

GPU SuperServer ARS-121L-DNR

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



Key Applications

High Performance Computing, Hyperscale Cloud Applications, Data Analytics,

Key Features

- 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 480GB LPDDR5X onboard memory;
- 2x PCIe 5.0 x16 slots per node supporting NVIDIA BlueField®-3 or ConnectX®-7:
- Up to 4x Hot-swap E1.S drives and 2x M.2 NVMe drives per node;
- 7 Hot-Swap Heavy Duty Fans with Optimal Fan Speed Control;
- Two nodes in a 1U form factor. Each node supports the following:;
- Pending a firmware fix, this system currently supports four E1.S drives and two GPUs. Please consult your Supermicro Salesperson for details.;



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 processor(s) NVIDIA Dual 72-core CPUs on a Grace™ CPU Superchip
GPU	Max GPU Count: Up to 1 double-width or 1 single-width GPU(s) GPU-GPU Interconnect: PCIe
System Memory	Slot Count: Onboard Memory Max Memory: Up to 480GB ECC
Drive Bays Configuration	Default: Total 4 bay(s) • 4 front hot-swap E1.S NVMe drive bay(s) M.2: 2 M.2 NVMe slot(s) (M-key)
Expansion Slots	Default • 2 PCIe 5.0 x16 FHFL slot(s)
On-Board Devices	NVIDIA C2
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: 9 Removable heavy-duty 4cm Fan(s)
Power Supply	2x 2700W 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
	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: 65.5 lbs (29.7 kg)
	Net Weight: 48.5 lbs (22 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 G1SMH
Chassis	CSE-GP102TS-R000NDFP