Hyper SuperServer SYS-120H-TNR

1U Hyper with 8 NVMe/SAS/SATA bays

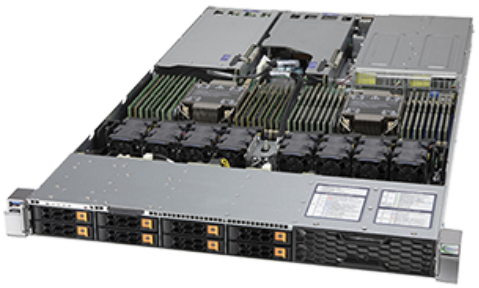
More details here

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;

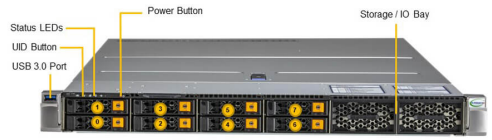


Form Factor	1U Rackmount Enclosure: 437 x 43 x 747mm (17.2" x 1.7" x 29.4") Package: 605 x 206 x 1032mm (23.8" x 8.1" x 40.6")
Processor	Dual Socket P+ (LGA-4189) 3rd Gen Intel® Xeon® Scalable processors Up to 40C/80T; Up to 60MB Cache per CPU
GPU	Up to 2 double-width GPUs
System Memory	Slot Count: 32 DIMM slots Max Memory (2DPC): Up to 8TB 3200MT/s ECC DDR4 Supports Intel® Optane™ persistent memory 200 series
Drive Bays Configuration	Default: Total 8 bays • 8 front hot-swap 2.5" NVMe*/SAS*/SATA* drive bays Option A: Total 12 bays • 12 front hot-swap 2.5" NVMe*/SAS*/SATA* drive bays (*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)
Expansion Slots	Default • 1 PCIe 4.0 x16 FHHL slot • 2 PCIe 4.0 x16 FH/10.5"L slots • 1 PCIe 4.0 x16 AIOM slot (OCP 3.0 compatible)
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) Network Connectivity: 2 RJ45 1GbE with Intel® I350-AM2 (optional) 4 RJ45 1GbE with Intel® I350-AM4 (optional) 4 SFP 1GbE with Intel® I350-AM4 (optional) 2 RJ45 10GBASE-T with Intel® X550-AT2 (optional) 2 SFP+ 10GbE with Intel® X710-BM2 (optional) 4 SFP+ 10GbE with Intel® XL710-BM1 (optional) 4 SFP+ 10GbE with Intel® X710-TM4 (optional) 2 SFP28 25GbE with Broadcom® BCM57414 (optional) 4 SFP28 25GbE (optional) 2 QSFP28 100GbE with Broadcom® BCM57508 (optional)

Input / Output	LAN: 1 RJ45 1 GbE Dedicated BMC LAN port USB: 2 USB 3.0 ports (rear) 1 USB 3.0 port (front) Video: 1 VGA port

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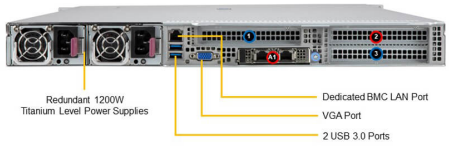
(Front View – System)



Slot	Description
0 – 3	2.5" Hot-swap NVMe/SAS3/SATA3 Drive Bays (NVMe from CPU1)*
4 – 7	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)



	Slot Description
AT	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) 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 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: 49 lbs (22.2 kg) Net Weight: 34 lbs (15.4 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	**Super X12DHM-6**
Chassis	**CSE-HS119-R1K24P**

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