

TECHNICAL DATASHEET

SUPERMICRO • MULTI-NODE & TWIN

Supermicro 2U TwinPro Server AS-2014TP-HTR

2U 4-node TwinPro with 3 3.5" SATA drives per node

SKU AS-2014TP-HTR

2U

Supermicro



FORM FACTOR

2U

MAX POWER (BASE)

333 W

HEAT OUTPUT

1,136 BTU/h

PRICE

On request

REQUEST A QUOTATION ONLINE

serverinvest.com/product/as-2014tp-htr

01 **Product overview**

The Supermicro AS-2014TP-HTR is a 2U TwinPro Server built on Single Socket SP3 AMD EPYC 7002/7003 Series Processors with up to 2 TB of memory in 8 DIMM slots.

2U 4-node TwinPro with 3 3.5" SATA drives per node.

ServerInvest configures every AS -2014TP-HTR 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 3 bays 3 front hot-swap 3.5" SATA drive bays
- Power: 2x 2000W
- Networking: Ethernet

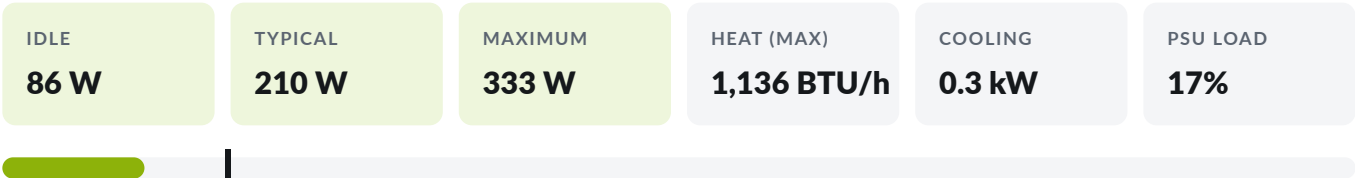
KEY SPECIFICATIONS

Form factor	2U
Processor	Single Socket SP3 AMD EPYC 7002/7003 Series Processors
Memory	8 DIMM slots, up to 2 TB
Drive bays	3
Power supply	2× 2000 W
Typical power draw	450 W
Networking	Ethernet
Dimensions (W×H×D)	437 × 89 mm



02 **Power & thermal**

Calculated for the base configuration



Typical 210 W · max 333 W · single PSU rating 2000 W

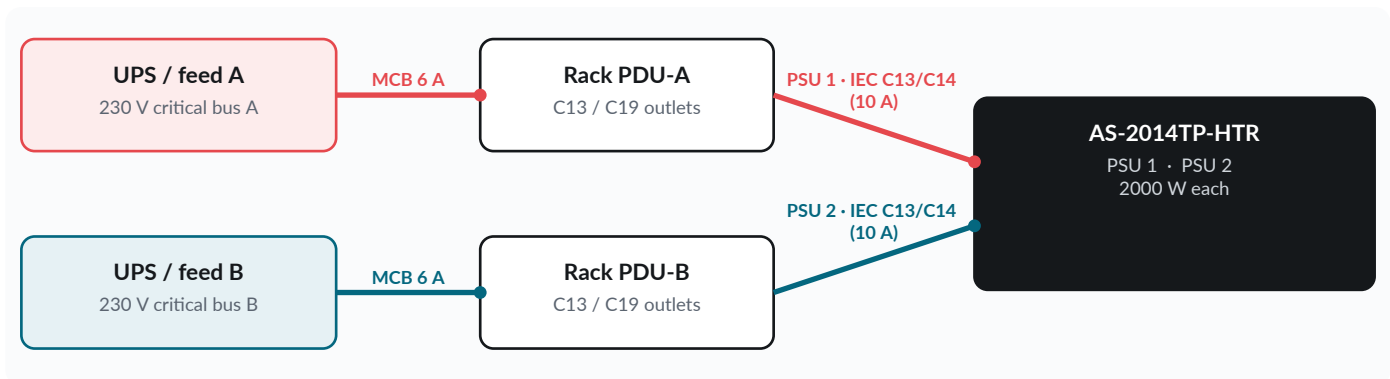
Annual IT energy (24/7)	1,514 kWh
Annual facility energy (PUE 1.5)	2,271 kWh
Annual energy cost	€303 IT · €454 incl. cooling (at 0.20 €/kWh)
CO ₂ emissions / year	0.59 t (grid factor 0.26 kg/kWh)
Power supplies	2× 2000 W redundant (N+1)

