GPU SuperServer SYS-821GE-TNHR

More details here

Key Applications

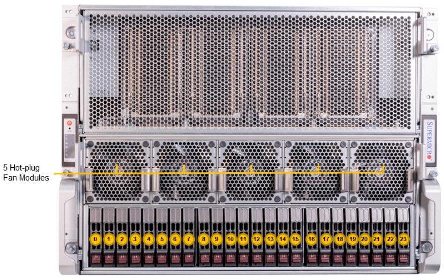
High Performance Computing, AI/Deep Learning Training, Industrial Automation, Retail, Healthcare, Conversational AI, Business Intelligence & Analytics, Drug Discovery, Climate and Weather Modeling, Finance & Economics,

Key Features

- 32 DIMM slots Up to 8TB: 32x 256 GB DRAM Memory Type: 4800MHz ECC DDR5;
- 8 PCIe Gen 5.0 X16 LP, 2 PCIe Gen 5.0 X16 FHFL Slots;
- Flexible networking options;
- 8x 2.5" Hot-swap SATA drive bays; 12x 2.5" Hot-swap NVMe drive bays; 2 M.2 NVMe for boot drive only;
- 10 heavy duty fans with optimal fan speed control;
- Optional: 8x 3000W (4+4) Redundant Power Supplies, Titanium Level; 6x 3000W (3+3) Redundant Power Supplies, Titanium Level;

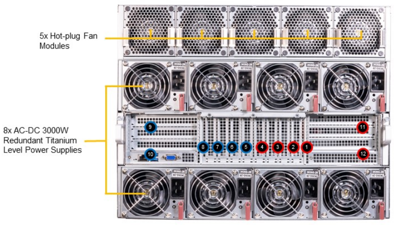
Form Factor	8U Rackmount Enclosure: 437 x 355.6 x 843.28mm (17.2" x 14" x 33.2") Package: 698 x 750 x 1300mm (27.5" x 29.5" x 51.2")
Processor	4th Gen Intel® Xeon® Scalable processors Dual Socket LGA-4677 (Socket E) supported (Supports up to 350W TDP CPUs (Air Cooled), Supports up to 350W TDP CPUs (Liquid Cooled))
GPU	Supported GPU: HGX H100 8-GPU SXM5 Multi-GPU Board CPU-GPU Interconnect: PCIe 5.0 x16 CPU-to-GPU Interconnect GPU-GPU Interconnect: NVIDIA® NVLink™ with NVSwitch™
System Memory	32 DIMM slots Up to 8TB ECC LRDIMM, DDR5-4800MHz
Drive Bays	20x 2.5" hot-swap NVMe/SATA drive bays (8x 2.5" NVMe dedicated) 2 M.2 NVMe
Expansion Slots	8 PCIe 5.0 x16 LP slot(s) 2 PCIe 5.0 x16 FHFL slot(s)
On-Board Devices	Chipset: Intel® C741 Network Connectivity: 2x 10GbE BaseT with Intel® X550-AT2 (optional) 2x 25GbE SFP28 with Broadcom® BCM57414 (optional) 2x 10GbE BaseT 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	Video: 1 VGA port(s)

(Front View – System)



Drive Bay	Description
⓪ – ⑮	16x 2.5" Hot-swap NVMe Drive Bays
⑯ – ㉓	8x 2.5" Hot-swap SATA Drive Bays

(Rear View – System)



	Slot Description
①	PCIe 5.0 x16 (LP) from PLX switch linked to GPUs
②	PCIe 5.0 x16 (LP) from PLX switch linked to GPUs
③	PCIe 5.0 x16 (LP) from PLX switch linked to GPUs
④	PCIe 5.0 x16 (LP) from PLX switch linked to GPUs
⑤	PCIe 5.0 x16 (LP) from PLX switch linked to GPUs
⑥	PCIe 5.0 x16 (LP) from PLX switch linked to GPUs

	Slot Description
⑦	PCIe 5.0 x16 (LP) from PLX switch linked to GPUs
⑧	PCIe 5.0 x16 (LP) from PLX switch linked to GPUs
⑨	PCIe 5.0 x16 (FHFL)
⑩	PCIe 5.0 x16 (FHFL)
⑪	PCIe 5.0 x16 (FHFL)
⑫	PCIe 5.0 x16 (FHFL)

System Cooling	10 heavy duty fan(s) Liquid Cooling: Direct to Chip (D2C) Cold Plate (optional)
Power Supply	6x 3000W (3+3) Redundant Power Supplies, Titanium Level Output Type: Backplanes (connector)
System BIOS	BIOS Type: AMI 32MB SPI Flash EEPROM
Management	SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; IPMI 2.0; Redfish API; OOB Management Package (SFT-OOB-LIC)
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	Height: 14" (355.6 mm) Width: 17.2" (437 mm) Depth: 33.2" (843.28 mm) Gross Weight: 225 lbs (102.1 kg) Net Weight: 166 lbs (75.3 kg) Packaging: 29.5" (H) x 27.5" (W) x 51.2" (D) Available Color: Black Front & 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-OAD
Chassis	CSE-GP801TS