

TECHNICAL DATASHEET

SUPERMICRO · GPU & AI SERVERS

Supermicro 4U GPU Server AS-4126GS-NB3RT-LCC

DP AMD 4U Liquid-Cooled System with NVIDIA HGX B300 8-GPU (complete rack and onsite service are required)

SKU AS-4126GS-NB3RT-LCC

4U

SP5

Supermicro



FORM FACTOR

4U

MAX POWER (BASE)

402 W

HEAT OUTPUT

1,372 BTU/h

PRICE

On request

CONFIGURE & QUOTE ONLINE

serverinvest.com/product/as-4126gs-nb3rt-lcc

01 Product overview

The Supermicro AS-4126GS-NB3RT-LCC is a 4U GPU Server built on AMD EPYC 9005 with up to 6 TB of memory in 24 DIMM slots.

DP AMD 4U Liquid-Cooled System with NVIDIA HGX B300 8-GPU (complete rack and onsite service are required).

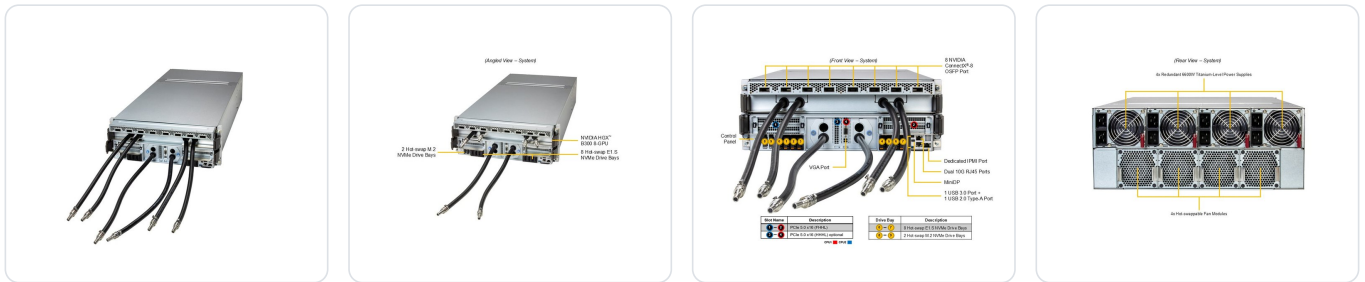
ServerInvest configures every AS -4126GS-NB3RT-LCC to order, updates BIOS and BMC firmware, installs your operating system on request and runs a 48-hour burn-in test before delivery. Every system includes a 3-year warranty.

HIGHLIGHTS

- AMD EPYC 9005
- Up to 6 TB memory · 24 DIMM slots
- Total 8 bays 8 front hot-swap E1.S PCIe 5.0 x4 NVMe drive bays
- Power: 4x 6600W
- Networking: 8 OSFP 800GbE

KEY SPECIFICATIONS

Form factor	4U
Processor	AMD EPYC 9005
Socket	SP5
Memory	24 DIMM slots, up to 6 TB
Memory type	DDR5-6400 ECC RDIMM
Drive bays	8 (8 NVMe)
Power supply	4× 6600 W
Typical power draw	450 W
Networking	8 OSFP 800GbE
Dimensions (W×H×D)	437 × 178 mm



02 Base configuration

Components included in the listed base price — every part can be changed in the online configurator

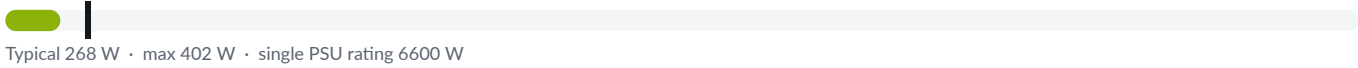
COMPONENT	DESCRIPTION	QTY
Base system	Supermicro 4U GPU Server AS-4126GS-NB3RT-LCC	1
Processor	AMD EPYC 9135 - 16 Cores, 3.65/4.30GHz, 64MB Cache (200 Watt)	1
Memory	16GB 6400MT/s DDR5 ECC Registered DIMM Module	2
Warranty & support	3-year return-to-base warranty (included)	1

Price on request — contact us for a tailored quotation

03 Power & thermal

Calculated for the base configuration

IDLE	TYPICAL	MAXIMUM	HEAT (MAX)	COOLING	PSU LOAD
115 W	268 W	402 W	1,372 BTU/h	0.4 kW	6%



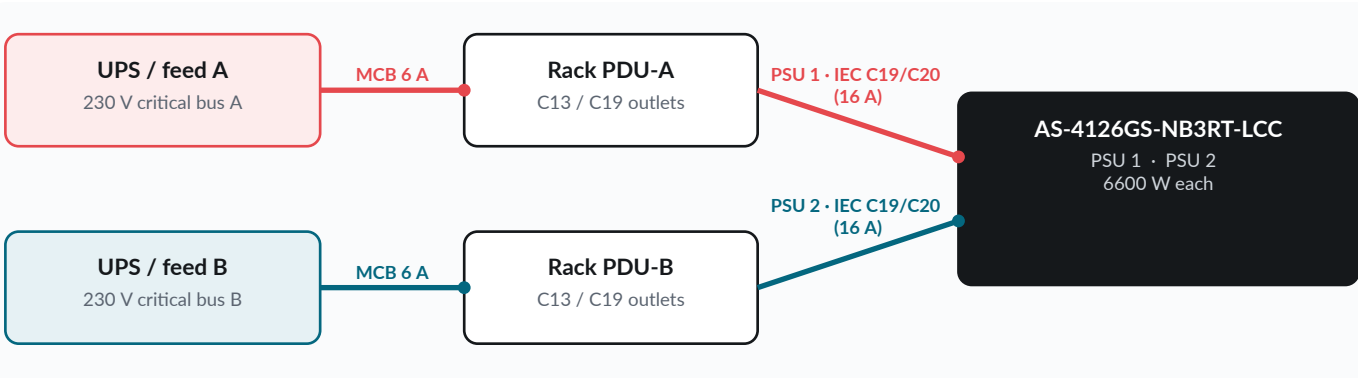
Annual IT energy (24/7)	1,946 kWh
Annual facility energy (PUE 1.5)	2,919 kWh
Annual energy cost	€389 IT · €584 incl. cooling (at 0.20 €/kWh)
CO ₂ emissions / year	0.76 t (grid factor 0.26 kg/kWh)
Power supplies	4× 6600 W redundant (N+1)

