

TECHNICAL DATASHEET

SUPERMICRO · EDGE & EMBEDDED

Supermicro 2U IoT Server SYS-222HE-TN

X14 DP 2U short-depth rear I/O system with 6 hot-swap 2.5" NVMe/SAS/SATA bays and 4 PCIe 5.0 x16 slots + 2 PCIe 5.0 x16 AIOM slots

SKU SYS-222HE-TN

2U

LGA4710

Supermicro



FORM FACTOR

2U

MAX POWER (BASE)

591 W

HEAT OUTPUT

2,016 BTU/h

PRICE

from €8,500

CONFIGURE & QUOTE ONLINE

serverinvest.com/product/sys-222he-tn

01 Product overview

The Supermicro SYS-222HE-TN is a 2U IoT Server built on dual Intel Xeon 6 processors with up to 8 TB of memory in 32 DIMM slots.

X14 DP 2U short-depth rear I/O system with 6 hot-swap 2.5" NVMe/SAS/SATA bays and 4 PCIe 5.0 x16 slots + 2 PCIe 5.0 x16 AIOM slots.

The chassis accepts up to 3 GPU accelerators for AI, rendering and HPC workloads.

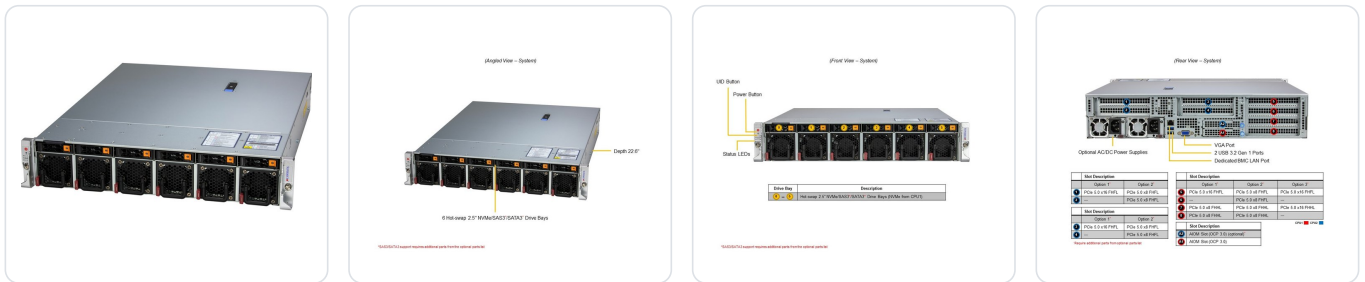
ServerInvest configures every SYS-222HE-TN to order, updates BIOS and BMC firmware, installs your operating system on request and runs a 48-hour burn-in test before delivery. Every system includes a 3-year warranty.

HIGHLIGHTS

- Dual Intel Xeon 6
- Up to 8 TB memory · 32 DIMM slots
- Total 6 bays 6 front hot-swap 2.5" NVMe*/SAS*/SATA* drive bays
- Up to 3 GPUs
- Power: 2x 2000W
- Networking: Via AIOM

KEY SPECIFICATIONS

Form factor	2U
Processor	2× Intel Xeon 6
Socket	LGA4710
Memory	32 DIMM slots, up to 8 TB
Memory type	DDR5-6400 ECC RDIMM
Drive bays	30 (30 NVMe)
GPU	Up to 3 GPUs
Power supply	2× 2000 W
Typical power draw	2100 W
Networking	Via AIOM
Dimensions (W×H×D)	437 × 89 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 2U IoT Server SYS-222HE-TN	1
Processor	Intel Xeon 6710E Processor 64 Cores (96M Cache, 2.40Ghz) 205W	2
Memory	16GB 6400MT/s DDR5 ECC Registered DIMM Module	4
Warranty & support	3-year return-to-base warranty (included)	1

Base configuration from

€8,500
excl. VAT

03 Power & thermal

Calculated for the base configuration

IDLE	TYPICAL	MAXIMUM	HEAT (MAX)	COOLING	PSU LOAD
132 W	386 W	591 W	2,016 BTU/h	0.6 kW	30%

Typical 386 W · max 591 W · single PSU rating 2000 W

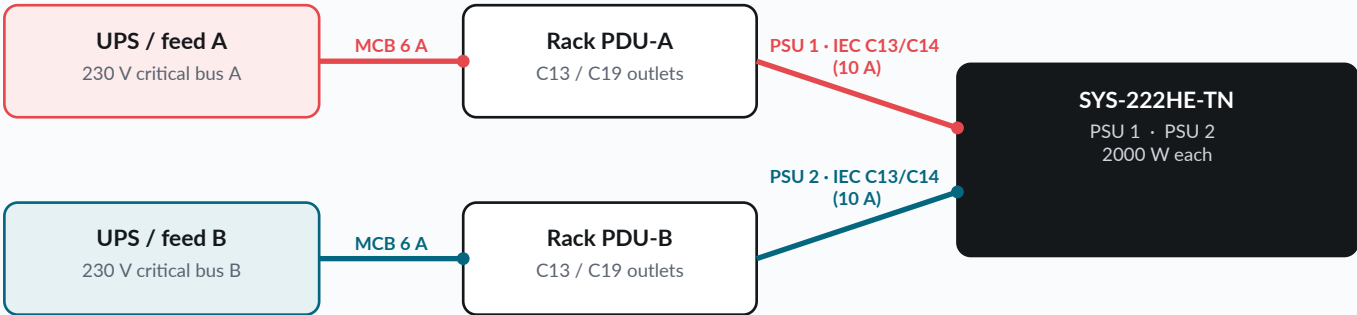
Annual IT energy (24/7)	2,714 kWh
Annual facility energy (PUE 1.5)	4,071 kWh
Annual energy cost	€543 IT · €814 incl. cooling (at 0.20 €/kWh)
CO ₂ emissions / year	1.06 t (grid factor 0.26 kg/kWh)
Power supplies	2× 2000 W redundant (N+1)

POWER BY COMPONENT	IDLE	TYPICAL	MAX
Chassis, motherboard, fans, BMC	50 W	77 W	110 W
2× CPU — Intel Xeon 6710E Processor 64 Cores	62 W	266 W	410 W
4× Memory 16 GB DIMM	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.

