GPU SuperServer ARS-111GL-NHR

1U NVIDIA Grace-Hopper Super Chip with On board Hopper GPU and 72 core Grace CPU
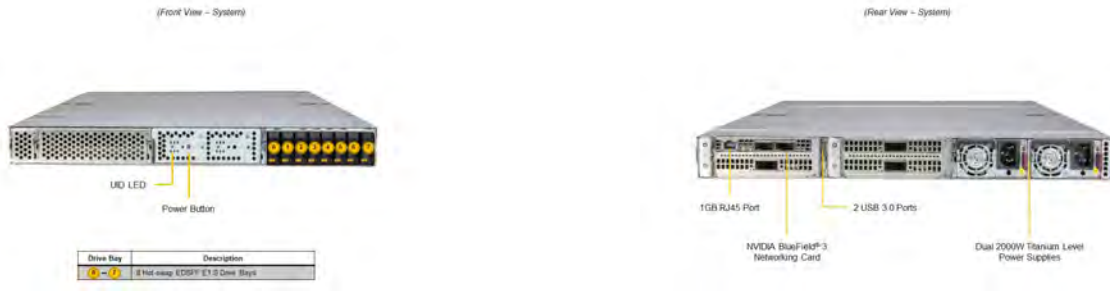
Key Applications

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;
- 3x 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	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) USB: 2 USB port(s) (2 rear)

(Front View – System)

UID LED

Power Button

Drive Bay	Description
0 - 7	8 Hot-swap EDSFF E1.S Drive Bays

(Rear View – System)

1GB RJ45 Port

2 USB 3.0 Ports

NVIDIA BlueField-3
Networking Card

Dual 2000W Titanium Level
Power Supplies

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	CPU: Monitors for CPU Cores, Chipset Voltages, Memory
	8+4 Phase-switching voltage regulator
	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	Height: 1.75" (44 mm)
	Width: 17.33" (440 mm)
	Depth: 37" (940 mm)
	Gross Weight: 65.5 lbs (29.7 kg)
	Net Weight: 48.5 lbs (22 kg)
	Packaging: 9.5" (H) x 48" (W) x 28" (D)
	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-GP102TS-R000NDFP