

TECHNICAL DATASHEET

SUPERMICRO · RACKMOUNT SERVERS

Supermicro 2U Ultra Server AS-2024US-TRT

2U Ultra with 12 SATA bays and 4 PCIe 3.0 x16 slots

SKU AS-2024US-TRT

2U

Supermicro



FORM FACTOR

2U

MAX POWER (BASE)

549 W

HEAT OUTPUT

1,873 BTU/h

PRICE

On request

REQUEST A QUOTATION ONLINE
serverinvest.com/product/as-2024us-trt



01 Product overview

The Supermicro AS-2024US-TRT is a 2U Ultra 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.

2U Ultra with 12 SATA bays and 4 PCIe 3.0 x16 slots.

The chassis accepts up to 2 GPU accelerators for AI, rendering and HPC workloads.

ServerInvest configures every AS -2024US-TRT 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 12 bays 12 front hot-swap 3.5" SATA drive bays
- Up to 2 GPUs
- Power: 2x 1600W
- Networking: 2 RJ45 10GbE

KEY SPECIFICATIONS

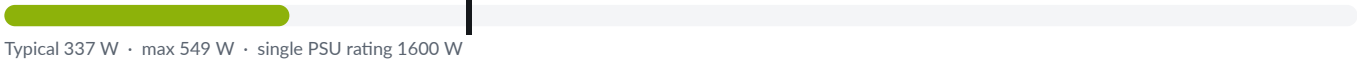
Form factor	2U
Processor	2× Dual Socket SP3 AMD EPYC 7002/7003 Series Processors
Memory	32 DIMM slots, up to 8 TB
Drive bays	40 (40 NVMe)
GPU	Up to 2 GPUs
Power supply	2× 1600 W
Typical power draw	1650 W
Networking	2 RJ45 10GbE
Dimensions (W×H×D)	437 × 89 mm



02 Power & thermal

Calculated for the base configuration

IDLE 119 W	TYPICAL 337 W	MAXIMUM 549 W	HEAT (MAX) 1,873 BTU/h	COOLING 0.5 kW	PSU LOAD 34%
----------------------	-------------------------	-------------------------	----------------------------------	--------------------------	------------------------



Typical 337 W · max 549 W · single PSU rating 1600 W

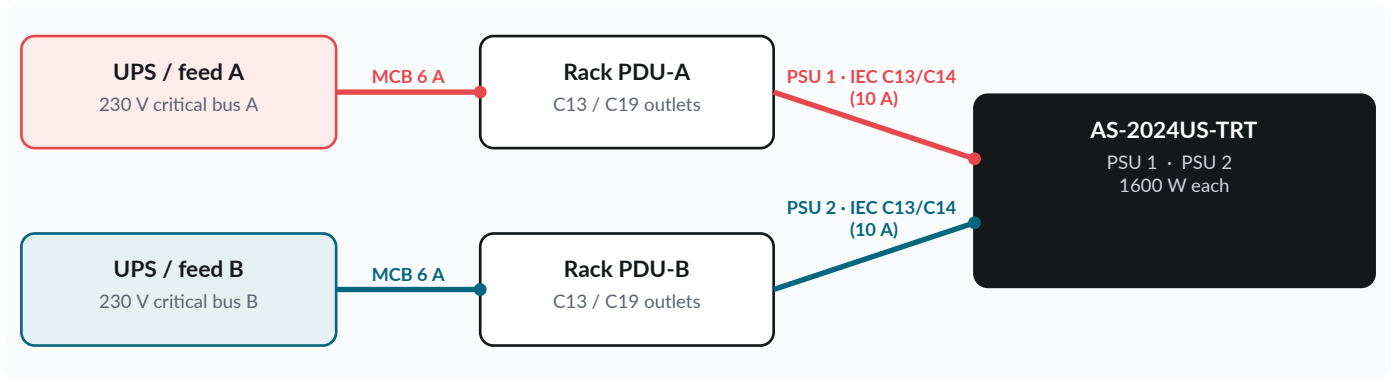
Annual IT energy (24/7)	2,379 kWh
Annual facility energy (PUE 1.5)	3,569 kWh
Annual energy cost	€476 IT · €714 incl. cooling (at 0.20 €/kWh)
CO ₂ emissions / year	0.93 t (grid factor 0.26 kg/kWh)
Power supplies	2× 1600 W redundant (N+1)

POWER BY COMPONENT	IDLE	TYPICAL	MAX
Chassis, motherboard, fans, BMC	50 W	77 W	110 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 C13/C14 (10 A) power cords.
- Maximum current per feed: 2.5 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: 549 W = 1,873 BTU/h (0.5 kW).