POWER BY COMPONENT	IDLE	TYPICAL	MAX
Chassis, motherboard, fans, BMC	50 W	77 W	110 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: 1.5 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: 333 W = 1,136 BTU/h (0.3 kW).

04 Full specifications

MOTHERBOARD

Super H12SST-PS

PROCESSOR (PER NODE)

CPU	Single Socket SP3 AMD EPYC 7002/7003 Series Processors
Core Count	Up to 64C/128T
Note	Supports up to 280W TDP CPUs (Air Cooled)

SYSTEM MEMORY (PER NODE)

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

ON-BOARD DEVICES (PER NODE)

Network Connectivity	Ethernet InfiniBand View AIOM 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 (PER NODE)

LAN	1 RJ45 1 GbE Dedicated BMC LAN port
USB	2 USB 3.0 ports (rear) 1 USB 2.0 Type-A port

Video	1 VGA port
DOM	1 Super DOM (Disk on Module) port
TPM	1 TPM header

SYSTEM BIOS

BIOS Type	AMI 128MB SPI Flash ROM
-----------	-------------------------

MANAGEMENT

Software	Supermicro Server Manager (SSM) Supermicro Update Manager (SUM) Supermicro SuperDoctor 5 (SD5) KVM with dedicated LAN IPMI 2.0 Watch Dog
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

CERTIFICATIONS

Operating Systems	Milan: Windows Server 2019, Windows Server 2022 Rome: ESXi 6.7 U3, ESXi 7.0, Hypervisor 8.1, Oracle Linux 7.6, RHEL 8.1, SLES 12 SP5, SLES 15 SP1, Ubuntu 18.04 LTS, Windows Server 2019 View all OS Compatibility and Certification Matrix
-------------------	---

CHASSIS

Form Factor	2U Rackmount
Model	CSE-827HQ+-R2K04BP2

DIMENSIONS AND WEIGHT

Height	3.47" (88 mm)
Width	17.25" (438 mm)
Depth	30.5" (774 mm)
Package	10" (H) x 24.5" (W) x 45" (D)
Weight	Gross Weight: 85 lbs (38.6 kg) Net Weight: 54.5 lbs (24.7 kg)
Available Color	Black front & silver body

EXPANSION SLOTS (PER NODE)

PCI-Express (PCIe) Configuration	Default 2 PCIe 4.0 x16 LP slots View AOC Options
----------------------------------	--

M.2	4 M.2 PCIe 4.0 x4 SATA slots (M-key 2242/2260/2280/22110)
-----	---

DRIVE BAYS / STORAGE (PER NODE)

Drive Bays Configuration	Default: Total 3 bays 3 front hot-swap 3.5" SATA drive bays View Drive Options
--------------------------	---

M.2	4 M.2 PCIe 4.0 x4 SATA slots (M-key 2242/2260/2280/22110) View M.2 Options
-----	---

SYSTEM COOLING

Fans	Up to 4x 8cm heavy duty fans with optimal fan speed control (1 fans per node)
------	---

POWER SUPPLY

2x 2000W
2x 2000W Redundant (1 + 1) Titanium Level (96%) power supplies
Dimension (WxHxL)
76 x 40 x 336 mm

OPERATING ENVIRONMENT

RoHS	RoHS Compliant
------	----------------

Environmental Spec.	Operating Temperature: 10°C to 30°C (50°F to 86°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-2014tp-htr/datasheet/manufacturerr

