

# GPU SuperServer ARS-111GL-NHR

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



[More details here](#)

## Key Applications

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

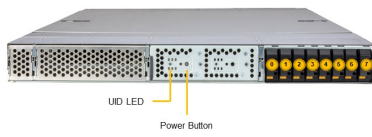
## Key Features

- 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;



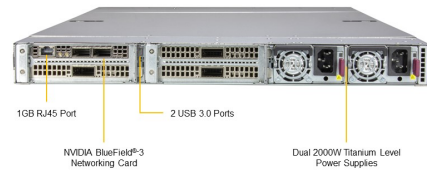
<b>Form Factor</b>	<p>1U Rackmount</p> <p>Enclosure: 440 x 44 x 940mm (17.33" x 1.75" x 37")</p> <p>Package: 1219 x 241 x 711mm (48" x 9.5" x 28")</p>
<b>Processor</b>	<p>Single Socket</p> <p>NVIDIA GH200 Grace Hopper™ Superchip</p> <p>Up to 72C/144T</p>
<b>GPU</b>	<p>Max GPU Count: Up to 1 onboard GPU(s)</p> <p>Supported GPU: NVIDIA: GH200 Grace Hopper™ Superchip (Air-cooled)</p> <p>CPU-GPU Interconnect: NVLink®-C2C</p>
<b>System Memory</b>	<p>Slot Count: Onboard Memory</p> <p>Max Memory: Up to 480GB ECC LPDDR5X</p> <p>Additional GPU Memory: Up to 96GB ECC HBM3</p>
<b>Drive Bays</b>	<p>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.)</p> <p>2 M.2 NVMe</p>
<b>Expansion Slots</b>	<p>2 PCIe 5.0 x16 FHFL slot(s)</p>
<b>On-Board Devices</b>	<p>Chipset: System on Chip</p> <p>Network Connectivity:</p>
<b>Input / Output</b>	<p>LAN: 1 RJ45 1GbE (Dedicated IPMI port)</p> <p>USB: 2 USB 3.0 port(s) (2 rear)</p> <p>Video: 1 Mini DisplayPort(s)</p>

(Front View – System)



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

(Rear View – System)



**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**

- 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-MG102TS-R000NDFP