## Hyper SuperServer SYS-221H-TN24R

## **Key Applications**

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

## **Key Features**

- Dual Socket E (LGA-4677) 4th Gen Intel® Xeon® Scalable processors;
- 32 DIMM slots supporting up to 8TB of memory; RDIMMs up to DDR5-4800;
- Optional PCIe slot configurations up to 8 PCIe 5.0 x8 or 4 PCIe 5.0 x16 slots with support for double-width GPU/Accelerator cards;
- Flexible networking options with up to 2 AIOM networking slots (OCP NIC 3.0 compatible);
- 24x 2.5" hot-swap NVMe/SATA/SAS 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;



Form Factor	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")
Processor	4th Gen Intel® Xeon® Scalable processors
	Dual Socket LGA-4677 (Socket E) supported
	4 UPI Intel Xeon CPU Max Series with high bandwidth memory (HBM)
	(Supports up to 350W TDP CPUs (Aircooled), Supports up to 350W TDP CPUs (Liquid Cooled))
System Memory	32 DIMM slots
	Up to 8TB ECC RDIMM, DDR5-4800MHz
Drive Bays	24x 2.5" hot-swap NVMe/SATA/SAS drive bays;
	Optional RAID support via RAID Controller AOC
Expansion Slots	4 (Optional) PCIe 5.0 x16 or x8 FH, 10.5"L slot(s)
	4 (Optional) PCIe 5.0 x8 FH, 10.5"L slot(s)
	Note: For 16 NVMe configurations, PCIe slots 1,2 and AIOM slot A2 cannot be used.
	For 24 NVMe configurations, PCIe slots 1,2,5,6 and AIOM slot A2 cannot be used.
On-Board Devices	Chipset: Intel® C741
	Network Connectivity: 2x 1GbE BaseT with Intel® i350-AM2 (optional)
	4x 1GbE BaseT or 4x 1GbE SFP with Intel® i350-AM4 (optional)
	2x 10GbE BaseT with Intel® X550-AT2 (optional)
	2x 10GbE SFP+ with Intel® X710-BM2 (optional)
	4x 10GbE SFP+ with Intel® XL710-BM1 (optional)
	4x 10GbE RJ45/SFP+ with Intel® X710-TM4 (optional)
	2x 25GbE SFP28 with Broadcom® BCM57414 (optional)
	4x 25GbE RJ45/SFP28 with Mellanox® CX-4 Lx EN Intel® X550-AT2 (optional)
	2x 100GbE QSFP28 with Broadcom® BCM57508 (optional)
	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 Dedicated BMC LAN port
	USB: 2 USB 2.0 port(s) (2 rear)
	Video: 1 VGA port(s)





System Cooling	4x 8cm heavy duty fan(s) Liquid Cooling: Direct to Chip (D2C) Cold Plate (optional)
Power Supply	1600W 1U redundant power supply Dimension (W x H x L): 73.5 x 40 x 265 mm Output Type: 25 Pairs Gold Finger Connector
System BIOS	BIOS Type: AMI 256MB SPI Flash
Management	SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; IPMI 2.0; Redfish API
PC Health Monitoring	CPU: Monitors for CPU Cores, Chipset Voltages, Memory FAN: Fans with tachometer monitoring Status monitor for speed control Pulse Width Modulated (PWM) fan connectors Temperature: Monitoring for CPU and chassis environment Thermal Control for fan connectors
Dimensions and Weight	Height: 3.5" (88.9 mm) Width: 17.2" (437 mm) Depth: 29.9" (760 mm) Gross Weight: 66 lbs (30 kg) Net Weight: 40 lbs (18.2 kg) Packaging: 10.4" (H) x 23.8" (W) x 43.6" (D) Available Color: N/A
Operating Environment	Operating Temperature: 10°C ~ 35°C (50°F ~ 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)
Motherboard	Super X13DEM
Chassis	CSE-HS219-R1K63P