GPU SuperServer ARS-111GL-NHR

NVIDIA GH200 Grace Hopper Superchip system supporting NVIDIA BlueField-3 or NVIDIA ConnectX-7
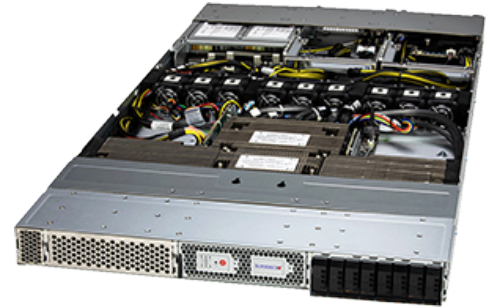
Key Applications

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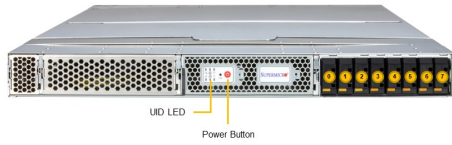
Key Features

- High density 1U GPU system with Integrated NVIDIA® H100 GPU;
- 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;
- 2x PCIe 5.0 x16 slots supporting NVIDIA BlueField®-3 or ConnectX®-7;
- 9 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	NVIDIA 72-core NVIDIA Grace CPU on GH200 Grace Hopper™ Superchip
GPU	Max GPU Count: Up to 1 onboard GPU(s) Supported GPU: NVIDIA: H100 Tensor Core GPU on GH200 Grace Hopper™ Superchip (Air-cooled) CPU-GPU Interconnect: NVLink®-C2C
System Memory	Slot Count: Onboard Memory Max Memory: Up to 480GB ECC LPDDR5X Additional GPU Memory: Up to 96GB ECC HBM3
Drive Bays Configuration	Default: Total 8 bay(s) • 8 front hot-swap E1.S NVMe drive bay(s) M.2: 2 M.2 NVMe slot(s) (M-key)
Expansion Slots	Default • 2 PCIe 5.0 x16 FHFL slot(s)
On-Board Devices	System on Chip
Input / Output	LAN: 1 RJ45 1 GbE Dedicated IPMI LAN port(s) USB: 1 USB 3.0 port(s) (Rear) Video: 1 mini-DP port(s) TPM: 1 TPM Onboard/port 80

(Front View – System)

(Rear View – System)

UID LED

Power Button

USB 3.0 Port
1GB RJ45 Port
Mini DisplayPort

NVIDIA BlueField®-3
Networking Card

Dual 2000W Titanium Level
Power Supplies

Drive Bay	Description
❶ – ❷	8 Hot-swap EDSFF E1.S Drive Bays

System Cooling	Fans: 9 Removable heavy-duty 4cm Fan(s)
Power Supply	2x 2000W Redundant Titanium Level power supplies
System BIOS	BIOS Type: AMI 64MB SPI Flash EEPROM

PC Health Monitoring	CPU: Monitors for CPU Cores, Chipset Voltages, Memory
	FAN: 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

Dimensions and Weight	Weight: Gross Weight: 65.5 lbs (29.7 kg) Net Weight: 48.5 lbs (22 kg) Available Color: Silver
Operating Environment	Operating Temperature: 10°C ~ 35°C (50°F ~ 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 G1SMH-G**
Chassis	**CSE-MG102TS-R000NDFP**