

GPU SuperServer ARS-122L-NR

1U air-cooled system with dual NVIDIA Vera CPUs



Key Applications

High Performance Computing, AI/Deep Learning Training, Large Language Model (LLM) Natural Language Processing, General purpose CPU workloads, including analytics, data science, simulation, HPC, application servers, and more,



Key Features

- 1U 1Node Air-cooled system with Dual NVIDIA VERA CPU, 450W TDP per processor with air cooling;
- Up to 1.5TB LPDDR5X SOCAMM2 per CPU;
- Up to 4 PCIe 6.0 x16 FHFL NIC slots (max of 2x BF-3 DPU);
- Up to 8x PCIe 6.0 E1.S drive bays
2 PCIe 6.0 x4 NVMe M.2 slots;
- 2 redundant (1+1) 2700W Titanium level efficiency power supplies;

Form Factor

1U Rackmount
Enclosure: 438.4 x 43.6 x 900mm (17.26" x 1.7" x 35.4")
Package: 695 x 230 x 1170mm (27.36" x 9.05" x 46.06")

Processor

Dual processor(s)
NVIDIA Vera CPU C2 (88-core)

System Memory

Slot Count: Onboard Memory
Max Memory: Up to 3TB ECC LPDDR5X

Drive Bays Configuration

Default: Total 8 bays
• 8 front fixed E1.S PCIe 5.0 x8 NVMe drive bays
M.2: 2 M.2 PCIe 5.0 x4 NVMe slots (M-key; USB 3.0)

Expansion Slots

PCI-Express (PCIe) Configuration: Default
• 4 PCIe 6.0 x16 (in x16) FHFL slots
M.2: 2 M.2 PCIe 5.0 x8 NVMe slots (M-key)

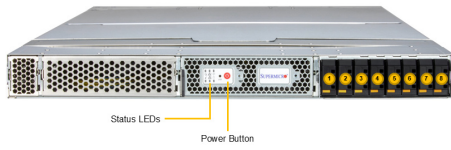
On-Board Devices

Chipset: NVIDIA C2
IPMI: Support for Intelligent Platform Management Interface v.2.0
IPMI 2.0 with virtual media over LAN and KVM-over-LAN support

Input / Output

LAN: 1 RJ45 1 GbE Dedicated BMC LAN port
1 RJ45 1 GbE LAN port
USB: 1 USB 3.0 Type-A port(Rear)
Video: 1 mini-DP port
TPM: 1 TPM Onboard/port 80

(Front View – System)



Drive Bay	Description
8	8 E1S Drive Bays

System Cooling	Fans: Up to 9 heavy duty fans with optimal fan speed control
Power Supply	2x 2700W Redundant Titanium Level (96%) power supplies
System BIOS	BIOS Type: AMI 64MB SPI Flash EEPROM
Management	Redfish API; Supermicro Update Manager (SUM); KVM with dedicated LAN ; IPMI 2.0; Watch Dog; OOB Management Package (SFT-OOB-LIC)
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: 49.21 lbs (22.32 kg) Net Weight: 33.64 lbs (15.26 kg) Available Color: Silver
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 G3DBY
Chassis	CSE-MG107TS-R000NDFP