

TECHNICAL DATASHEET

SUPERMICRO · TOWER SERVERS & WORKSTATIONS

Supermicro Mid-Tower SuperWorkstation Server SYS-532AW-C

UP mid-tower workstation for 3D design and content creation

SKU SYS-532AW-C

Tower

Supermicro



FORM FACTOR

Tower

MAX POWER (BASE)

306 W

HEAT OUTPUT

1,044 BTU/h

PRICE

from €2,540

REQUEST A QUOTATION ONLINE

serverinvest.com/product/sys-532aw-c

01 Product overview

The Supermicro SYS-532AW-C is a Mid-Tower SuperWorkstation Server built on Intel Core with up to 192 GB of memory in 4 DIMM slots.

UP mid-tower workstation for 3D design and content creation.

The chassis accepts up to 1 GPU accelerators for AI, rendering and HPC workloads.

ServerInvest configures every SYS-532AW-C 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

- Intel Core
- Up to 192 GB memory · 4 DIMM slots
- Total 6 bays 2 internal fixed 3.5"/2.5" SATA drive bays
- Up to 1 GPUs
- Power: 1x 1000W
- Networking: 1 RJ45 1GbE with Intel I219-LM

KEY SPECIFICATIONS

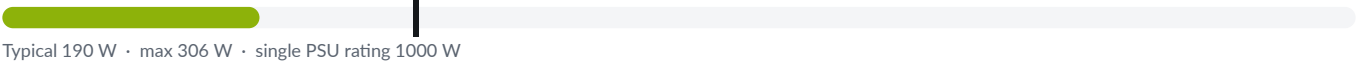
Form factor	Tower
Processor	Intel Core
Memory	4 DIMM slots, up to 192 GB
Drive bays	10 (10 NVMe)
GPU	Up to 1 GPUs
Power supply	1× 1000 W
Typical power draw	900 W
Networking	1 RJ45 1GbE with Intel I219-LM



02 Power & thermal

Calculated for the base configuration

IDLE 73 W	TYPICAL 190 W	MAXIMUM 306 W	HEAT (MAX) 1,044 BTU/h	COOLING 0.3 kW	PSU LOAD 31%
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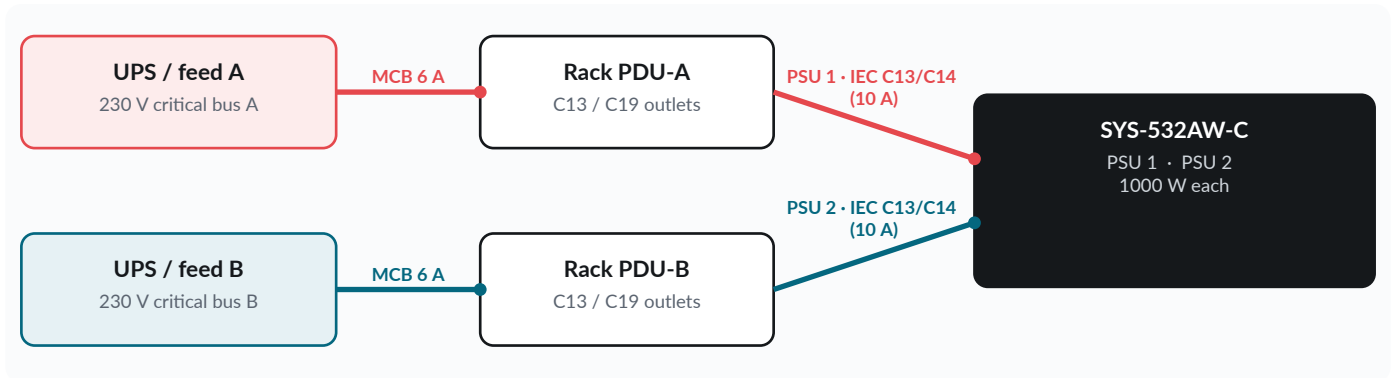
Annual IT energy (24/7)	1,357 kWh
Annual facility energy (PUE 1.5)	2,036 kWh
Annual energy cost	€271 IT · €407 incl. cooling (at 0.20 €/kWh)
CO ₂ emissions / year	0.53 t (grid factor 0.26 kg/kWh)
Power supplies	1× 1000 W

POWER BY COMPONENT	IDLE	TYPICAL	MAX
Chassis, motherboard, fans, BMC	38 W	59 W	85 W
CPU (base configuration)	25 W	110 W	185 W
2× Memory (base configuration)	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.

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 C13/C14 (10 A) power cords.
- Maximum current per feed: 1.4 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: 306 W = 1,044 BTU/h (0.3 kW).

