# GPU SuperServer ARS-221GL-NR

2U NVIDIA Grace™ CPU Superchip with Support for 4 PCIe based GPUs

More details here

## 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

- High density 2U GPU system with up to 4 NVIDIA® H100 PCIe GPUs; PCIe-based NVIDIA L40s; Highest GPU communication using NVIDIA® NVLINK™; PCIe-based NVIDIA H100 NVL with NVLink Bridge Support;
- Energy-Efficient NVIDIA Grace™ CPU Superchip with 144 Cores;
- 480GB or 240GB LPDDR5X onboard memory option for minimum latency and maximum power efficiency;
- 7 PCIe 5.0 x16 FHFL Slots;
- NVIDIA BlueField-3 Data Processing Unit Support for the most demanding accelerated computing workloads.;
- E1.S NVMe Storage Support;

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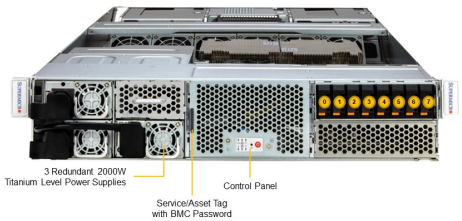
|---|---|
| Form Factor | 2U Rackmount<br>Enclosure: 438.4 x 88 x 900mm (17.25" x 3.46" x 35.43")<br>Package: (22.5" x 11" x 45.5") |
| Processor | Dual C2<br>NVIDIA Grace™ CPU Superchip<br>Up to 144C/288T |
| GPU | Max GPU Count: Up to 4 double-width GPU(s)<br>Supported GPU: NVIDIA PCIe: H100 NVL,H100,L40S<br>CPU-GPU Interconnect: PCIe 5.0 x16 CPU-to-GPU Interconnect<br>GPU-GPU Interconnect: NVIDIA® NVLink® Bridge (optional) |
| System Memory | Slot Count: Onboard Memory<br>Max Memory: Up to 480GB ECC LPDDR5X |
| Drive Bays | 8x E1.S hot-swap NVMe drive slots (For further information on the maximum number of E1.S drives available and the use of BF3 as a storage controller please contact your Supermicro Sales Representative.) |
| Expansion Slots | 7 PCIe 5.0 x16 FHFL slot(s) |
| On-Board Devices | Chipset: NVIDIA C2<br>Network Connectivity: 1x 10GbE BaseT<br>IPMI: Support for Intelligent Platform Management Interface v.2.0<br>IPMI 2.0 with virtual media over LAN and KVM-over-LAN support |
| Input / Output | Video: 1 VGA port(s) |

*(Front View – System)*




| Drive Bay | Description |
|---|---|
| 0 – 7 | Hot-swap E1.S NVMe Drive Bays |

*(Rear View – System)*


| Slot | Description |
|---|---|
| 1 – 4 | PCIe 5.0 x16 FHFL / Double-Width GPU |
| 5 – 7 | PCIe 5.0 x16 FHFL Slots / Single-Width GPU |

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|---|---|
| System Cooling | Fans: 6 heavy duty fans with optimal fan speed control |
| Power Supply | 2000W Redundant Titanium Level power supplies |
| System BIOS | BIOS Type: AMI 32MB SPI Flash EEPROM |
| Management | SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; IPMI 2.0; Redfish API; OOB Management Package (SFT-OOB-LIC ) |
| PC Health Monitoring | CPU: Monitors for CPU Cores, Chipset Voltages, Memory<br>8+4 Phase-switching voltage regulator<br>FAN: Fans with tachometer monitoring<br>Status monitor for speed control<br>Pulse Width Modulated (PWM) fan connectors<br>Temperature: Monitoring for CPU and chassis environment<br>Thermal Control for fan connectors |
| Dimensions and Weight | Height: 3.46" (88 mm)<br>Width: 17.25" (438.4 mm)<br>Depth: 35.43" (900 mm)<br>Gross Weight: 86.5 lbs (39.2 kg)<br>Net Weight: 67.5 lbs (30.6 kg)<br>Packaging: 11" x 22.5" x 45.5"<br>Available Color: Black front & silver body |
| Operating Environment | Operating Temperature: 10°C ~ 35°C (50°F ~ 95°F)<br>Non-operating Temperature: -40°C to 60°C (-40°F to 140°F)<br>Operating Relative Humidity: 8% to 90% (non-condensing)<br>Non-operating Relative Humidity: 5% to 95% (non-condensing) |
| Motherboard | Super G1SMH |
| Chassis | CSE-GP201TS-R000NP |