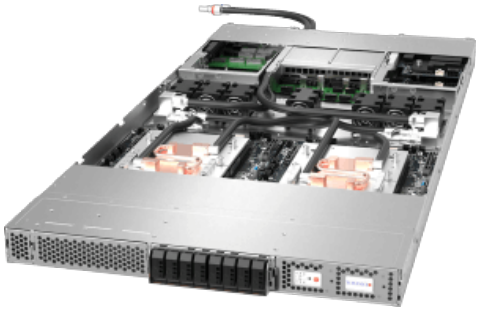
# GPU SuperServer ARS-111GL-DNHR-LCC

1U 2-Node NVIDIA GH200 Grace Hopper Superchip system with liquid-cooling supporting NVIDIA BlueField-3 or NVIDIA ConnectX-7

More details here

## Key Applications

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



## Key Features

- Two nodes in a 1U form factor. Each node supports the following:;
- High density 1U 2-node GPU system with Integrated NVIDIA® H100 GPU (1 per Node);
- 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 per node supporting NVIDIA BlueField®-3 or ConnectX®-7;
- 7 Hot-Swap Heavy Duty Fans with Optimal Fan Speed Control;
- This system supports two E1.S drives directly from the processor only.;

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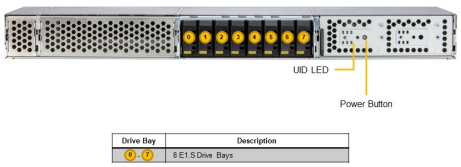
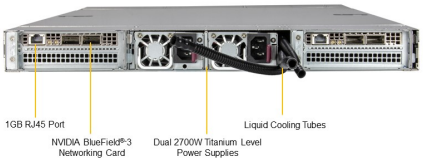
|---|---|
| Form Factor | 1U Rackmount<br>Enclosure: 440 x 44 x 940mm (17.33" x 1.75" x 37")<br>Package: 711 x 241 x 1219mm (28" x 9.5" x 48") |
| Processor | NVIDIA 72-core NVIDIA Grace CPU on GH200 Grace Hopper™ Superchip |
| GPU | Max GPU Count: 1 onboard GPU<br>Supported GPU: NVIDIA: H100 Tensor Core GPU on GH200 Grace Hopper™ Superchip<br>CPU-GPU Interconnect: NVIDIA NVLink®-C2C<br>GPU-GPU Interconnect: PCIe |
| System Memory | Slot Count: Onboard Memory<br>Max Memory: Up to 480GB ECC LPDDR5X<br>Additional GPU Memory: Up to 96GB ECC HBM3 |
| Drive Bays Configuration | Default: Total 4 bays<br>• 4 front fixed E1.S NVMe drive bays<br>M.2: 2 M.2 NVMe slots (M-key) |
| Expansion Slots | Default<br>• 2 PCIe 5.0 x16 FHFL slots |
| On-Board Devices | System on Chip |
| Input / Output | LAN: 1 RJ45 1 GbE Dedicated BMC LAN port<br>USB: 2 ports(rear)<br>Video: 1 mini-DP port |

*(Front View – System)*




| Drive Bay | Description |
|---|---|
| 0 - 7 | 8 E1.S Drive Bays |

*(Rear View – System)*




| | |
|---|---|
| System Cooling | Fans: Up to 7 Removable heavy-duty 4cm Fan(s)<br>Liquid Cooling: Direct to Chip (D2C) Cold Plate (optional) |
| Power Supply | 2x 2700W Redundant Titanium Level (96%) power supplies |
| System BIOS | BIOS Type: AMI 64MB SPI Flash EEPROM |
| PC Health Monitoring | CPU: Monitors for CPU Cores, Chipset Voltages, Memory<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 | Weight: Gross Weight: 65.5 lbs (29.7 kg)<br>Net Weight: 48.5 lbs (22 kg)<br>Available Color: Silver |
| Operating Environment | Operating Temperature: 10°C to 35°C (50°F to 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-G** |
| Chassis | **CSE-GP102TS-R000NDFP** |