

TECHNICAL DATASHEET

SUPERMICRO • GPU & AI SERVERS

Supermicro 8U GPU Server AS-8126GS-TNMR

DP AMD 8U System with AMD Instinct MI325X/MI350X 8-GPU

SKU AS-8126GS-TNMR

8U

SP5

Supermicro



FORM FACTOR

8U

MAX POWER (BASE)

509 W

HEAT OUTPUT

1,737 BTU/h

PRICE

On request**CONFIGURE & QUOTE ONLINE**serverinvest.com/product/as-8126gs-tnmr

01 Product overview

The Supermicro AS-8126GS-TNMR is a 8U GPU Server built on AMD EPYC 9005 with up to 6 TB of memory in 24 DIMM slots.

DP AMD 8U System with AMD Instinct MI325X/MI350X 8-GPU.

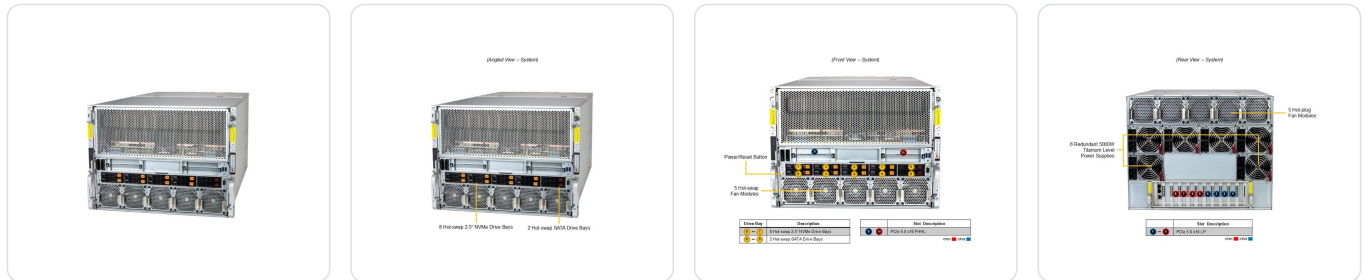
ServerInvest configures every AS -8126GS-TNMR to order, updates BIOS and BMC firmware, installs your operating system on request and runs a 48-hour burn-in test before delivery. Every system includes a 3-year warranty.

HIGHLIGHTS

- AMD EPYC 9005
- Up to 6 TB memory · 24 DIMM slots
- Total 10 bays 2 front hot-swap 2.5" SATA drive bays
- Power: 6x 5250W
- Networking: 2 RJ45 10GbE with Intel X710

KEY SPECIFICATIONS

Form factor	8U
Processor	AMD EPYC 9005
Socket	SP5
Memory	24 DIMM slots, up to 6 TB
Memory type	DDR5-6400 ECC RDIMM
Drive bays	18 (18 NVMe)
Power supply	6× 5250 W
Typical power draw	450 W
Networking	2 RJ45 10GbE with Intel X710
Dimensions (W×H×D)	437 × 356 mm



02 Base configuration

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

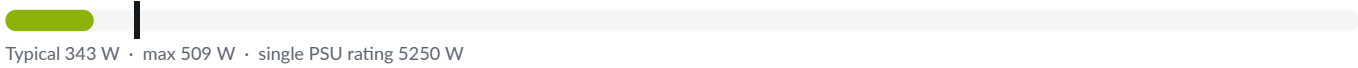
COMPONENT	DESCRIPTION	QTY
Base system	Supermicro 8U GPU Server AS-8126GS-TNMR	1
Processor	AMD EPYC 9135 - 16 Cores, 3.65/4.30GHz, 64MB Cache (200 Watt)	1
Memory	16GB 6400MT/s DDR5 ECC Registered DIMM Module	2
Warranty & support	3-year return-to-base warranty (included)	1

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
163 W	343 W	509 W	1,737 BTU/h	0.5 kW	10%



