

IoT SuperServer SYS-221HE-TNR



More details here

Key Applications

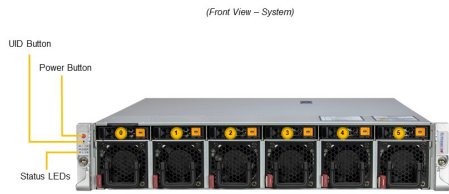
5G Core and Edge, Telecom Micro Data Center, AI Inference and Machine Learning, Network Function Virtualization, Cloud Computing,

Key Features

- 6 heavy duty hot-swap fans with optimal fan speed control;
- Up to 6x 2.5" hot-swap drive bays with options to support NVMe/SATA drives;
- Flexible networking options with 2 AIOM networking slots (OCP NIC 3.0 compatible);
- Configurable PCIe slot options up to 8 PCIe 5.0 x8 (6 FHFL+ 2 FHHL) or 4 PCIe 5.0 x16 (3 FHFL + 1 FHHL);
- Dual Socket E (LGA-4677) 5th/4th Gen Intel® Xeon® Scalable processors;
- 32 DIMM slots supporting up to 8TB of memory; RDIMMs up to DDR5-5600;
- Redundant 2000W Titanium level AC power supplies;

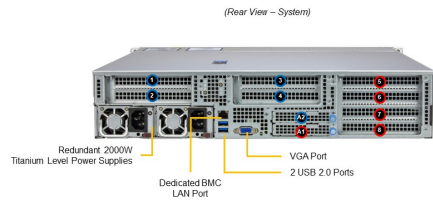


Form Factor	2U Rackmount Enclosure: 436.88 x 88.9 x 574mm (17.2" x 3.5" x 22.6") Package: 598 x 247 x 938mm (23.5" x 9.7" x 36.9")
Processor	Dual Socket E (LGA-4677) 5th Gen Intel® Xeon® / 4th Gen Intel® Xeon® Scalable processors Supports Intel Xeon CPU Max Series with high bandwidth memory (HBM) Up to 60C/120T; Up to 112.5MB Cache per CPU
GPU	Max GPU Count: Up to 3 double-width or 3 single-width GPU(s) Supported GPU: NVIDIA PCIe: RTX A4000, RTX A6000, A2, RTX A5000 CPU-GPU Interconnect: PCIe 5.0 x16 CPU-to-GPU Interconnect GPU-GPU Interconnect: PCIe
System Memory	Slot Count: 32 DIMM slots/16 Channels Max Memory (2DPC): Up to 8TB 5600MT/s ECC DDR5 RDIMM
On-Board Devices	SATA: 6 x SATA3 NVMe: NVMe; RAID 0/1/5/10 support(Intel® VROC RAID Key required) Chipset: Intel® C741 Network Connectivity: 2 SFP28 25Ethernet with Broadcom® BCM57414 (optional) 2 QSFP28 100Ethernet with Broadcom® BCM57508 (optional) 2 QSFP28 100Ethernet with Intel® E810-CAM2 (optional) 2 QSFP28 100Ethernet with Mellanox® CX-6 DX (optional) 4 SFP+ 10Ethernet with Intel® X710-BM2 (optional) 2 QSFP56 200Ethernet with Mellanox® CX-6 VPI (optional) 2 QSFP56 100Ethernet with Mellanox® CX-6 DX (optional) 2 RJ45 1Ethernet with Intel® I350-AM2 (optional) 4 RJ45/SFP+ 10Ethernet with Intel® X710-TM4 (optional) 1 OSFP 400Ethernet with NVIDIA® CX-7 NDR (optional) 4 RJ45 10Ethernet with Intel® X550 (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 BMC LAN oport LAN port(s)



Drive Bay	Description
1 - 6	2.5" Hot-swap NVMe/SATA3/SAS* Drive Bays (NVMe from CPU1)
7 - 12	2.5" Hot-swap NVMe/SATA3/SAS* Drive Bays (NVMe from CPU2)

*SAS support requires additional parts from the optional parts list



Slot Description		Slot Description		
Optional 1	Optional 2	Optional 1	Optional 2	Optional 3
1 PCIe 5.0 x16 (FHFL)	PCIe 5.0 x8 (FHFL)	1 PCIe 5.0 x16 (FHFL)	PCIe 5.0 x8 (FHFL)	PCIe 5.0 x16 (FHFL)
2 ---	PCIe 5.0 x8 (FHFL)	2 ---	PCIe 5.0 x8 (FHFL)	---
3 PCIe 5.0 x16 (FHFL)	PCIe 5.0 x8 (FHFL)	3 PCIe 5.0 x8 (FHHL)	PCIe 5.0 x8 (FHHL)	PCIe 5.0 x16 (FHHL)
4 ---	PCIe 5.0 x8 (FHFL)	4 PCIe 5.0 x8 (FHHL)	PCIe 5.0 x8 (FHHL)	---

Slot Description	
A2	AIOM/OCPP NIC 3.0 (optional)
A1	AIOM/OCPP NIC 3.0



System Cooling	Fans: 6 Counter-rotating, Hot-swappable 6cm Fan(s)
Power Supply	2x 2000W Redundant Titanium Level power supplies
System BIOS	BIOS Type: AMI 256MB SPI Flash
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 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: 47.4 lbs (21.5 kg) Net Weight: 34.4 lbs (15.6 kg) Available Color: Silver
Operating Environment	Operating Temperature: 0°C ~ 35°C (32°F ~ 95°F) Non-operating Temperature: -40°C to 70°C (-40°F to 158°F) Operating Relative Humidity: 8% to 90% (non-condensing) Non-operating Relative Humidity: 5% to 95% (non-condensing)
Motherboard	Super X13DEM
Chassis	CSE-HE211-R000NFP