

## GPU SuperServer SYS-421GE-TNHR2-LCC

DP Intel 4U Liquid-Cooled System with NVIDIA HGX H100 8-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,

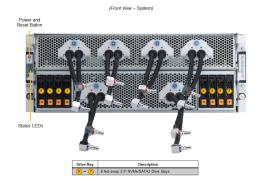
## **Key Features**

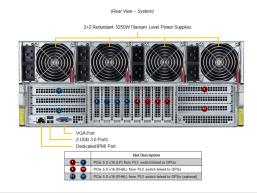
- 5th/4th Gen Intel® Xeon® Scalable processor support;
- 32 DIMM slots Up to 8TB: 32x 256 GB DRAM Memory Type: 5600MTs ECC DDR5;
- 8 PCle Gen 5.0 X16 LP
  - 2 PCIe Gen 5.0 X16 FHHL Slots, 2 PCIe Gen 5.0 X16 FHHL Slots (optional);
- Flexible networking options;
- 2 M.2 NVMe for boot drive only Optional: 8x 2.5" Hot-swap SATA drive bays 8x 2.5" Hot-swap NVMe drive bays;
- 4 heavy duty fans with optimal fan speed control;
- 4x 5250W(2+2) Redundant Power Supplies, Titanium Level;



Form Factor	4U Rackmount Enclosure: 449 x 174 x 842mm (17.7" x 6.85" x 33.2") Package: 1216 x 330 x 670mm (48" x 13" x 26.4")
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)  64C/128T; 320MB Cache per CPU
GPU	Max GPU Count: Up to 8 onboard GPU(s) Supported GPU: NVIDIA SXM: HGX H100 8-GPU (80GB) 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): 4TB 5600MT/s ECC DDR5 RDIMM Max Memory (2DPC): 8TB 4400MT/s ECC DDR5 RDIMM
Drive Bays Configuration	Default: Total 8 bay(s)  • 8 front hot-swap 2.5" NVMe drive bay(s)  M.2: 2 M.2 NVMe slot(s) (M-key)
Expansion Slots	Default  • 8 PCIe 5.0 x16 LP slot(s)  • 2 PCIe 5.0 x16 FHHL slot(s)
On-Board Devices	Chipset: Intel® C741  Network Connectivity: 2 SFP28 25GbE with Broadcom® BCM57414 (optional)  2 RJ45 10GbE with Intel® X710-AT2 (optional)  IPMI: Support for Intelligent Platform Management Interface v.2.0  IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
Input / Output	1 VGA port(s)







System Cooling	Fans: 4 Fan 8cm Fan(s) Liquid Cooling: Direct to Chip (D2C) Cold Plate (optional)
Power Supply	4x 5250W Redundant Titanium (certification pending) Level power supplies
System BIOS	BIOS Type: AMI 32MB SPI Flash EEPROM
Management	Redfish API; Supermicro Server Manager (SSM); Supermicro Power Manager (SPM); Supermicro Update Manager (SUM); SuperDoctor® 5; Super Diagnostics Offline; KVM with dedicated LAN; IPMI 2.0
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: 138.89 lbs (63 kg) Net Weight: 80.03 lbs (53 kg) Available Color: Silver
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-M
Chassis	CSE-GP401TS-R000NP