

GPU SuperServer SYS-221GE-TNHT-LCC

DP Intel 2U Liquid-Cooled System with NVIDIA HGX H100 4-GPU



Key Applications

High Performance Computing, AI/Deep Learning Training, Industrial Automation, Retail, Healthcare, Conversational AI, Business Intelligence & Analytics, Drug Discovery, Climate and Weather Modeling, Finance & Economics,

Key Features

- Highest GPU communication using NVIDIA® NVLINK™
High density 2U system with NVIDIA® HGX™ H100 4-GPU;
- 5th/4th Gen Intel® Xeon® Scalable processor support;
- 32 DIMM slots Up to 8TB: 32x 256 GB DRAM Memory Type: 5600MTs ECC DDR5;
- 4 PCIe Gen 5.0 X16 LP;
- Flexible networking options;
- 2 M.2 NVMe for boot drive only
4x 2.5" Hot-swap NVMe/SATA3 drive bays;
- Direct-To-Chip Liquid Cooling solution
4 heavy duty fans with optimal fan speed control;
- 2x 5250W(1+1) Redundant Power Supplies;



Form Factor	2U Rackmount Enclosure: 437 x 89 x 830.3mm (17.2" x 3.5" x 32.7") Package: (22.5" x 11" x 45.5")
Processor	Dual Socket E (LGA-4677) 5th Gen Intel® Xeon® / 4th Gen Intel® Xeon® Scalable processors Up to 56C/112T; Up to 112.5MB Cache per CPU
GPU	Max GPU Count: Up to 4 onboard GPU(s) Supported GPU: NVIDIA SXM: HGX H100 4-GPU (80GB) CPU-GPU Interconnect: PCIe 5.0 x16 CPU-to-GPU Interconnect GPU-GPU Interconnect: NVIDIA® NVLink®
System Memory	Slot Count: 32 DIMM slots/16 Channels Max Memory (2DPC): Up to 8TB 5600MT/s ECC DDR5 RDIMM/LRDIMM
Drive Bays Configuration	Default: Total 4 bay(s) • 4 front hot-swap 2.5" NVMe/SATA drive bay(s)
Expansion Slots	PCI-Express (PCIe) Configuration: Default • 4 PCIe 5.0 x16 LP slot(s) M.2: 2 M.2 PCIe 5.0 x4 NVMe slot(s) (M-key 22110(default)/2280)
On-Board Devices	Chipset: Intel® C741 Network Connectivity: 2 RJ45 10GbE with Intel® X710-AT2
Input / Output	1 VGA port(s)

(Front View – System)



Drive Bay	Description
	4 Hot-swap 2.5" NVMe/SATA3 Drive Bays

(Rear View – System)



Slot	Description
	PCIe 5.0 x16 LP
	CPU1 CPU2

System Cooling	Fans: 4 Fan 8cm Fan(s) Liquid Cooling: Direct to Chip (D2C) Cold Plate (optional)
Power Supply	2x 5250W Redundant Titanium (certification pending) Level (96%) power supplies
System BIOS	BIOS Type: AMI 32MB SPI Flash EEPROM
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 8+4 Phase-switching voltage regulator 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: 86.5 lbs (39.2 kg) Net Weight: 67.5 lbs (30.6 kg) Available Color: Silver Body
Operating Environment	Operating Temperature: 10°C ~ 35°C (50°F ~ 95°F) Non-operating Temperature: -40°C to 60°C (-40°F to 140°F) Operating Relative Humidity: 8% to 90% (non-condensing) Non-operating Relative Humidity: 5% to 95% (non-condensing)
Motherboard	Super X13DEG-R
Chassis	CSE-228G2TS-R5K25P