

TECHNICAL DATASHEET

SUPERMICRO • GPU & AI SERVERS

Supermicro 4U GPU Server AS-4124GO-NART+

DP AMD System with NVIDIA HGX A100 8-GPU and 3000W Power Supply

SKU AS-4124GO-NART+

4U

Supermicro



FORM FACTOR

4U

MAX POWER (BASE)

602 W

HEAT OUTPUT

2,054 BTU/h

PRICE

On request

REQUEST A QUOTATION ONLINE

serverinvest.com/product/as-4124go-nart-2

01 Product overview

The Supermicro AS-4124GO-NART+ is a 4U GPU Server built on dual Dual Socket SP3 AMD EPYC 7002/7003 Series Processors processors with up to 8 TB of memory in 32 DIMM slots.

DP AMD System with NVIDIA HGX A100 8-GPU and 3000W Power Supply.

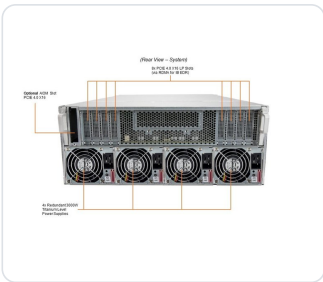
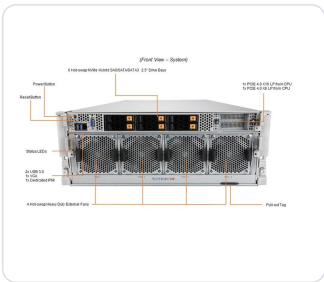
ServerInvest configures every AS -4124GO-NART+ to order, updates BIOS and BMC firmware, installs your operating system on request and runs a 48-hour burn-in test before delivery. Every system includes a 3-year warranty.

HIGHLIGHTS

- Dual Dual Socket SP3 AMD EPYC 7002/7003 Series Processors
- Up to 8 TB memory · 32 DIMM slots
- Total 6 bays 6 front hot-swap 2.5" NVMe drive bays
- Power: 4x 3000W
- Networking: Ethernet

KEY SPECIFICATIONS

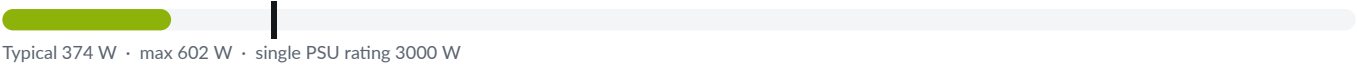
Form factor	4U
Processor	2× Dual Socket SP3 AMD EPYC 7002/7003 Series Processors
Memory	32 DIMM slots, up to 8 TB
Drive bays	20 (20 NVMe)
Power supply	4× 3000 W
Typical power draw	750 W
Networking	Ethernet
Dimensions (W×H×D)	437 × 178 mm



02 Power & thermal

Calculated for the base configuration

IDLE	TYPICAL	MAXIMUM	HEAT (MAX)	COOLING	PSU LOAD
143 W	374 W	602 W	2,054 BTU/h	0.6 kW	20%



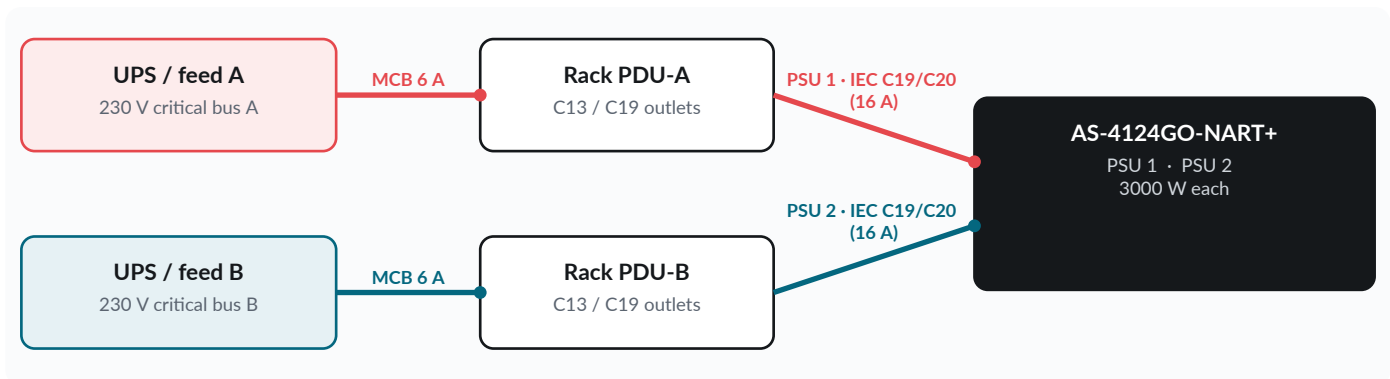
Annual IT energy (24/7)	2,669 kWh
Annual facility energy (PUE 1.5)	4,004 kWh
Annual energy cost	€534 IT · €801 incl. cooling (at 0.20 €/kWh)
CO ₂ emissions / year	1.04 t (grid factor 0.26 kg/kWh)
Power supplies	4× 3000 W redundant (N+1)

POWER BY COMPONENT	IDLE	TYPICAL	MAX
Chassis, motherboard, fans, BMC	72 W	112 W	160 W
2× CPU (base configuration)	50 W	220 W	370 W
4× Memory (base configuration)	12 W	20 W	36 W

DC loads converted to wall power at 94% PSU efficiency; typical load assumed 70% of the time. Engineering estimates — confirm with the manufacturer's power calculator for critical designs.

