

# Hyper SuperServer SYS-621H-TN12R

2U Hyper with 12 hot-swap 3.5" 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 double-width GPU/Accelerator cards;
- Flexible networking options with up to 2 AIOM networking slots (OCP NIC 3.0 compatible);
- 4 heavy duty hot-swap fans with optimal fan speed control;



### Form Factor

2U Rackmount  
 Enclosure: 437 x 88.9 x 803mm (17.2" x 3.5" x 31.6")  
 Package: 605 x 263 x 1107mm (23.8" x 10.4" x 43.6")

### Processor

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

### GPU

Max GPU Count: Up to 4 double-width or 8 single-width GPUs  
 Supported GPU: NVIDIA PCIe: H100, L40, L40S, L4, A40, A16, A100

### System Memory

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

### Drive Bays Configuration

Default: Total 12 bays  
 • 12 front hot-swap 3.5" NVMe\*/SAS\*/SATA\* drive bays  
 (\*NVMe/SAS/SATA support may require additional storage controller and/or cables)  
 M.2: 2 M.2 NVMe/SATA slots (M-key 2280/22110)

### Expansion Slots

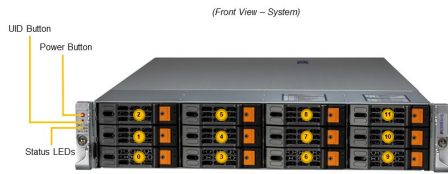
PCI-Express (PCIe) Configuration: Option A\*  
 • 4 PCIe 5.0 x16 (in x16) FH/10.5"L double-width slots  
 • 2 PCIe 5.0 x16 AIOM slots (OCP 3.0 compatible)  
 Option B\*  
 • 8 PCIe 5.0 x8 (in x16) HH/10.5"L slots  
 • 2 PCIe 5.0 x16 AIOM slots (OCP 3.0 compatible)  
 M.2: 2 M.2 NVMe/SATA slots (B+M-key 2280/22110)

### On-Board Devices

SATA: SATA (6Gbps) ; RAID 0/1/5/10 support  
 NVMe: NVMe; RAID 0/1/5/10 support(Intel® VROC RAID key required)  
 Chipset: Intel® C741  
 Network Connectivity: Via AIOM

### Input / Output

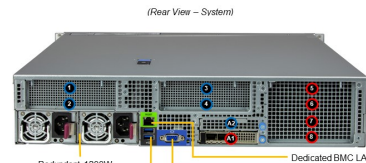
LAN: 1 RJ45 1 GbE Dedicated BMC LAN port  
 USB: 2 USB 2.0 ports(rear)  
       2 USB 3.0 ports(Header)  
 Video: 1 VGA port



(Front View – System)

Slot	Description
1	3.5" or 2.5" Hot-Swap NVMe/SAS/SATA3 Drive Bays (NVMe from CPU1)
2	3.5" or 2.5" Hot-Swap NVMe/SAS/SATA3 Drive Bays (NVMe from CPU2)

\*NVMe, SAS3, or SATA3 support requires additional parts from the optional parts list



(Rear View – System)

Slot Description			Slot Description		
Option 1	Option 2	Option 3	Option 1	Option 2	Option 3
PCIe 5.0 x8 (m x16)	PCIe 5.0 x16	2x Hot-Swap 2.5" NVMe Drive Bays (CPU 2)	PCIe 5.0 x8 (m x16)	PCIe 5.0 x16	PCIe 5.0 x16
PCIe 5.0 x8 (m x16)	—	—	PCIe 5.0 x8 (m x16)	—	—
Slot Description			Slot Description		
Option 1	Option 2	Option 3	Option 1	Option 2	Option 3
PCIe 5.0 x8 (m x16)	PCIe 5.0 x16	2x Hot-Swap 2.5" NVMe Drive Bays (CPU 2)	PCIe 5.0 x8 (m x16)	PCIe 5.0 x8 (m x16)	PCIe 5.0 x16
PCIe 5.0 x8 (m x16)	—	—	PCIe 5.0 x8 (m x16)	PCIe 5.0 x8 (m x16)	—
Slot Description			Slot Description		
AIDM / OCP NIC 3.0 Slot			AIDM / OCP NIC 3.0 Slot		
(Optional) AIDM / OCP NIC 3.0 Slot			(Optional) AIDM / OCP NIC 3.0 Slot		

\*Requires additional parts in optional parts list  
Not available if front drive bays are using an NVMe configuration

CPU1 CPU2

System Cooling	Fans: 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%) power supplies
System BIOS	BIOS Type: AMI 64MB SPI Flash
Management	SuperCloud Composer; 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!
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	Weight: Gross Weight: 63 lbs (28.6 kg) Net Weight: 37 lbs (16.8 kg) 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	<a href="#">Super X13DEM</a>
Chassis	<b>CSE-HS829-R1K24P</b>