

GPU SuperServer ARS-522GP-NR

5U AI server with Arm AGI CPU Neoverse V3 64, 128, or 136 cores, up to 8 double-width GPUs, 24 DDR5-8800 DIMMs, and 8 NVMe drives



Key Applications

Enterprise Applications, HPC, AI / Deep Learning, Rendering, Big Data Analytics, Cloud Gaming, AI Inference,

Key Features

- 5U AI server supporting up to 8 double-width GPUs;
- Dual Arm AGI CPU Neoverse V3 with 64, 128, or 136 cores and up to 300W each with air-cooling;
- Up to 24 DIMMs supporting up to 6TB DDR5-8800 MT/s (1DPC);
- 8 PCIe 5.0 x16 DW-FHFL slots + 4 PCIe 5.0 x16 FHFL slots + 1 PCIe 6.0 x16 FHFL slot + 1 PCIe 5.0 x8 AIOM slot;
- Flexible networking with OCP 3.0 compatible AIOM;
- Up to 8 front hot-swap 2.5" NVMe drive bays;
- Up to 6x N+N redundant 2700W AC hot-swappable power supplies (Titanium Level);



Form Factor	5U Rackmount Enclosure: 438 x 222.5 x 786.1mm (17.2" x 8.75" x 31") Package: 720 x 440 x 1080mm (28.34" x 17.32" x 42.51")
Processor	Dual processor(s) Arm AGI CPU Neoverse V3 with 64/128/136 cores
GPU	Up to 8 double-width GPUs
System Memory	Slot Count: 24 DIMM slots Max Memory (1DPC): 6TB 8800MT/s ECC DDR5 RDIMM
Drive Bays Configuration	Default: Total 8 bays <ul style="list-style-type: none"> • 8 front hot-swap 2.5" NVMe drive bays M.2: 1 M.2 PCIe 4.0 x1 NVMe slot (M-key 2280(default)/22110)
Expansion Slots	PCI-Express (PCIe) Configuration: Default <ul style="list-style-type: none"> • 8 PCIe 5.0 x16 (in x16) FHFL double-width slots • 4 PCIe 5.0 x16 (in x16) FHHL slots • 1 PCIe 6.0 x16 (in x16) FHFL slot • 1 PCIe 5.0 x8 (in x8) AIOM slot (OCP 3.0 compatible) M.2: 1 M.2 PCIe 4.0 x1 NVMe slot (M-key 22110(default)/2280)
On-Board Devices	Via AIOM
Input / Output	LAN: 2 RJ45 1 GbE Dedicated BMC LAN ports USB: 2 USB 3.0 ports(rear) Video: 1 VGA port(Rear) Serial: 1 COM port(rear)

System Cooling	Fans: Up to 10 Heavy duty counter-rotating 8cm Fan(s) Air Shroud: 2 Air Shrouds
Power Supply	6x 2700W Redundant (3 + 3) Titanium Level (96%) Hot-plug power supplies
System BIOS	BIOS Type: AMI 1024MB SPI Flash
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 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
Dimensions and Weight	Weight: Gross Weight: 100 lbs (45.3 kg) Net Weight: 65.5 lbs (29.7 kg) Available Color: Black Front & Silver Body
Operating Environment	RoHS Compliant 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 AR3DPD
Chassis	CSE-528G2TS-R000NDP
