

AI Training SuperServer SYS-421GE-TNHR2-LCC

DP Intel 4U Liquid-Cooled System with NVIDIA HGX H100/H200 8-GPU (onsite service is required for liquid-cooling)



Key Applications

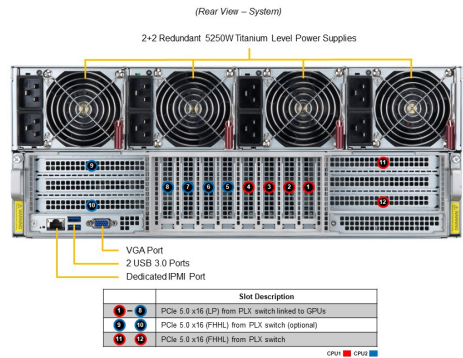
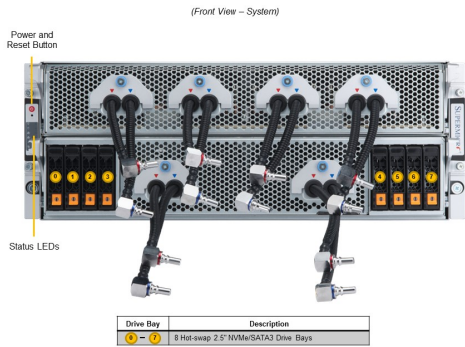
Scientific Research, Conversational AI, Business Intelligence & Analytics, Drug Discovery, Finance Services and Fraud Detection, AI/Deep Learning Training and Inference, Large Language Model (LLM) and Generative AI, High Performance Computing (HPC), Autonomous Vehicle Technologies,

Key Features

- Complete liquid-cooled rack integration is required for purchase;
- 5th/4th Gen Intel® Xeon® Scalable processor support;
- 8 NVIDIA H200/H100 GPUs;
- 32 DIMM slots, ECC RDIMM DDR5 up to 4TB 5600MT/s (1DPC) or up to 8TB 4400MT/s (2DPC);
- 8 PCIe 5.0 x16 LP, 2x PCIe 5.0 x16 FHHL slots;
- 8 front hot-swap 2.5" NVMe U.2, 2x front hot-swap NVMe M.2;
- 4 Redundant 52500W Titanium Level power supplies;
- 2 10GbE RJ-45, 1x Dedicated BMC/IPMI;



Form Factor	4U Rackmount Enclosure: 449 x 174 x 895.35mm (17.6" x 6.85" x 35.25") Package: 1280 x 410 x 730mm (50.39" x 16.14" x 28.7")
Processor	Dual Socket E (LGA-4677) 5th Gen Intel® Xeon® / 4th Gen Intel® Xeon® Scalable processors Up to 64C/128T; Up to 320MB Cache per CPU
GPU	Max GPU Count: 8 onboard GPUs Supported GPU: NVIDIA SXM: HGX H100 8-GPU (80GB), HGX H200 8-GPU (141GB) CPU-GPU Interconnect: PCIe 5.0 x16 CPU-to-GPU Interconnect GPU-GPU Interconnect: NVIDIA® NVLink™ with NVSwitch™
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 8 bays <ul style="list-style-type: none"> • 8 front hot-swap 2.5" NVMe drive bays M.2: 2 M.2 NVMe slots (M-key)
Expansion Slots	Default <ul style="list-style-type: none"> • 8 PCIe 5.0 x16 LP slots • 2 PCIe 5.0 x16 FHHL slots Option A <ul style="list-style-type: none"> • 8 PCIe 4.0 x16 LP slots • 4 PCIe 5.0 x16 FHHL slots
On-Board Devices	Chipset: Intel® C741 Network Connectivity: 2 RJ45 10GbE with Intel® X710-AT2
Input / Output	1 VGA port



System Cooling	<p>Fans: Up to 4 Fan 8cm Fan(s)</p> <p>Liquid Cooling: Direct to Chip (D2C) Cold Plate</p>
Power Supply	4x 5250W Redundant (2 + 2) Titanium Level (96%) power supplies
System BIOS	BIOS Type: AMI 32MB UEFI
Management	SuperCloud Composer®; Supermicro Server Manager (SSM); Super Diagnostics Offline (SDO); Supermicro Thin-Agent Service (TAS); SuperServer Automation Assistant (SAA) New!
PC Health Monitoring	<p>CPU: Monitors for CPU Cores, Chipset Voltages, Memory</p> <p>8+4 Phase-switching voltage regulator</p> <p>FAN: Fans with tachometer monitoring</p> <p>Status monitor for speed control</p> <p>Pulse Width Modulated (PWM) fan connectors</p> <p>Temperature: Monitoring for CPU and chassis environment</p> <p>Thermal Control for fan connectors</p>
Dimensions and Weight	<p>Weight: Gross Weight: 216 lbs (98 kg)</p> <p>Net Weight: 176 lbs (80 kg)</p> <p>Available Color: Silver</p>
Operating Environment	<p>Operating Temperature: 10°C to 35°C (50°F to 95°F)</p> <p>Non-operating Temperature: -40°C to 60°C (-40°F to 140°F)</p> <p>Operating Relative Humidity: 8% to 90% (non-condensing)</p> <p>Non-operating Relative Humidity: 5% to 95% (non-condensing)</p>
Motherboard	Super X13DEG-M
Chassis	CSE-GP403TS-R000NFP