GPU A+ Server AS -8125GS-TNHR

DP AMD 8U System with NVIDIA HGX H100/H200 8-GPU

Key Applications

High Performance Computing, AI/Deep Learning Training, Industrial Automation, Retail, Climate and Weather Modeling,

Key Features

- High density 8U system for NVIDIA® HGX™ H100/H200 8-GPU
  Highest GPU communication using NVIDIA® NVLINK™ + NVIDIA® NVSwitch™
  8 NIC for GPU direct RDMA (1:1 GPU Ratio);
- 24 DIMM slots DDR5; up to 6TB 4800MT/s ECC LRDIMM/RDIMM;
- Up to 8 PCIe 5.0 x16 LP + 4 PCIe 5.0 x16 FHFL slots;
- Flexible networking options;
- 12 Hot-swap 2.5" NVMe drive bays + 2 hot-swap 2.5" SATA drive bays
  + 4 hot-swap 2.5" NVMe drive bays (optional)
  1 M.2 NVMe for boot drive only;
- 10 heavy duty fans with optimal fan speed control;
- 6x 3000W redundant Titanium level power supplies;

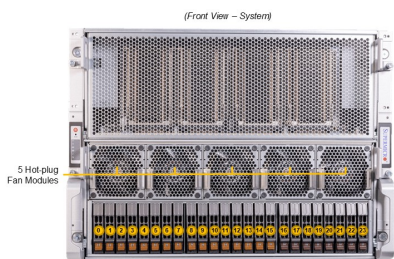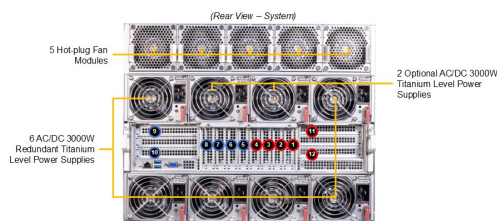|	
Form Factor	8U Rackmount Enclosure: 437 x 355.6 x 843.28mm (17.2" x 14" x 33.2") Package: 698 x 750 x 1300mm (27.5" x 29.5" x 51.2")
Processor	Dual Socket SP5 AMD EPYC™ 9004 Series Processors Up to 128C/256T
GPU	Max GPU Count: 8 onboard GPUs Supported GPU: NVIDIA SXM: HGX H100 8-GPU (80GB), HGX H200 8-GPU (141GB), HGX H200 8-GPU (141GB) CPU-GPU Interconnect: PCIe 5.0 x16 CPU-to-GPU Interconnect GPU-GPU Interconnect: NVIDIA® NVLink® with NVSwitch™
System Memory	Slot Count: 24 DIMM slots Max Memory (1DPC): Up to 6TB 4800MT/s ECC DDR5 RDIMM

Drive Bays Configuration	Default: Total 18 bays
	  • 2 front hot-swap 2.5" SATA drive bays
	  • 4 front hot-swap 2.5" NVMe* drive bays
	  • 12 front hot-swap 2.5" NVMe drive bays
	(*NVMe support may require additional storage controller and/or cables)
	M.2: 1 M.2 NVMe slot (M-key)

Expansion Slots	Default
	  • 8 PCIe 5.0 x16 LP slots
	  • 2 PCIe 5.0 x16 FHFL slots
	Option A
	  • 8 PCIe 5.0 x16 LP slots
	  • 4 PCIe 5.0 x16 FHFL slots

On-Board Devices	AMD SP5
Input / Output	1 VGA port

(Front View – System)

5 Hot-plug Fan Modules

Drive Bay	Description
0 — 11	12x 2.5" Hot-swap NVMe Drive Bays (Default)
12 — 15	4x 2.5" Hot-swap NVMe Drive Bays (Optional)
16 — 17	2x 2.5" Hot-swap SATA Drive Bays (Default)
18 — 23	Not used

(Rear View – System)

5 Hot-plug Fan Modules

2 Optional AC/DC 3000W Titanium Level Power Supplies

6 AC/DC 3000W Redundant Titanium Level Power Supplies

Slot	Description		Slot	Description
1	PCIe 5.0 x16 (LP) from PLX switch linked to GPUs		7	PCIe 5.0 x16 (LP) from PLX switch linked to GPUs
2	PCIe 5.0 x16 (LP) from PLX switch linked to GPUs		8	PCIe 5.0 x16 (LP) from PLX switch linked to GPUs
3	PCIe 5.0 x16 (LP) from PLX switch linked to GPUs		9	PCIe 5.0 x16 (FHFL)
4	PCIe 5.0 x16 (LP) from PLX switch linked to GPUs		10	PCIe 5.0 x16 (FHFL)
5	PCIe 5.0 x16 (LP) from PLX switch linked to GPUs		11	PCIe 5.0 x16 (FHFL) (optional)
6	PCIe 5.0 x16 (LP) from PLX switch linked to GPUs		12	PCIe 5.0 x16 (FHFL) (optional)

CPU1 ■ CPU2 ■

System Cooling	Fans: 10 heavy duty fans with optimal fan speed control
Power Supply	6x 3000W Redundant Titanium Level (96%) power supplies
System BIOS	BIOS Type: AMI 32MB SPI Flash EEPROM
Management	SuperCloud Composer®; Supermicro Server Manager (SSM); Supermicro Update Manager (SUM); Supermicro SuperDoctor® 5 (SD5); Super Diagnostics Offline (SDO); Supermicro Thin-Agent Service (TAS); SuperServer Automation Assistant (SAA) New!

PC Health Monitoring	CPU: Monitors for CPU Cores, Chipset Voltages, Memory
	    7 +1 Phase-switching voltage regulator
	FAN: Fans with tachometer monitoring
	    Status monitor for speed control
	Temperature: Monitoring for CPU and chassis environment
	        Thermal Control for fan connectors

Dimensions and Weight	Weight: Gross Weight: 225 lbs (102.1 kg) Net Weight: 166 lbs (75.3 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 60°C (-40°F to 140°F) Operating Relative Humidity: 8% to 90% (non-condensing) Non-operating Relative Humidity: 5% to 95% (non-condensing)
Motherboard	**Super H13DSG-O-CPU-D**
Chassis	**CSE-GP801TS**