03 Power connection diagram

Dual-feed (A/B) connection for redundant power supplies



- Connect PSU 1 to PDU-A and PSU 2 to PDU-B (independent feeds) using IEC C19/C20 (16 A) power cords.
- Maximum current per feed: 2.8 A at 230 V — each feed must be able to carry the full load if the other fails.
- Recommended protection per PDU circuit: MCB 6 A, curve C; RCD according to local regulations.
- Heat to remove at full load: 602 W = 2,054 BTU/h (0.6 kW).

04 Full specifications

MOTHERBOARD

Super H12DGO-6

PROCESSOR

CPU	Dual Socket SP3 AMD EPYC 7002/7003 Series Processors
Note	Supports up to 280W TDP CPUs (Air Cooled)

GPU

Max GPU Count	8 onboard GPUs
Supported GPU	NVIDIA SXM: HGX A100 8-GPU (80GB)
GPU-GPU Interconnect	NVIDIA NVLink with NVSwitch

SYSTEM MEMORY

Memory	Slot Count: 32 DIMM slots Max Memory (2DPC): Up to 8TB 3200MT/s ECC DDR4 RDIMM/LRDIMM View Memory Options
Memory Voltage	1.2V

ON-BOARD DEVICES

Network Connectivity	Ethernet View AIOM Options View AOC Options
IPMI	Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support

INPUT / OUTPUT

LAN	1 RJ45 1 GbE Dedicated BMC LAN port
USB	2 USB 3.0 ports (front)
Video	1 VGA port (Front)

SYSTEM BIOS

BIOS Type	AMI 256MB SPI Flash ROM
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MANAGEMENT

Software	Supermicro Server Manager (SSM) Supermicro Power Manager (SPM) Supermicro Update Manager (SUM) Supermicro SuperDoctor 5 (SD5) KVM with dedicated LAN IPMI 2.0 Watch Dog
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SECURITY

Hardware	Trusted Platform Module (TPM) 2.0 Silicon Root of Trust (RoT) – NIST 800-193 Compliant
Features	Cryptographically Signed Firmware Secure Boot Secure Firmware Updates Automatic Firmware Recovery System Lockdown

PC HEALTH MONITORING

CPU	4+1 Phase-switching voltage regulator 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

CERTIFICATIONS

Operating Systems	Milan: ESXi 7.0 U3, ESXi 8.0, Hypervisor 8.2, Oracle Linux 8.3, RHEL 8.3, SLES 15 SP2 Rome: ESXi 7.0 U3, Hypervisor 8.2.1, Oracle Linux 8.3, RHEL 8.2, SLES 15 SP2 View all OS Compatibility and Certification Matrix
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CHASSIS

Form Factor	4U Rackmount
Model	CSE-438G

DIMENSIONS AND WEIGHT

Height	6.9" (174 mm)
Width	17.6" (446 mm)
Depth	35.4" (900 mm)

Package	29.5" (H) x 27.4" (W) x 44.9" (D)
Weight	Gross Weight: 225 lbs (102.1 kg) Net Weight: 166 lbs (75.3 kg)
Available Color	Black Front & Silver Body

EXPANSION SLOTS

PCI-Express (PCIe) Configuration	Default 1 PCIe 4.0 x16 LP slot 1 PCIe 4.0 x8 LP slot View AOC Options
M.2	2 M.2 PCIe 4.0 x4 slots (M-key 22110)

DRIVE BAYS / STORAGE

Drive Bays Configuration	Default: Total 6 bays 6 front hot-swap 2.5" NVMe drive bays Option A: Total 10 bays 6 front hot-swap 2.5" NVMe drive bays 4 rear hot-swap 2.5" NVMe drive bays View NVMe Options View Drive Options
M.2	2 M.2 NVMe slots (M-key) View M.2 Options

SYSTEM COOLING

Fans	Up to 4 x Hot-swap 11.5K RPM heavy duty Fan(s)
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POWER SUPPLY

	4x 3000W 4x 3000W Redundant (2 + 2) Titanium Level (96%) power supplies Dimension (WxHxL) 106.5 x 82.4 x 203.5 mm
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OPERATING ENVIRONMENT

RoHS	RoHS Compliant
Environmental Spec.	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)

05 Built, tested & supported by ServerInvest

Engineered configuration

Every option validated for socket, memory channels, PCIe lanes, power and cooling.

48-hour burn-in

Assembled, firmware-updated and stress-tested before it leaves our workshop.

3-year warranty

Standard on every system, with on-site next-business-day upgrades available.

Rack-ready delivery

Rails, cable management and labelling included — delivered across Europe.



Interested in this solution?

Request a quotation online or talk to a solutions engineer — we reply within one business day.
office@serverinvest.com

Official manufacturer datasheet: serverinvest.com/product/as-4124go-nart-2/datasheet/manufactur