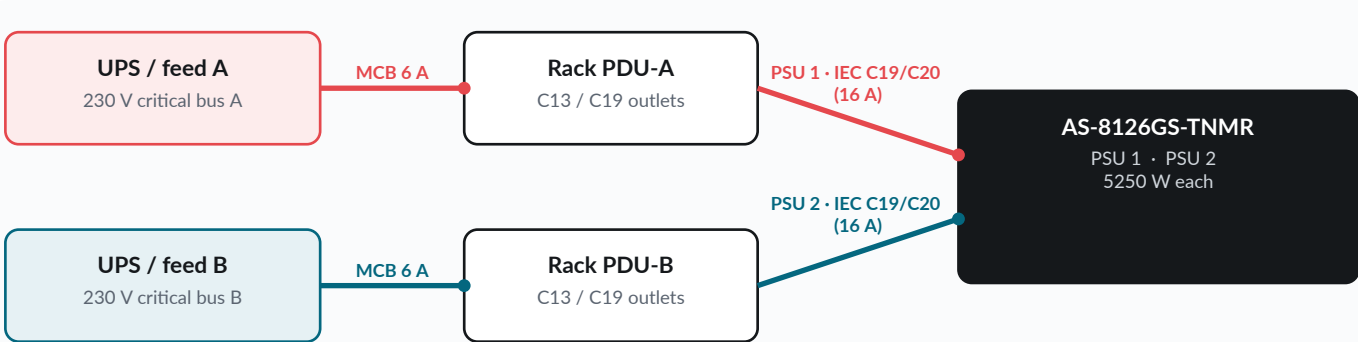
Annual IT energy (24/7)	2,532 kWh
Annual facility energy (PUE 1.5)	3,798 kWh
Annual energy cost	€506 IT · €760 incl. cooling (at 0.20 €/kWh)
CO ₂ emissions / year	0.99 t (grid factor 0.26 kg/kWh)
Power supplies	6× 5250 W redundant (N+1)

POWER BY COMPONENT	IDLE	TYPICAL	MAX
Chassis, motherboard, fans, BMC	117 W	182 W	260 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: 2.3 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: 509 W = 1,737 BTU/h (0.5 kW).

05 Full specifications

MOTHERBOARD	
	Super H14DSG-OD
PROCESSOR	
CPU	Dual processor(s) AMD EPYC 9005/9004 Series Processors
Core Count	Up to 384C/768T

Note Supports up to 500W TDP CPUs

GPU

Max GPU Count	8 onboard GPUs
Supported GPU	AMD: Instinct MI325X Accelerators, Instinct MI350X Accelerators View GPU Options
CPU-GPU Interconnect	PCIe 5.0 x16 CPU-to-GPU Interconnect
GPU-GPU Interconnect	AMD Infinity Fabric Link

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	2 RJ45 10GbE with Intel X710 View AOC Options
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INPUT / OUTPUT

LAN	1 RJ45 1 GbE Dedicated BMC LAN port
USB	2 USB 3.0 Type-A ports (Rear)
Video	1 VGA 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	Cryptographically Signed Firmware Secure Boot Secure Firmware Updates Automatic Firmware Recovery Supply Chain Security: Remote Attestation Runtime BMC Protections System Lockdown
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PC HEALTH MONITORING

CPU	7 +1 Phase-switching voltage regulator Monitors for CPU Cores, Chipset Voltages, Memory
Fan	Fans with tachometer monitoring Status monitor for speed control
Temperature	Monitoring for CPU and chassis environment Thermal Control for fan connectors

CERTIFICATIONS

Operating Systems	Oracle Linux 9.6, RHEL 10.0 View all OS Compatibility and Certification Matrix
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CHASSIS

Form Factor	8U Rackmount
Model	CSE-GP805TS-R000NPF

DIMENSIONS AND WEIGHT

Height	13.8" (356 mm)
Width	17.6" (447 mm)
Depth	33.2" (843 mm)
Package	26" (H) x 28.74" (W) x 50.39" (D)
Weight	Gross Weight: 336 lbs (152.4 kg) Net Weight: 288 lbs (130.635 kg)
Available Color	Silver

FRONT PANEL

Buttons	Power On/Off UID/ Reset button
LED	HDD activity Network activity LEDs System information (overheat/UID) UID

EXPANSION SLOTS

PCI-Express (PCIe) Configuration	Default 8 PCIe 5.0 x16 LP slots 2 PCIe 5.0 x16 FHHL slots View AOC Options
M.2	2 M.2 PCIe 3.0 x4 NVMe slots (M-key 22110(default))

DRIVE BAYS / STORAGE

Drive Bays Configuration Default: Total 10 bays 2 front hot-swap 2.5" SATA drive bays
8 front 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 14 heavy duty fans with optimal fan speed control

Air Shroud 1 Air Shroud

POWER SUPPLY

6x 5250W
6x 5250W Redundant (3 + 3) 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)

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-8126gs-tnmr/datasheet/manufacturer

