

TECHNICAL DATASHEET

SUPERMICRO · RACKMOUNT SERVERS

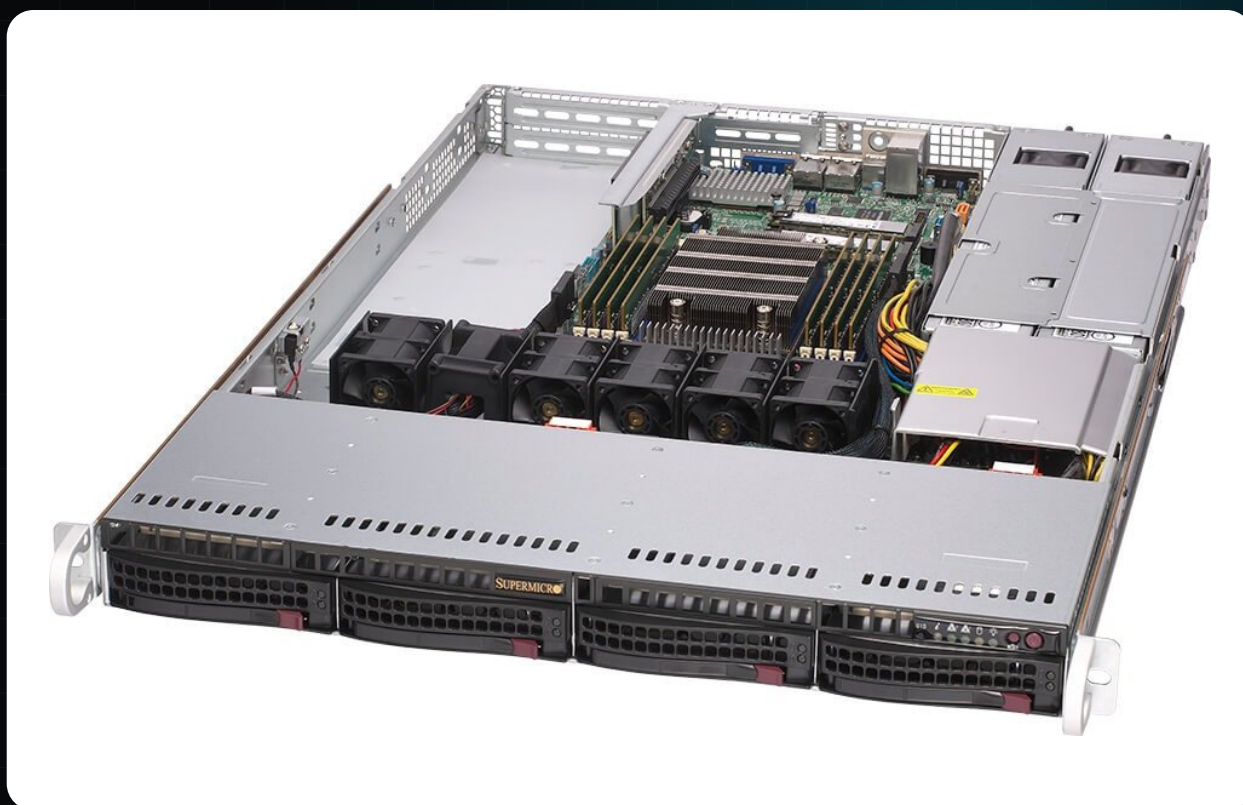
Supermicro 1U WIO Server AS-1014S-WTRT

1U WIO with 4 hot-swap 3.5" SATA bays and dual 10GbE

SKU AS-1014S-WTRT

1U

Supermicro



FORM FACTOR

1U

MAX POWER (BASE)

306 W

HEAT OUTPUT

1,044 BTU/h

PRICE

On request

REQUEST A QUOTATION ONLINE

serverinvest.com/product/as-1014s-wtrt

01 Product overview

The Supermicro AS-1014S-WTRT is a 1U WIO Server built on Single Socket SP3 AMD EPYC 7002/7003 Series Processors with up to 2 TB of memory in 8 DIMM slots.

1U WIO with 4 hot-swap 3.5" SATA bays and dual 10GbE.

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

ServerInvest configures every AS -1014S-WTRT 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

- Single Socket SP3 AMD EPYC 7002/7003 Series Processors
- Up to 2 TB memory · 8 DIMM slots
- Total 4 bays 4 front hot-swap 3.5" SATA drive bays
- Up to 2 GPUs
- Power: 2x 500W
- Networking: 2 RJ45 10GbE with Broadcom BCM57416

KEY SPECIFICATIONS

Form factor	1U
Processor	Single Socket SP3 AMD EPYC 7002/7003 Series Processors
Memory	8 DIMM slots, up to 2 TB
Drive bays	8 (8 NVMe)
GPU	Up to 2 GPUs
Power supply	2× 500 W
Typical power draw	1350 W
Networking	2 RJ45 10GbE with Broadcom BCM57416
Dimensions (W×H×D)	437 × 44 mm



