

GPU SuperServer ARS-111GL-NHR-LCC

1U System with NVIDIA GH200 Grace Hopper Superchip with Onboard H100 GPU and 72-core Grace CPU (Liquid-cooled)

Key Applications

High Performance Computing, AI/Deep Learning Training and Inference, Large Language Model (LLM) and Generative AI,

Key Features

- High density 1U GPU system with Integrated NVIDIA® H100 GPU and liquid cooling;
- NVIDIA Grace Hopper™ Superchip (Grace CPU and H100 GPU);
- NVLink® Chip-2-Chip (C2C) high-bandwidth, low-latency interconnect between CPU and GPU at 900GB/s;
- Up to 576GB of coherent memory per node including 480GB LPDDR5X and 96GB of HBM3 for LLM applications;
- 3x PCIe 5.0 x16 slots supporting NVIDIA BlueField®-3 or ConnectX®-7;
- 7 Hot-Swap Heavy Duty Fans with Optimal Fan Speed Control;



Form Factor	1U Rackmount Enclosure: 440 x 44 x 940mm (17.33" x 1.75" x 37") Package: 1219 x 241 x 711mm (48" x 9.5" x 28")
Processor	Single Socket NVIDIA GH200 Grace Hopper™ Superchip Up to 72C/144T
GPU	CPU-GPU Interconnect: NVLink®-C2C GPU-GPU Interconnect: PCIe
System Memory	Up to 480GB: Onboard LPDDR5X (and additional 96GB HBM3 for GPU)
Drive Bays	8x E1.S hot-swap NVMe drive slots 2 M.2 NVMe
Expansion Slots	3 PCIe 5.0 x16 FHFL slot(s)
On-Board Devices	Chipset: System on Chip Network Connectivity: 1x 1GbE BaseT with NVIDIA ConnectX®-7 or Bluefield®-3 DPU
Input / Output	LAN: 1 RJ45 1GbE (Dedicated IPMI port)



System Cooling	Fans: 9 Removable heavy-duty 4CM Fan(s)
Power Supply	2x 2000W Redundant Titanium Level power supplies
System BIOS	BIOS Type: AMI 32MB SPI Flash EEPROM
PC Health Monitoring	<p>CPU: Monitors for CPU Cores, Chipset Voltages, Memory 8+4 Phase-switching voltage regulator</p> <p>FAN: Fans with tachometer monitoring Status monitor for speed control Pulse Width Modulated (PWM) fan connectors</p> <p>Temperature: Monitoring for CPU and chassis environment Thermal Control for fan connectors</p>
Dimensions and Weight	<p>Height: 1.75" (44 mm)</p> <p>Width: 17.33" (440 mm)</p> <p>Depth: 37" (940 mm)</p> <p>Gross Weight: 65.5 lbs (29.7 kg)</p> <p>Net Weight: 48.5 lbs (22 kg)</p> <p>Packaging: 9.5" (H) x 48" (W) x 28" (D)</p> <p>Available Color: Silver</p>
Operating Environment	<p>Operating Temperature: 10°C ~ 35°C (50°F ~ 95°F)</p> <p>Non-operating Temperature: -40°C to 60°C (-40°F to 140°F)</p> <p>Operating Relative Humidity: 8% to 90% (non-condensing)</p> <p>Non-operating Relative Humidity: 5% to 95% (non-condensing)</p>
Motherboard	Super G1SMH-G
Chassis	CSE-GP102TS-R000NDFP