

# Hyper SuperServer SYS-221H-TNR

2U Hyper with 8 hot-swap 2.5" NVMe/SAS/SATA bays and 4 PCIe 5.0 x16 slots + up to 2 PCIe 5.0 x16 AIOM slots



More details here

## Key Applications

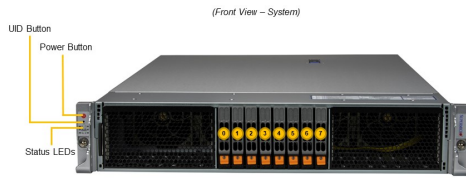
Virtualization, Software-defined Storage, AI Inference and Machine Learning, Cloud Computing, Enterprise Server,

## Key Features

- Dual Socket E (LGA-4677) 5th/4th Gen Intel® Xeon® Scalable processors;
- 32 DIMM slots supporting up to 8TB of memory; RDIMMs up to DDR5-5600;
- Optional PCIe slot configurations up to 8 PCIe 5.0 x8 or 4 PCIe 5.0 x16 slots with support for up to 4 double-width or 8 x8 single-width GPU/Accelerator cards;
- Flexible networking options with up to 2 AIOM networking slots (OCP NIC 3.0 compatible);
- 8x 2.5" hot-swap NVMe/SATA/SAS drive bays; Optional 8x 2.5" hot-swap NVMe/SAS/SATA drive bays; 2x internal M.2 NVMe/SATA drive slots; Optional RAID support via storage add-on card;
- 4 heavy duty hot-swap fans with optimal fan speed control;



<b>Form Factor</b>	2U Rackmount Enclosure: 437 x 88.9 x 760mm (17.2" x 3.5" x 29.9") Package: 605 x 263 x 1107mm (23.8" x 10.4" x 43.6")
<b>Processor</b>	Dual Socket E (LGA-4677) 5th Gen Intel® Xeon®/4th Gen Intel® Xeon® Scalable processors Supports Intel Xeon CPU Max Series with high bandwidth memory (HBM) Up to 64C/128T; Up to 320MB Cache per CPU
<b>GPU</b>	Max GPU Count: Up to 4 double-width or 8 single-width GPUs Supported GPU: NVIDIA PCIe: H100, H100 NVL, A100, A16, A40, L4, L40, L40S, RTX A4000, RTX A6000
<b>System Memory</b>	Slot Count: 32 DIMM slots Max Memory (1DPC): Up to 4TB 5600MT/s ECC DDR5 RDIMM Max Memory (2DPC): Up to 8TB 4400MT/s ECC DDR5 RDIMM
<b>Drive Bays Configuration</b>	Default: Total 8 bays <ul style="list-style-type: none"> <li>• 8 front hot-swap 2.5" NVMe*/SAS*/SATA* drive bays</li> </ul> Option A: Total 16 bays <ul style="list-style-type: none"> <li>• 16 front hot-swap 2.5" NVMe*/SAS*/SATA* drive bays</li> </ul> (*NVMe/SAS/SATA support may require additional storage controller and/or cables, please see the optional parts list for details) M.2: 2 M.2 NVMe/SATA slots (M-key 2280/22110)
<b>Expansion Slots</b>	PCI-Express (PCIe) Configuration: Option A* <ul style="list-style-type: none"> <li>• 4 PCIe 5.0 x16 FH/10.5"L double-width slots</li> <li>• 2 PCIe 5.0 x16 AIOM slots (OCP 3.0 compatible)</li> </ul> Option B* <ul style="list-style-type: none"> <li>• 8 PCIe 5.0 x8 (in x16) FH/10.5"L slots</li> <li>• 2 PCIe 5.0 x16 AIOM slots (OCP 3.0 compatible)</li> </ul> CXL Support: Up to 4 CXL 1.1 x16/x8 devices M.2: 2 M.2 NVMe/SATA slots (B+M-key 2280/22110)
<b>On-Board Devices</b>	SATA: SATA (6Gbps) ; RAID 0/1/5/10 support NVMe: NVMe; RAID 0/1/5/10 support(Intel® VROC RAID key required) Network Connectivity: Via AIOM
<b>Input / Output</b>	LAN: 1 RJ45 1 GbE Dedicated BMC LAN port USB: 2 USB 2.0 ports(rear) 2 USB 3.0 ports(Header) Video: 1 VGA port



Slot	Description
0 - 4	2.5" Hot-swap INWMe/SAS3/SATA3 Drive Bays (INWMe from CPU2) <sup>1</sup>

<sup>1</sup>INWMe, SAS3, or SATA3 support requires additional parts in optional parts list



Slot Description	Option 1	Option 2	Option 3
Option 1	PCIe 5.0 x8 (in x16)	PCIe 5.0 x16	PCIe 5.0 x16
Option 2	PCIe 5.0 x8 (in x16)	---	---
Option 3	PCIe 5.0 x8 (in x16)	PCIe 5.0 x8 (in x16)	PCIe 5.0 x16
Option 4	PCIe 5.0 x8 (in x16)	PCIe 5.0 x8 (in x16)	---

Slot Description	Option 1	Option 2
Option 1	PCIe 5.0 x8 (in x16)	PCIe 5.0 x16
Option 2	PCIe 5.0 x8 (in x16)	---

Slot Description	
Option 1	AICM / OCP 3.0 M.2 Slot
Option 2	AICM / OCP 3.0 M.2 Slot <sup>2</sup> (optional)

<sup>1</sup> Requires additional parts from the optional parts list  
<sup>2</sup> Not available in INWMe drive bay configurations



System Cooling	Fans: Up to 4x 8cm heavy duty fans with optimal fan speed control Air Shroud: 2 Air Shrouds Liquid Cooling: Direct to Chip (D2C) Cold Plate (optional)
Power Supply	2x 1200W Redundant Titanium Level (96%) Hot-plug power supplies
System BIOS	BIOS Type: AMI 64MB SPI Flash
Management	SuperCloud Composer <sup>®</sup> ; Supermicro Server Manager (SSM); Supermicro Update Manager (SUM); Supermicro SuperDoctor <sup>®</sup> 5 (SD5); Super Diagnostics Offline (SDO); Supermicro Thin-Agent Service (TAS); SuperServer Automation Assistant (SAA) New!
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
Dimensions and Weight	Weight: Gross Weight: 66 lbs (30 kg) Net Weight: 40 lbs (18.2 kg) Available Color: N/A
Operating Environment	Name: A2 Operating Temperature: 10°C to 35°C (50°F to 95°F) Non-operating Temperature: -30°C to 60°C (-40°F to 140°F) Operating Relative Humidity: 8% to 80% (max 21° DP; non-condensing) Non-operating Relative Humidity: 8% to 90% (max 38° DP; non-condensing)
Motherboard	<a href="#">Super X13DEM</a>
Chassis	CSE-HS219-R1K24P