04 Full specifications

MOTHERBOARD

Super H12DSU-iN

PROCESSOR

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

GPU

Max GPU Count	Up to 2 double-width or 4 single-width GPUs
Supported GPU	NVIDIA PCIe: A10, A100, A16, A2, A40, RTX 4000, RTX 6000, RTX 8000, RTX A2000, RTX A4000, RTX A5000, RTX A6000, T4 AMD PCIe: Instinct MI100, Instinct MI210 View GPU Options

SYSTEM MEMORY

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

ON-BOARD DEVICES

SATA	SATA (6Gbps)
Network Connectivity	2 RJ45 10GbE View Network Card (AOC) 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	3 USB 3.0 Type-A ports (Rear)
Video	1 VGA port
TPM	1 TPM header

SYSTEM BIOS

BIOS Type	AMI 32MB SPI Flash EEPROM
BIOS Features	Plug and Play (PnP) USB Keyboard support ACPI 5.1 DMI 2.3 PCI 2.2 SMBIOS 3.1.1

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) OOB Management Package (SFT-OOB-LIC) SuperServer Automation Assistant (SAA) New! IPMICFG SMCIPMITool IPMIView
----------	---

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	CPU switching voltage regulator Monitors CPU Core Voltages, +12V, +3.3V, +5V, +5V standby, 3.3V standby, VBAT
Fan	Pulse Width Modulated (PWM) fan connectors Status monitor for speed control Up to 8-fan status tachometer monitoring Up to eight 4-pin fan headers
Other Features	Chassis Intrusion Detection Chassis Intrusion Header

Temperature	CPU thermal trip support I ² C Temperature Sensing Logic Monitoring for CPU and chassis environment Thermal control for 8x Fan connectors
-------------	---

CERTIFICATIONS

Operating Systems	Milan: ESXi 6.7 U3, ESXi 7.0 U1, Hypervisor 8.2, Oracle Linux 8.3, RHEL 8.3, RHEL 9.0, SLES 12 SP5, SLES 15 SP2, SLES 15 SP3, Windows Server 2019, Windows Server 2022 Rome: ESXi 6.7 U3, ESXi 7.0, Hypervisor 8.1, Oracle Linux 7.8, RHEL 8.2, SLES 12 SP5, SLES 15 SP2, SLES 15 SP3, Ubuntu 20.04 LTS, Windows Server 2016, Windows Server 2019 View all OS Compatibility and Certification Matrix
-------------------	--

CHASSIS

Form Factor	2U Rackmount
Model	CSE-829U2TS-R1K62P3-T

DIMENSIONS AND WEIGHT

Height	3.5" (89 mm)
Width	17.2" (437 mm)
Depth	28.46" (723 mm)
Package	10.28" (H) x 24.65" (W) x 45.39" (D)
Weight	Gross Weight: 72 lbs (32.7 kg) Net Weight: 36 lbs (16.4 kg)
Available Color	N/A

EXPANSION SLOTS

PCI-Express (PCIe) Configuration	Default 2 PCIe 4.0 x16 FH/10.5"L slots 1 PCIe 4.0 x16 LP slot 1 PCIe 4.0 x8 LP slot 1 PCIe 4.0 x16 FH, 9.5"L slot 1 PCIe 4.0 x8 (in x16) FH, 9.5"L slot View AOC Options
----------------------------------	--

DRIVE BAYS / STORAGE

Drive Bays Configuration	Default: Total 12 bays 12 front hot-swap 3.5" SATA drive bays Option A: Total 12 bays 8 front hot-swap 3.5" SATA drive bays 4 front hot-swap 3.5"/2.5" NVMe* drive bays Option B: Total 12 bays 12 front hot-swap 3.5" SAS* drive bays (*NVMe/SAS support may require additional storage controller and/or cables, please see the optional parts list for details) View NVMe Options View Drive Options
--------------------------	---

SYSTEM COOLING

Fans	Up to 4 heavy duty fans with optimal fan speed control
------	--

POWER SUPPLY

2x 1600W
2x 1600W Redundant (1 + 1) Titanium Level (96%) power supplies
Dimension (WxHxL)
73.5 x 40 x 203 mm

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 70°C (-40°F to 158°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-2024us-trt/datasheet/manufacturerr