02 Power & thermal

Calculated for the base configuration

IDLE	TYPICAL	MAXIMUM	HEAT (MAX)	COOLING	PSU LOAD
73 W	190 W	306 W	1,044 BTU/h	0.3 kW	61%

Typical 190 W · max 306 W · single PSU rating 500 W

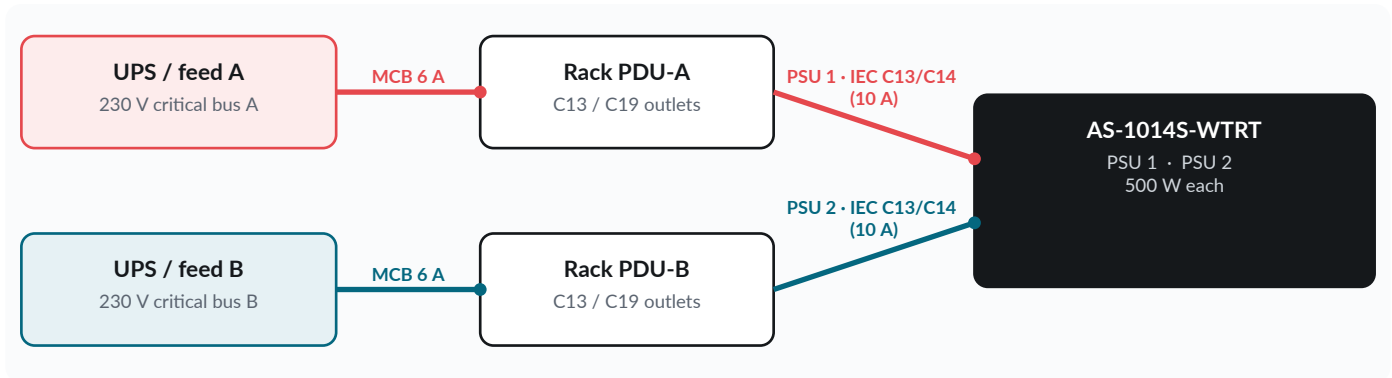
Annual IT energy (24/7)	1,357 kWh
Annual facility energy (PUE 1.5)	2,036 kWh
Annual energy cost	€271 IT · €407 incl. cooling (at 0.20 €/kWh)
CO ₂ emissions / year	0.53 t (grid factor 0.26 kg/kWh)
Power supplies	2× 500 W redundant (N+1)

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 H12SSW-NT

PROCESSOR

CPU	Single 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 2 single-width GPUs
Supported GPU	NVIDIA PCIe: A2, T4

SYSTEM MEMORY

Memory	Slot Count: 8 DIMM slots Max Memory (1DPC): Up to 2TB 3200MT/s ECC DDR4 RDIMM/LRDIMM View Memory Options
Memory Voltage	1.2V

ON-BOARD DEVICES

SATA	SATA (6Gbps)
Network Connectivity	2 RJ45 10GbE with Broadcom BCM57416 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 2 RJ45 1 GBASE-T LAN ports
USB	4 USB 3.0 ports (rear) 1 USB 3.0 Type-A port
Video	1 VGA port
DOM	2 Super DOM (Disk on Module) ports

SYSTEM BIOS

BIOS Type	AMI 32MB 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! IPMICFG SMCIPMITool IPMIView
Power configurations	ACPI/APM Power Management

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: Hypervisor 8.2, Oracle Linux 8.3, RHEL 8.3, RHEL 9.0, Windows Server 2019, Windows Server 2022 Rome: ESXi 6.7 U3, ESXi 7.0, Hypervisor 8.1, Oracle Linux 7.6, RHEL 8.0, Ubuntu 18.04 LTS, Windows Server 2016, Windows Server 2019 View all OS Compatibility and Certification Matrix
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CHASSIS

Form Factor	1U Rackmount
Model	CSE-815TS-R504WBP4

DIMENSIONS AND WEIGHT

Height	1.7" (43 mm)
Width	17.2" (437 mm)
Depth	25.6" (650 mm)
Package	8.5" (H) x 23.5" (W) x 33.7" (D)
Weight	Gross Weight: 46 lbs (20.87 kg) Net Weight: 22 lbs (9.98 kg)
Available Color	Black

FRONT PANEL

Buttons	Power On/Off UID button
LED	HDD activity Network activity Power status Universal Information (UID)

EXPANSION SLOTS

PCI-Express (PCIe) Configuration	Default 2 PCIe 4.0 x16 FHFL slots 1 PCIe 4.0 x16 LP slot View AOC Options
M.2	2 M.2 PCIe 3.0 x1 NVMe/SATA slots (M-key)

DRIVE BAYS / STORAGE

Drive Bays Configuration	Default: Total 4 bays 4 front hot-swap 3.5" SATA drive bays Option A: Total 4 bays 4 front hot-swap 3.5"/2.5" PCIe 3.0 NVMe* 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
Peripheral Bays	1 slim DVD bay (optional)

SYSTEM COOLING

Fans	Up to 2 AOC cooling Fan(s) Up to 4 Counter-rotating PWM 4cm Fan(s)
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POWER SUPPLY

2x 500W
2x 500W Redundant (1 + 1) Platinum Level (94%) power supplies
Dimension (WxHxL)
54.5 x 40.25 x 320 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 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-1014s-wtrt/datasheet/manufactur

