

GPU SuperServer ARS-221GL-NHIR

DP 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 2U 1-node GPU system with two Integrated NVIDIA H100 GPUs and two 72-core Arm Neoverse V2 CPUs
NVIDIA® NVLink® high speed interconnect between both GH200 Super Chips;
- 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 624GB of coherent memory per node including 480GB LPDDR5X and 144GB of HBM3e for LLM applications;
- 3x PCIe 5.0 X16 supporting one NVIDIA Bluefield 3 and two connectX-7 cards and 1x PCIe 5.0 x8 slot per node supporting a 10GB LP NIC Card;
- 6 Hot Swap Heavy Duty Fans with Optional Speed Control;



Form Factor	2U Rackmount Enclosure: 438.4 x 87 x 900mm (17.3" x 3.43" x 35.43") Package: 700 x 280 x 1200mm (27.56" x 11.02" x 47.24")
Processor	NVIDIA 72-core NVIDIA Grace CPU on GH200 Grace Hopper™ Superchip
GPU	Max GPU Count: Up to 2 onboard GPU(s) Supported GPU: NVIDIA: H100 Tensor Core GPU on GH200 Grace Hopper™ Superchip (Liquid-cooled) CPU-GPU Interconnect: NVLink®-C2C GPU-GPU Interconnect: NVIDIA® NVLink®
System Memory	Slot Count: Onboard Memory Max Memory: Up to 480GB ECC LPDDR5X Additional GPU Memory: Up to 144GB 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 • 3 PCIe 5.0 x16 (in x16) FHFL slot(s)
On-Board Devices	System on Chip
Input / Output	LAN: 1 RJ45 1 GbE Dedicated IPMI LAN port(s) USB: 2 port(s) (rear) Video: 1 mini-DP port(s)

System Cooling	Fans: 7 Removable heavy-duty 6cm Fan(s)
Power Supply	4x 2000W Redundant (2 + 2) 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: 103 lbs (46.8 kg) Net Weight: 88 lbs (40 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 G2DMH-GI
Chassis	CSE-MG202TS-R000NDFP
