68G5	1U LHS Hyper Riser card with one PCIe 5.0 X16
PCIe slot 5 (1x16) + slot 7+8 (2x8)					
Part Number	LBL-4000	CBL-MCIO-1222AM5	CBL-MCIO-1226AM5	RSC-H2-6888G5L	MCP-240-21908-0N
Qty	1	1	1	1	1
Description	Cabled PCIe slot Warning Label	MCIOx8 (STR to STR),22cm,LNRV,30AWG	MCIOx8 (STR to STR),26cm,LNRV,30AWG	2U LHS Hyper Riser card with 4 PCIe 5.0 slots	Riser Bracket(4-slot) for RSC-H2-6888G5L
PCIe slot 5+7 (2x16)					
Part Number	CBL-PWEX-1136YB-25 RSC-H-68G5	CBL-MCIO-1226AM5R	LBL-4000	MCP-240-21908-0N	RSC-H-6G5L
Qty	1 1	2	1	1	1
Description	MicroHi(2x4 to 2x2Y),PH3.0,25/25cm,YRB,8.5A/p,18AWG 1U LHS Hyper Riser card with one PCIe 5.0 X16	MCIOx8 (STR to STR),26cm,LNRV,30AWG	Cabled PCIe slot Warning Label	Riser Bracket(4-slot) for RSC-H2-6888G5L	1U LHS Hyper riser card with one PCIe 5.0 X16 slot
PCIe slot 5-8 (4x8)					
Part Number	CBL-MCIO-1222AM5	MCP-240-21908-0N	RSC-H2-6888G5L		
Qty	2	1	1		
Description	MCIOx8 (STR to STR),22cm,LNRV,30AWG	Riser Bracket(4-slot) for RSC-H2-6888G5L	2U LHS Hyper Riser card with 4 PCIe 5.0 slots		
Rail Set					
Part Number	MCP-290-11903-0N	MCP-290-11902-0N (included in the system)	MCP-290-21103-0N	MCP-290-11901-0N	
Qty	1	1	1	1	
Description	30.5" ball-bearing rail set for Hyper servers	35.25" ball-bearing rail set for Hyper servers	21.65" ball-bearing rail set for Hyper servers	41" ball-bearing rail set for Hyper servers	
Serial Port DTK Cable with PCIe Bracket					
Part Number	CBL-0010L				
Qty	1				
Description	9-Pin 26CM Serial Port DTK Cable with PCIe Bracket				
TPM security module					
Part Number	AOM-TPM-9670V	AOM-TPM-9672V-FIPS	AOM-TPM-9670H-FIPS	AOM-TPM-9672V (/products/accessories/addon/AOM-TPM-9672V.php)	
Qty	1	1	1	1	
Description	SPI capable TPM 2.0 with Infineon 9670 controller; vertical form factor	AOM-TPM-9672V-FIPS TPM 2.0 with 10 pins SPI support FIPS	AOM-TPM-9670H-FIPSupporting FIPS 140-2	SPI capable vertical TPM 2.0	

Certain products may not be available in your region

Global SKU (/de/products/SMC_global_skus)