GPU SuperServer SYS-821GE-TNMR2

DP Intel 8U System with AMD MI300X 8-GPU and Rear I/O

More details here

Key Applications

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



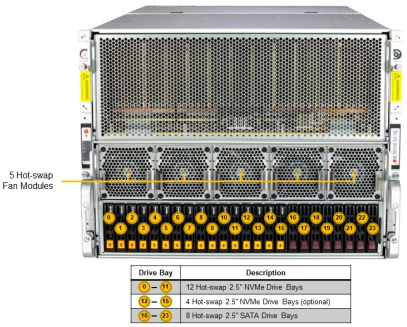
Key Features

- Dual Socket E (LGA-4677) 5th/4th Gen Intel® Xeon® Scalable processors up to 350W with air cooling;
- High density 8U system with AMD Instinct MI300X 8-GPU;
- Up to 32 DIMMs supporting up to 8TB DDR5-4400 in 2DPC or 4TB DDR5-5600 in 1DPC;
- Flexible networking options;
- 8 PCIe Gen 5.0 X16 LP, 2 PCIe Gen 5.0 X16 FHHL Slots, 2 PCIe Gen 5.0 X16 FHHL Slots (optional);
- 8x 2.5" Hot-swap SATA drive bays, 2x M.2 NVMe for boot drive, up to 16x 2.5" Hot-swap NVMe drive bays (12 by default + 4 optional);
- 6 Redundant 3000W Titanium Level power supplies;
- 8U Rackmount chassis with 33.2" (843mm) depth;

Form Factor	8U Rackmount Enclosure: 447 x 356 x 843mm (17.7" x 13.8" x 33.2") Package: 750 x 700 x 1300mm (29.5" x 27.6" x 51")
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: AMD: Instinct™ MI300X Accelerators CPU-GPU Interconnect: PCIe 5.0 x16 CPU-to-GPU Interconnect GPU-GPU Interconnect: AMD Infinity Fabric™ Link
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 20 bays • 12 front hot-swap 2.5" NVMe drive bays • 8 front hot-swap 2.5" SATA drive bays Option A: Total 4 bays • 4 front hot-swap 2.5" NVMe drive bays M.2: 2 M.2 PCIe 3.0 x2 NVMe slots (M-key)
Expansion Slots	Default • 8 PCIe 5.0 x16 LP slots • 2 PCIe 5.0 x16 FHHL slots
On-Board Devices	2 SFP28 25GbE with Broadcom® BCM57414 (optional) 2 RJ45 10GbE with Intel® X710-AT2 (optional)
Input / Output	USB: 1 USB 3.0 Type-A port(Rear) Video: 1 VGA port

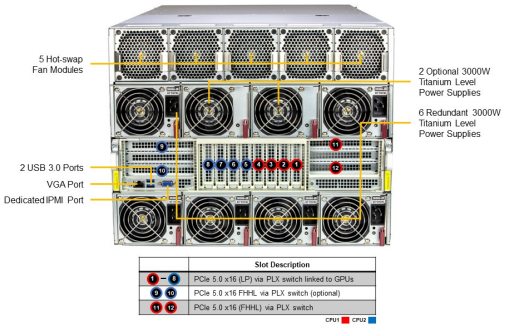
©2026 Copyright Super Micro Computer, Inc. All rights reserved. *Product specifications may change without notice

(Front View – System)



Drive Bay	Description
0 – 11	12 Hot-swap 2.5" NVMe Drive Bays
12 – 15	4 Hot-swap 2.5" NVMe Drive Bays (optional)
16 – 23	8 Hot-swap 2.5" SATA Drive Bays

(Rear View – System)



Slot	Description
1 – 8	PCIe 5.0 x16 (LP) via PLX switch linked to GPUs
9 10	PCIe 5.0 x16 FHHL via PLX switch (optional)
11 12	PCIe 5.0 x16 (FHHL) via PLX switch

CPU1 CPU2

System Cooling	Fans: Up to 10 heavy duty fans with optimal fan speed control
Power Supply	6x 3000W Redundant Titanium 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: 8+4 Phase-switching voltage regulator 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: 178.6 lbs (81 kg) Net Weight: 116.22 lbs (53 kg) Available Color: Silver
Operating Environment	Operating Temperature: 10°C to 35°C (50°F to 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-MA**
Chassis	**CSE-GP801TS-R000NPF-D2**

©2026 Copyright Super Micro Computer, Inc. All rights reserved. *Product specifications may change without notice