

# Hyper SuperServer SYS-120H-TNR

1U Hyper with 8 NVMe/SAS/SATA bays



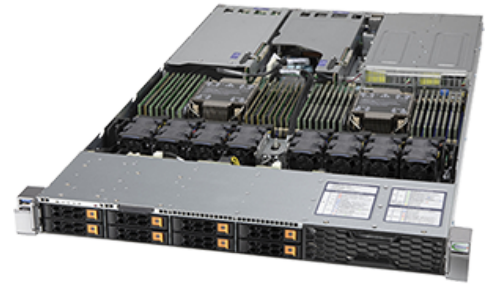
More details here

## Key Applications

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

## Key Features

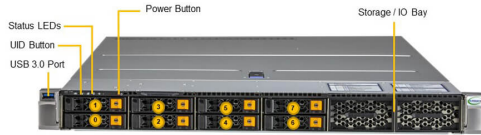
- Dual Socket P+ (LGA-4189) 3rd Gen Intel® Xeon® Scalable Processors;
- 32 DIMM Slots; Up to 8TB DRAM; Up to 8TB Intel® Optane™ Persistent Memory (up to 12TB with DRAM); 3200/2933/2666 ECC DDR4 LRDIMM; RDIMM; Intel® Optane™ Persistent Memory 200 series;
- 3 PCIe 4.0 x16 slots with support for GPU/Accelerator cards;
- Flexible networking options with 1 AIOM networking slot (OCP NIC 3.0 compatible);
- 8x 2.5" hot-swap NVMe/SATA/SAS drive bays; Optional 4x 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;
- 8 heavy duty hot-swap fans with optimal fan speed control;



|                          |   |
|--------------------------|---|
| Form Factor              | 1U Rackmount<br>Enclosure: 437 x 43 x 747mm (17.2" x 1.7" x 29.4")<br>Package: 605 x 206 x 1032mm (23.8" x 8.1" x 40.6")  |
| Processor                | Dual Socket P+ (LGA-4189)<br>3rd Gen Intel® Xeon® Scalable processors<br>Up to 40C/80T; Up to 60MB Cache per CPU  |
| GPU                      | Up to 2 double-width GPUs   |
| System Memory            | Slot Count: 32 DIMM slots<br>Max Memory (2DPC): Up to 8TB 3200MT/s ECC DDR4<br>Supports Intel® Optane™ persistent memory 200 series   |
| Drive Bays Configuration | Default: Total 8 bays<br>• 8 front hot-swap 2.5" NVMe*/SAS*/SATA* drive bays<br>Option A: Total 12 bays<br>• 12 front hot-swap 2.5" NVMe*/SAS*/SATA* drive bays<br>(*NVMe/SAS/SATA support may require additional storage controller and/or cables, please see the optional parts list for details)<br>M.2: 2 M.2 NVMe/SATA slots (M-key 2280/22110)  |
| Expansion Slots          | Default<br>• 1 PCIe 4.0 x16 FHHL slot<br>• 2 PCIe 4.0 x16 FH/10.5"L slots<br>• 1 PCIe 4.0 x16 AIOM slot (OCP 3.0 compatible)  |
| On-Board Devices         | SATA: SATA (6Gbps) ; RAID 0/1/5/10 support<br>NVMe: NVMe; RAID 0/1/5/10 support(Intel® VROC RAID key required)<br>Network Connectivity: 2 RJ45 1GbE with Intel® I350-AM2 (optional)<br>4 RJ45 1GbE with Intel® I350-AM4 (optional)<br>4 SFP 1GbE with Intel® I350-AM4 (optional)<br>2 RJ45 10GBASE-T with Intel® X550-AT2 (optional)<br>2 SFP+ 10GbE with Intel® X710-BM2 (optional)<br>4 SFP+ 10GbE with Intel® XL710-BM1 (optional)<br>4 SFP+ 10GbE with Intel® X710-TM4 (optional)<br>2 SFP28 25GbE with Broadcom® BCM57414 (optional)<br>4 SFP28 25GbE (optional)<br>2 QSFP28 100GbE with Broadcom® BCM57508 (optional) |
| Input / Output           | LAN: 1 RJ45 1 GbE Dedicated BMC LAN port<br>USB: 2 USB 3.0 ports(rear)<br>1 USB 3.0 port(front)   |



(Front View – System)



| Slot  | Description  |
|-------|--|
| 1 - 2 | 2.5" Hot-swap NVMe/SAS3/SATA3 Drive Bays (NVMe from CPU1)* |
| 3 - 4 | 2.5" Hot-swap NVMe/SAS3/SATA3 Drive Bays (NVMe from CPU2)* |

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

(Rear View – System)



Redundant 1200W Titanium Level Power Supplies  
 Dedicated BMC LAN Port  
 VGA Port  
 2 USB 3.0 Ports

| Slot | Description                     |
|------|---------------------------------|
| A1   | AIOM / OCP 3.0 NIC Slot         |
| 1    | PCI-E 4.0 x16 Slot (FH, 6.6'L)  |
| 2    | PCI-E 4.0 x16 Slot (FH, 10.5'L) |
| 3    | PCI-E 4.0 x16 Slot (FH, 10.5'L) |

CPU1 CPU2

|                       |  |
|-----------------------|--|
| System Cooling        | Fans: Up to 8 counter-rotating 40x40x56mm Fan(s)<br>Air Shroud: 2 Air Shrouds  |
| Power Supply          | 2x 1200W Redundant Titanium Level (96%) Hot-plug power supplies  |
| System BIOS           | BIOS Type: AMI 256MB SPI Flash   |
| Management            | SuperCloud Composer® (SCC); 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<br>Fan: Fans with tachometer monitoring<br>Pulse Width Modulated (PWM) fan connectors<br>Status monitor for speed control<br>Temperature: Monitoring for CPU and chassis environment<br>Thermal Control for fan connectors |
| Dimensions and Weight | Weight: Gross Weight: 49 lbs (22.2 kg)<br>Net Weight: 34 lbs (15.4 kg)<br>Available Color: N/A   |
| Operating Environment | Name: A2<br>Operating Temperature: 10°C to 35°C (50°F to 95°F)<br>Non-operating Temperature: -30°C to 60°C (-40°F to 140°F)<br>Operating Relative Humidity: 8% to 80% (max 21° DP; non-condensing)<br>Non-operating Relative Humidity: 8% to 90% (max 38° DP; non-condensing)    |
| Motherboard           | <a href="#">Super X12DHM-6</a>   |
| Chassis               | <a href="#">CSE-HS119-R1K24P</a>   |