

MGX™ SuperServer ARS-121L-DNR

1U 2-Node NVIDIA Grace CPU Superchip system supporting NVIDIA BlueField-3 or NVIDIA ConnectX-7



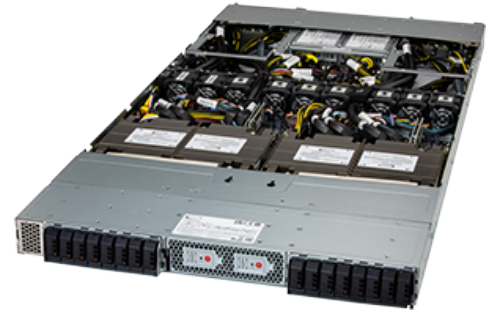
[More details here](#)

Key Applications

High Performance Computing, Hyperscale Cloud Applications, Data Analytics,

Key Features

- Pending a firmware fix, this system currently supports four E1.S drives. Please consult your Supermicro Salesperson for details.;
- Two **hot-pluggable** systems (nodes) in a 1U form factor. Each node supports the following.;
- High density 1U 2-node system with NVIDIA Grace™ CPU Superchip per node;
- NVLink® Chip-2-Chip (C2C) high-bandwidth, low-latency interconnect between CPU and CPU at 900GB/s;
- Up to 960GB LPDDR5X onboard memory (per node);
- 2x PCIe 5.0 x16 slots per node supporting NVIDIA BlueField®-3 or ConnectX®-7. Please note: GPU is not supported;
- Up to 2x Hot-swap E1.S drives and 2x M.2 NVMe drives per node;
- 7 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: 711 x 241 x 1219mm (28" x 9.5" x 48")

Processor Dual processor(s)
 NVIDIA Dual 72-core CPUs on a Grace™ CPU Superchip
 144C/144T; 198MB Cache per CPU

System Memory Onboard Memory
 960GB ECC

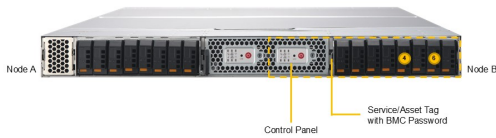
Drive Bays Configuration Default: Total 4 bays
 • 4 front hot-swap E1.S NVMe drive bays
 M.2: 4 M.2 NVMe slots (M-key)

Expansion Slots Default
 • 2 PCIe 5.0 x16 FHFL slots

On-Board Devices NVIDIA C2

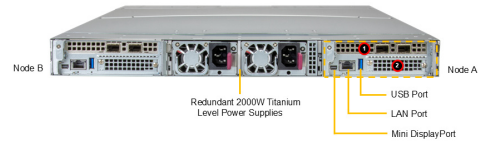
Input / Output LAN: 1 RJ45 1 GbE Dedicated BMC LAN port
 USB: 2 ports(rear)
 Video: 1 mini-DP port

(Front View – System)



Drive Bay (Node A-B)	Description
1 2	2 Fixed E1.S NVMe Drive Bays

(Rear View – System)



Per Node (Node A-B)	Slot Description
1	PCIe 5.0 x16 FHFL (on physical motherboard slot 4)
2	PCIe 5.0 x16 HHL (on physical motherboard slot 5)

System Cooling	Fans: Up to 9 Removable heavy-duty 4cm Fan(s)
Power Supply	2x 2000W Redundant Titanium Level (96%) power supplies
System BIOS	BIOS Type: AMI 32MB SPI Flash EEPROM
PC Health Monitoring	CPU: Monitors for CPU Cores, Chipset Voltages, Memory FAN: Fans with tachometer monitoring Pulse Width Modulated (PWM) fan connectors Status monitor for speed control 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 to 35°C (50°F to 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
Chassis	CSE-GP102TS-R000NDFP