

# 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



More details here

## Key Applications

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

## Key Features

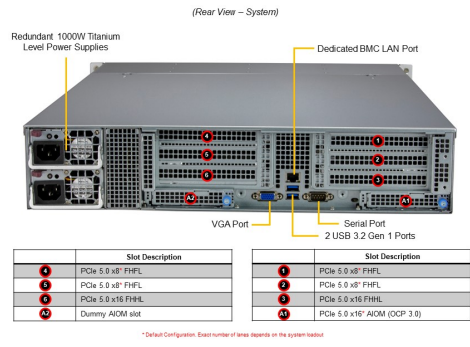
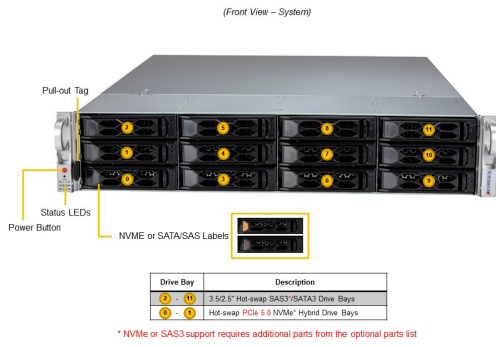
- Single Socket E (LGA-4677) 4th/5th Gen Intel® Xeon® Scalable processors. Up to 350W TDP;
- Intel® C741 Chipset;
- 16 DIMMs; Supports 3DS DDR5 RDIMM. Up to 5600 MHz;
- Single AIOM with NCSI (OCP 3.0) for networking, 1 dedicated IPMI LAN;
- 12 Front hot-swap 3.5" SATA3 drive bays (Optional 2 hybrid Gen5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



<b>Form Factor</b>	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")
<b>Processor</b>	Single Socket E (LGA-4677) 5th Gen Intel® Xeon® / 4th Gen Intel® Xeon® Scalable processors Up to 64C/128T; Up to 320MB Cache
<b>GPU</b>	Max GPU Count: Up to 2 double-width or 4 single-width GPUs Supported GPU: NVIDIA PCIe: H100, L40, T1000, RTX A6000, RTX A4000, RTX A2000, L40S, L4, A40, A30, A16, A2 CPU-GPU Interconnect: PCIe 5.0 x16 CPU-to-GPU Interconnect
<b>System Memory</b>	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
<b>Drive Bays Configuration</b>	Default: Total 12 bays <ul style="list-style-type: none"> <li>• 12 front hot-swap 3.5" SAS*/SATA drive bays</li> </ul> Option A: Total 12 bays <ul style="list-style-type: none"> <li>• 2 front hot-swap 3.5" PCIe 5.0 x4 NVMe*/SAS*/SATA drive bays</li> <li>• 10 front hot-swap 3.5" SAS*/SATA drive bays</li> </ul> (*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)
<b>Expansion Slots</b>	Default <ul style="list-style-type: none"> <li>• 4 PCIe 5.0 x8 FHFL slots</li> <li>• 2 PCIe 5.0 x16 FHHL slots</li> <li>• 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible)</li> </ul> Option A <ul style="list-style-type: none"> <li>• 4 PCIe 5.0 x8 FHFL slots</li> <li>• 2 PCIe 5.0 x16 FHHL slots</li> <li>• 1 PCIe 5.0 x8 AIOM slot (OCP 3.0 compatible)</li> </ul> Option B <ul style="list-style-type: none"> <li>• 2 PCIe 5.0 x16 FHFL double-width slots</li> <li>• 2 PCIe 5.0 x16 FHHL slots</li> <li>• 1 PCIe 5.0 x8 AIOM slot (OCP 3.0 compatible)</li> </ul>
<b>On-Board Devices</b>	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
<b>Input / Output</b>	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

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System Cooling	Fans: 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 ~ 35°C (50°F ~ 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	<a href="#"><u>Super X13SEDW-F</u></a>
Chassis	<b>CSE-LA26TS-R1K23AWP1</b>