

GPU A+ Server AS -4125GS-TNRT2

DP AMD 4U Dual-Root PCIe GPU System with up to 10 PCIe GPUs ;

[./files_SYS/images/System/AS-4125GS-TNRT2_main.jpg](#)

Key Applications

- AI / Deep Learning
- Big Data Analytics and AI
- High Performance Computing
- Engineering/scientific research

Key Features

- Flexible GPU support: active & passive GPUs
- Dual Root Configuration with PCIe Switch for up to 10 double width, full length GPUs
- 8 Hot-Swap Heavy Duty Fans with Optimal Fan Speed Control
- Dual-Socket, AMD EPYC™ 9004/9005 Series Processors up to 400W TDP
- Supports up to 24 DIMM Slots, 6000 MT/s 6TB DDR5 memory
(Please check System Memory Section for detail)
- AIOM / OCP 3.0 Support
- Total of 8 Hot-swap 2.5" NVMe drive bays
- 1 M.2 Slot
- Total of 4x 2000W Redundant (2 + 2) Titanium Level power supplies
(Power supply full redundancy based on configuration and application load)

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Specifications

Product SKUs A+ Server AS -4125GS-TNRT2		Chassis Form Factor 4U Rackmount	
Motherboard Super H13DSG-O-CPU (https://www.supermicro.com/en/products/motherboard/h13dsg-o-cpu)		Model CSE-418G2TS	
Processor CPU Dual processor(s) AMD EPYC™ 9004/9005 Series Processors (https://www.supermicro.com/en/support/resources/cpu-amd-epyc-9005-9004-7003) (* AMD EPYC™ 9005 Series drop-in support requires board revision 2.x)		Dimensions and Weight Height 7" (178 mm) Width 17.2" (437 mm) Depth 29" (737 mm) Package 26.57" (H) x 27" (W) x 41" (D) Weight Gross Weight: 100 lbs (45.3 kg) Net Weight: 65.5 lbs (29.7 kg) Available Color Black Front & Silver Body	
Core Count Note Up to 160C/320T; Up to 512MB Cache per CPU Supports up to 400W TDP CPUs * This system supports AMD EPYC™ 9004/9005 Series processors up to 400W TDP		Front Panel LED Hard drive activity LED Network activity LEDs Power status LED System Overheat & Power Fail LED Buttons Power On/Off button System Reset button	
GPU Max GPU Count Up to 10 double-width GPUs Supported GPU NVIDIA PCIe: H100, H100 NVL, A30, A40, L4, L40, RTX 6000 Ada Generation, A100, RTX A5000, RTX A6000, L40, RTX 4000 Ada Generation, RTX 4000 Ada Generation, RTX 4500 Ada, RTX 5000 Ada, A4000 AMD PCIe: Instinct™ MI210 View GPU Options		Expansion Slots PCI-Express (PCIe) Default 11 PCIe 5.0 x16 FHFL slots Configuration Option A 13 PCIe 5.0 x16 FHFL slots View AOC Options	
https://www.supermicro.com/port/resources/gpu?rsc=fltr_sku%3DAS%20-4125GS		Drive Bays / Storage Drive Bays Configuration Default: Total 10 bays 8 front hot-swap 2.5" NVMe drive bays 2 front hot-swap 2.5" SATA drive bays View NVMe Options View Drive Options View M.2 Options	
CPU-GPU Interconnect PCIe 5.0 x16 Switch Dual-Root		M.2 1 M.2 PCIe 3.0 x4 NVMe slot (M-key) View M.2 Options	
GPU-GPU Interconnect NVIDIA® NVLink® Bridge (optional), AMD Infinity Fabric™ Link (optional)		https://www.supermicro.com/w/support/resources/m2ssd?SystemID=88475&ProductName=125GS-TNRT2	
System Memory Memory Slot Count: 24 DIMM slots Max Memory (1DPC): Up to 6TB 4800MT/s ECC RDIMM (AMD EPYC™ 9004 Series Processor) Max Memory (1DPC): Up to 6TB 6000MT/s ECC RDIMM (AMD EPYC™ 9005 Series Processor) View Memory Options		System Cooling Fans 8 heavy duty fans with optimal fan speed control	
Memory Voltage 1.1V		Power Supply	
On-Board Devices SATA SATA (6Gbps) Chipset AMD SP5 Network Connectivity 2 RJ45 10GbE View AIOM Options		https://www.supermicro.com/port/resources/aoc/aiom?show=SELECT&type=GPU View AOC Options	
Input / Output LAN 1 RJ45 1 GbE Dedicated BMC LAN port 2 RJ45 10 GBASE-T LAN ports USB 2 ports(rear) Video 1 VGA port Serial 1 COM port(rear)			

System BIOS			
BIOS Type	AMI 32MB SPI Flash EEPROM	4x 2000W	
Management Software		4x 2000W Redundant (2 + 2) Titanium Level (96%) power supplies	
SuperCloud Composer® . (https://www.supermicro.com/en/solutions/management-software/supercloud-composer) Supermicro Server Manager (SSM) . (https://www.supermicro.com/en/solutions/management-software/supermicro-server-manage) Supermicro Update Manager (SUM) . (https://www.supermicro.com/en/solutions/management-software/supermicro-update-manage) Supermicro SuperDoctor® 5 (SD5) . (https://www.supermicro.com/en/solutions/management-software/superdoctor) Super Diagnostics Offline (SDO) . (https://www.supermicro.com/en/solutions/management-software/super-diagnostics-offline) Supermicro Thin-Agent Service (TAS) . (https://www.supermicro.com/en/solutions/management-software/thin-agent-service) SuperServer Automation Assistant (SAA) New . (https://www.supermicro.com/en/solutions/management-software/superserver-automation-assistant)		Dimension (WxHxL) 73.5 x 40 x 203 mm Input 1000W: 100-127Vac 1000W: 100-127Vac / 50-60Hz 1800W: 200-220Vac 1800W: 200-220Vac / 50-60Hz 1980W: 220-230Vac 1980W: 220-230Vac / 50-60Hz 2000W: 220-240Vac 2000W: 220-240Vac / 50-60Hz (for UL only) 2000W: 230-240Vdc 2000W: 230-240Vac 2000W: 230-240Vac / 50-60Hz 2000W: 230-240Vdc / 50-60Hz (for China only) +12V Max: 83A / Min: 0A (100Vac-127Vac) Max: 150A / Min: 0A (200Vac-220Vac) Max: 165A / Min: 0A (220Vac-230Vac) Max: 166A / Min: 0A (230Vac-240Vac) 12V SB Max: 3.5A / Min: 0A Max: 3.5A Output Type Backplanes (gold finger)	
Power configurations	Power-on mode for AC power recovery ACPI Power Management		
Security Hardware			
Trusted Platform Module (TPM) 2.0 Silicon Root of Trust (RoT) – NIST 800-193 Compliant			
Features	Cryptographically Signed Firmware Secure Boot Secure Firmware Updates Automatic Firmware Recovery Supply Chain Security: Remote Attestation Runtime BMC Protections System Lockdown		
PC Health Monitoring			
CPU	Monitors for CPU Cores, Chipset Voltages, Mer		
FAN	7 +1 Phase-switching voltage regulator 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		
		Operating Environment Environmental Spec. 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)	

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Parts List

Certain products may not be available in your region