POWER BY COMPONENT	IDLE	TYPICAL	MAX
Chassis, motherboard, fans, BMC	72 W	112 W	160 W
CPU — AMD EPYC 9135 - 16 Cores	30 W	130 W	200 W
2× Memory 16 GB DIMM	6 W	10 W	18 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.

04 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: 1.8 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: 402 W = 1,372 BTU/h (0.4 kW).

05 Full specifications

MOTHERBOARD	
	Super H14DSG-OM
PROCESSOR	
CPU	Dual processor(s) AMD EPYC 9005/9004 Series Processors
Core Count	Up to 192C/384T; Up to 384MB Cache per CPU

Note Supports up to 500W TDP CPUs (Liquid Cooled)

GPU

Max GPU Count	8 onboard GPUs
Supported GPU	NVIDIA SXM: HGX B300 8-GPU (288GB) View GPU Options
CPU-GPU Interconnect	PCIe 5.0 x16 CPU-to-GPU Interconnect
GPU-GPU Interconnect	NVIDIA NVLink with NVSwitch

SYSTEM MEMORY

Memory	Slot Count: 24 DIMM slots Max Memory (1DPC): Up to 6TB 6400MT/s ECC DDR5 RDIMM (AMD EPYC 9005 Series Processor) Max Memory (1DPC): Up to 6TB 4800MT/s ECC DDR5 RDIMM (AMD EPYC 9004 Series Processor) View Memory Options
Memory Voltage	1.1V

ON-BOARD DEVICES

Network Connectivity	8 OSFP 800GbE 2 RJ45 10GbE View AOC Options
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INPUT / OUTPUT

USB	1 USB 3.0 Type-A port (Front) 1 USB 2.0 Type-A port (Front)
Video	1 VGA port 1 mini-DP port
TPM	1 TPM header

SYSTEM BIOS

BIOS Type	AMI 64MB SPI Flash EEPROM
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MANAGEMENT

Software	SuperCloud Composer (SCC) Supermicro Server Manager (SSM) Supermicro Update Manager (SUM) Supermicro SuperDoctor 5 (SD5) Super Diagnostics Offline (SDO) Supermicro Thin-Agent Service (TAS) SuperServer Automation Assistant (SAA) New!
Power configurations	Power-on mode for AC power recovery ACPI Power Management

SECURITY

Hardware	Trusted Platform Module (TPM) 2.0 Silicon Root of Trust (RoT) – NIST 800-193 Compliant
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Features	Automatic Firmware Recovery Cryptographically Signed Firmware Runtime BMC Protections Secure Boot Secure Firmware Updates Supply Chain Security: Remote Attestation
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PC HEALTH MONITORING

CPU	8+4 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	ESXi 8.0U3, ESXi 9.0, RHEL 10.0 View all OS Compatibility and Certification Matrix
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CHASSIS

Form Factor	4U Rackmount
Model	CSE-GP405LTS-R000NP

DIMENSIONS AND WEIGHT

Height	6.85" (174 mm)
Width	17.6" (448 mm)
Depth	39.03" (896.8 mm)
Package	16.14" (H) x 31.29" (W) x 54.92" (D)
Weight	Gross Weight: 253 lbs (115 kg) Net Weight: 203 lbs (92 kg)
Available Color	Silver

FRONT PANEL

Buttons	Power On/Off UID
LED	HDD activity LAN1 activity LAN2 activity Power Fail Power status

EXPANSION SLOTS

PCI-Express (PCIe) Configuration	Default 2 PCIe 5.0 x16 FHHL slots Option A 2 PCIe 5.0 x16 FHHL slots 2 PCIe 5.0 x16 HHHL slots View AOC Options
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DRIVE BAYS / STORAGE

Drive Bays Configuration	Default: Total 8 bays 8 front hot-swap E1.S PCIe 5.0 x4 NVMe drive bays View NVMe Options
M.2	2 M.2 NVMe slots (M-key 2280/22110; RAID support via S3808N controller) View M.2 Options

SYSTEM COOLING

Fans	Up to 4 Hot-swappable rear fans with optimal fan speed control 80x80x80mm Fan(s)
Air Shroud	1 Air Shroud
Liquid Cooling	Direct to Chip (D2C) Cold Plate

POWER SUPPLY

4x 6600W
4x 6600W Redundant (2 + 2) Titanium Level (96%) power supplies
Dimension (WxHxL)
106.5 x 82.1 x 245.3 mm

OPERATING ENVIRONMENT

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)
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06 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.



Ready to order or need changes?

Configure this system online or talk to a solutions engineer — we reply within one business day.

office@serverinvest.com

Official manufacturer datasheet: serverinvest.com/product/as-4126gs-nb3rt-lcc/datasheet/manufacturer