04 Full specifications

MOTHERBOARD

Super X14SAE

PROCESSOR

CPU	Single LGA-1851 Intel Core Ultra 9/7/5 (Series 2) processors
Core Count	Up to 24C/24T; Up to 36MB Cache
Note	Supports up to 125W TDP CPUs (Air Cooled)

GPU

Max GPU Count	Up to 1 triple-width or 1 double-width GPU
Supported GPU	NVIDIA PCIe: NVIDIA RTX PRO 2000 Blackwell, NVIDIA RTX PRO 4000 Blackwell, NVIDIA RTX PRO 4500 Blackwell, NVIDIA RTX PRO 6000 Blackwell Max-Q Workstation Edition, NVIDIA RTX PRO 6000 Blackwell Workstation Edition, RTX 5000 Ada, RTX 6000 Ada Generation NVIDIA: GeForce RTX 5070, GeForce RTX 5080, GeForce RTX 5090 Intel: Arc Pro B50 Graphics View GPU Options

SYSTEM MEMORY

Memory	Slot Count: 4 DIMM slots Max Memory (2DPC): Up to 192GB 5600MT/s ECC/non-ECC DDR5 UDIMM View Memory Options
Memory Voltage	1.1V

ON-BOARD DEVICES

SATA	SATA (6Gbps) via Intel W880; RAID 0/1/5/10 support
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Chipset	Intel W880
Network Connectivity	1 RJ45 1GbE with Intel I219-LM 1 RJ45 2.5GbE with Intel I226-LM View AOC Options

INPUT / OUTPUT

USB	2 USB 3.2 Gen1 Type-A ports (front) 3 USB 3.2 Gen2 Type-A ports (Rear) 1 USB 3.2 Gen2 Type-C port (Rear) 1 USB 3.2 Gen2 Type-C port (Front) 1 Thunderbolt 4 Type-C port (Rear)
Video	1 DisplayPort 2.1 port (Rear) 1 port(s) supporting 8K@60Hz as specified in HDMI 2.1 (Rear)
Audio	7.1 HD Audio
TPM	1 TPM Onboard TPM & TPM Header

SYSTEM BIOS

BIOS Type	AMI 256MB SPI Flash
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MANAGEMENT

Software	Supermicro SuperDoctor 5 (SD5) Super Diagnostics Offline (SDO)
Power configurations	ACPI 6.0 Power Management

SECURITY

Features	Cryptographically Signed Firmware Secure Boot
Hardware	Trusted Platform Module (TPM) 2.0

PC HEALTH MONITORING

Voltage	+1.0V PCH, +1.8V PCH, +12V, +3.3V, +5V, +5V standby, 1.05 (PCH), 3.3V standby, 5 (4-pin), CPU, CPU temperature, CPU thermal trip support, PCH temperature, System temperature, VBAT, VRM temperature
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CERTIFICATIONS

Operating Systems	RHEL 9.6, RHEL 10.0, Windows 11 View all OS Compatibility and Certification Matrix
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CHASSIS

Form Factor	Mid-Tower
Model	CSE-GS3A-000NBP

DIMENSIONS AND WEIGHT

Height	17.72" (450 mm)
Width	8.07" (205 mm)
Depth	18.5" (470 mm)
Package	24.29" (H) x 12.8" (W) x 23.23" (D)

Weight	Gross Weight: 19.2 lbs (8.7 kg) Net Weight: 14.1 lbs (6.4 kg)
Available Color	Black

FRONT PANEL

Buttons	Power On/Off
LED	HDD activity Power status LED
Port	Audio Jack-Combo microphone input / audio output port USB Type-A Ports-USB 3.2 Gen 1X1 ports (5G) USB Type-C-USB 3.2 Gen 2X2 port (20G)

EXPANSION SLOTS

PCI-Express (PCIe) Configuration	Default 2 PCIe 5.0 x8 (in x16) FHFL slots 1 PCIe 4.0 x4 (in x4) FHHL slot Option A 1 PCIe 5.0 x16 (in x16) FHFL slot 1 PCIe 4.0 x4 (in x4) FHHL slot View AOC Options
M.2	1 M.2 PCIe 5.0 x4 NVMe slot (M-key 2280(default)) 1 M.2 PCIe 4.0 x4 NVMe slot (M-key 22110(default)/2280)

DRIVE BAYS / STORAGE

Drive Bays Configuration	Default: Total 6 bays 2 internal fixed 3.5"/2.5" SATA drive bays 4 internal fixed 2.5" NVMe*/SATA drive bays (*NVMe support may require additional storage controller and/or cables, please see the optional parts list for details) View NVMe Options View Drive Options
M.2	1 M.2 PCIe 4.0 x4 NVMe slot (M-key 22110(default)/2280) 1 M.2 PCIe 5.0 x4 NVMe slot (M-key 2280(default)) View M.2 Options

SYSTEM COOLING

Fans	Up to 4x 120mm Fan(s)
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POWER SUPPLY

	1x 1000W 1x 1000W Gold Level (90%) power supply Dimension (WxHxL) 150 x 86 x 140 mm
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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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ENVIRONMENTAL / RECYCLING

Recycle	Return Server-End of Life Product
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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/sys-532aw-c/datasheet/manufacture

