

UP SuperServer SYS-521C-NR

2U UP CloudDC with 12 hot-swap 3.5" SAS/SATA (2 NVMe hybrid) bays and 6 PCIe 5.0 slots + 1 PCIe 5.0 AIOM slot

Key Applications

Cloud Computing, Data Center Optimized, Network Appliance, AI inferencing, ML training, Database/Storage,

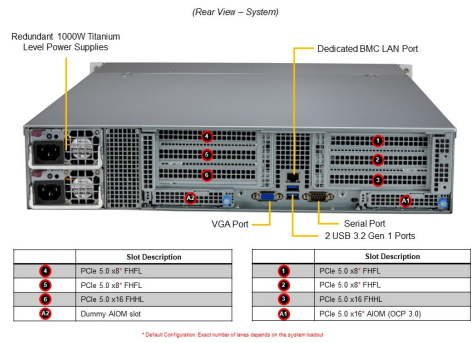
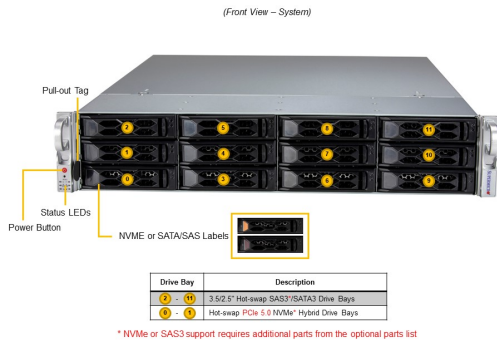
Key Features

- Single Socket E (LGA-4677) 4th/5th Gen Intel® Xeon® Scalable processors. Up to 350W TDP;
- Intel® C741 Chipset;
- 16 DIMMs; Supports 3DS DDR5 RDIMM. Up to 5600 MHz;
- Single AIOM with NCSI (OCP 3.0) for networking, 1 dedicated IPMI LAN;
- 12 Front hot-swap 3.5" SATA3 drive bays (Optional 2 hybrid Gen5 NVMe), SAS3 with additional SAS controller card;
- Redundant Titanium 1200W Power Supplies;



Form Factor	2U Rackmount Enclosure: 437 x 89 x 648mm (17.2" x 3.5" x 25.5") Package: 679 x 296 x 876mm (26.7" x 11.4" x 34.5")
Processor	Single Socket E (LGA-4677) 5th Gen Intel® Xeon® / 4th Gen Intel® Xeon® Scalable processors Up to 64C/128T; Up to 320MB Cache
GPU	Max GPU Count: Up to 2 double-width or 4 single-width GPUs Supported GPU: NVIDIA PCIe: H100, H100 NVL, A16, A30, A40, L4, L40S, RTX 6000 Ada Generation, RTX A2000, A2, RTX A6000, T1000, L40, RTX 4000 Ada Generation, RTX 4000 SFF Ada Generation, RTX 2000 Ada, RTX 4500 Ada, RTX A4000 CPU-GPU Interconnect: PCIe 5.0 x16 CPU-to-GPU Interconnect
System Memory	Slot Count: 16 DIMM slots/8 Channels Max Memory (1DPC): Up to 2TB 5600MT/s ECC DDR5 RDIMM Max Memory (2DPC): Up to 4TB 4400MT/s ECC DDR5 RDIMM
Drive Bays Configuration	Default: Total 12 bays • 12 front hot-swap 3.5" SAS*/SATA drive bays Option A: Total 12 bays • 2 front hot-swap 3.5" PCIe 5.0 x4 NVMe*/SAS*/SATA drive bays • 10 front hot-swap 3.5" SAS*/SATA drive bays (*NVMe/SAS support may require additional storage controller and/or cables, please see the optional parts list for details) M.2: 2 M.2 PCIe 3.0 x2 NVMe slots (M-key 2280/22110)
Expansion Slots	Default • 4 PCIe 5.0 x8 FHFL slots • 2 PCIe 5.0 x16 FHHL slots • 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible) Option A • 4 PCIe 5.0 x8 FHFL slots • 2 PCIe 5.0 x16 FHHL slots • 1 PCIe 5.0 x8 AIOM slot (OCP 3.0 compatible) Option B • 2 PCIe 5.0 x16 FHFL double-width slots • 2 PCIe 5.0 x16 FHHL slots • 1 PCIe 5.0 x8 AIOM slot (OCP 3.0 compatible)
On-Board Devices	SATA: SATA (6Gbps) ; RAID 0/1/5/10 support NVMe: NVMe; RAID 0/1/5/10 support(Intel® VROC RAID key required) Chipset: Intel® C741 Network Connectivity: Via AIOM
Input / Output	LAN: 1 RJ45 1 GbE Dedicated BMC LAN port

USB: 2 USB 2.0 ports(header)
2 USB 3.2 Gen1 Type-A ports(rear)
Video: 1 VGA port
Serial: 1 COM port(rear)
TPM: 1 TPM header



System Cooling	Fans: Up to 3 heavy duty PWM 80x80x38mm Fan(s) Air Shroud: 1 Air Shroud
Power Supply	2x 1200W Redundant (1 + 1) 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: Monitors for CPU Cores, Chipset Voltages, Memory 8 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: 59 lbs (26.76 kg) Net Weight: 33 lbs (15 kg) Available Color: Black front & silver body
Operating Environment	Operating Temperature: 10°C to 35°C (50°F to 95°F) Non-operating Temperature: -30°C to 60°C (-22°F to 140°F) Operating Relative Humidity: 8% to 80% (non-condensing) Non-operating Relative Humidity: 8% to 90% (non-condensing)
Motherboard	Super X13SEDW-F
Chassis	CSE-LA26TS-R1K23AWP1