

Storage SuperServer ARS-121L-NE316R

1U NVIDIA Grace CPU Superchip system supporting NVIDIA BlueField®-3 or NVIDIA Connect®X-7



Key Applications

Software-defined Storage, In-Memory Computing, Data Intensive HPC, Private & Hybrid Cloud, NVMe Over Fabrics Solution,

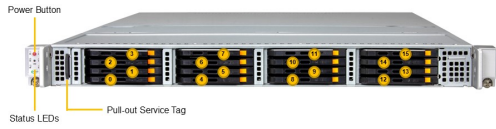
Key Features

- Single NVIDIA Grace™ CPU Superchip, up to 144 Arm v9 cores, TDP 600W;
- Up to 960GB LPDDR onboard memory;
- 2 PCIe 5.0 x16 FHHL slots & 1 AIOM connector (OCP 3.0 SFF Compliant);
- 16 Front Hot-Swap E3.S (7.5mm) NVMe drive bays;
- Redundant Titanium 1600W Power Supplies;



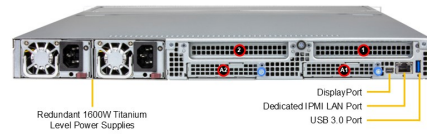
Form Factor	1U Rackmount Enclosure: 438.4 x 43.6 x 772.15mm (17.2" x 1.7" x 30.4") Package: 672 x 224 x 1100mm (26.46" x 8.82" x 43.31")
Processor	Single processor(s) NVIDIA Dual 72-core CPUs on a Grace™ CPU Superchip
System Memory	Slot Count: Onboard Memory Max Memory: Up to 960GB ECC LPDDR5X
Drive Bays Configuration	Default: Total 16 bays <ul style="list-style-type: none"> • 16 front hot-swap E3.S 1T NVMe drive bays M.2: 2 M.2 NVMe slots (M-key)
Expansion Slots	Default* <ul style="list-style-type: none"> • 2 PCIe 5.0 x16 (in x16) FHHL slots Option A <ul style="list-style-type: none"> • 2 PCIe 5.0 x16 (in x16) AIOM slots (OCP 3.0 compatible) (*Requires additional parts, please see the optional parts list for details. For more details on PCIe slot configuration options, please refer to the system callout images above.)
On-Board Devices	System on Chip
Input / Output	LAN: 1 RJ45 1 GbE Dedicated BMC LAN port USB: 1 USB 3.0 Type-A port(Rear) Video: 1 mini-DP port

(Front View – System)



Drive Bay	Description
1-16	16 Hot-swap E3.S (7.5mm) 19Mm Drive Bays

(Rear View – System)



Slot	Slot Description
1-2	PCIe 5.0 x16 FHHL
3-4	PCIe 5.0 x16 A1OM

System Cooling	Fans: 8 Removable heavy-duty 4cm Fan(s)
Power Supply	2x 1600W Redundant (1 + 1) 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 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: 66.8 lbs (30.3 kg) Net Weight: 43.6 lbs (19.8 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 G1SMP
Chassis	CSE-SG101E3-R000NDP