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 C13/C14 (10 A) power cords.
- Maximum current per feed: 2.7 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: 591 W = 2,016 BTU/h (0.6 kW).

05 Full specifications

MOTHERBOARD	Super X14DBM-SP
PROCESSOR	CPU Dual Socket E2 (LGA-4710) Intel Xeon 6700/6500 series processors with P-cores or 6700 series processors with E-cores

Core Count	P-cores: Up to 86C/172T; Up to 336MB Cache per CPU E-cores: Up to 144C/144T; Up to 108MB Cache per CPU
Note	Supports up to 350W TDP CPUs (Air Cooled) Supports up to 350W TDP CPUs (Liquid Cooled)

GPU

Max GPU Count	Up to 3 double-width or 4 single-width GPUs
Supported GPU	NVIDIA PCIe: L4, NVIDIA RTX PRO 4000 Blackwell, NVIDIA RTX PRO 4500 Blackwell, NVIDIA RTX PRO 5000 Blackwell, NVIDIA RTX PRO 6000 Blackwell Max-Q Workstation Edition View GPU Options
CPU-GPU Interconnect	PCIe 5.0 x16 CPU-to-GPU Interconnect
GPU-GPU Interconnect	PCIe

SYSTEM MEMORY

Memory	Slot Count: 32 DIMM slots Max Memory (1DPC): Up to 4TB 6400MT/s ECC DDR5 RDIMM Max Memory (1DPC): Up to 4TB 8800MT/s ECC DDR5 MRDIMM (P-core only) Max Memory (2DPC): Up to 8TB 6000MT/s ECC DDR5 RDIMM View Memory Options
Memory Voltage	1.1V

ON-BOARD DEVICES

NVMe	NVMe; RAID 0/1/5/10 support(Intel VROC RAID key required) View NVMe Options
Network Connectivity	Via AIOM View AIOM Options View AOC Options

INPUT / OUTPUT

LAN	1 RJ45 1 GbE Dedicated BMC LAN port
USB	2 USB 3.0 ports (rear)
Video	1 VGA port

SYSTEM BIOS

BIOS Type	AMI 64MB SPI Flash
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MANAGEMENT

Software	SuperCloud Composer (SCC) Supermicro Server Manager (SSM) 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	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	Oracle Linux 9.4, RHEL 9.4, RHEL 10.0, Windows Server 2022, Windows Server 2025 View all OS Compatibility and Certification Matrix
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CHASSIS

Form Factor	2U Rackmount
Model	CSE-HE211-R000NFP

DIMENSIONS AND WEIGHT

Height	3.5" (88.9 mm)
Width	17.2" (436.88 mm)
Depth	22.6" (574 mm)
Package	9.7" (H) x 23.5" (W) x 36.9" (D)
Weight	Gross Weight: 47.4 lbs (21.5 kg) Net Weight: 34.4 lbs (15.6 kg)
Available Color	Silver

FRONT PANEL

Buttons	Power On/Off Power On/Off UID button
LED	HDD activity LED LAN1 activity LAN2 activity Power Fail Power status LED System information

EXPANSION SLOTS

PCI-Express (PCIe) Configuration	Option A* 3 PCIe 5.0 x16 (in x16) FH/10.5"L double-width slots 1 PCIe 5.0 x16 (in x16) FHHL slot 2 PCIe 5.0 x16 AIOM slots (OCP 3.0 compatible) Option B* 6 PCIe 5.0 x8 (in x16) FH/10.5"L slots 2 PCIe 5.0 x8 (in x16) FHHL slots 2 PCIe 5.0 x16 AIOM slots (OCP 3.0 compatible) (*Requires additional parts, please see the optional parts list for details. For more details on PCIe slot configuration options, please refer to the system callout images above.) View AOC Options
CXL Support	Up to 4 CXL 2.0 x16/x8 devices
M.2	2 M.2 PCIe 5.0 x2 NVMe slots (M-key 2280/22110)

DRIVE BAYS / STORAGE

Drive Bays Configuration	Default: Total 6 bays 6 front hot-swap 2.5" NVMe*/SAS*/SATA* drive bays Option A: Total 8 bays 6 front hot-swap 2.5" NVMe*/SAS*/SATA* drive bays 2 rear hot-swap 2.5" NVMe* drive bays Option B: Total 10 bays 6 front hot-swap 2.5" NVMe*/SAS*/SATA* drive bays 4 rear hot-swap 2.5" NVMe* drive bays (*NVMe/SAS/SATA support may require additional storage controller and/or cables, please see the optional parts list for details) View NVMe Options
M.2	2 M.2 PCIe 5.0 x2 NVMe slots (M-key 2280/22110/25110) View M.2 Options

SYSTEM COOLING

Fans	Up to 6 counter-rotating 60x60x56mm Fan(s)
Air Shroud	4 Air Shrouds
Liquid Cooling	Direct to Chip (D2C) Cold Plate (optional)

POWER SUPPLY

2x 2000W
 2x 1300W
 2x 1200W
 2x 2000W
 2x 2000W Redundant (1 + 1) Titanium Level (96%) power supplies
 Dimension (WxHxL)
 73.5 x 40 x 203 mm

OPERATING ENVIRONMENT

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)
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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/sys-222he-tn/datasheet/manufacture

