

# Ultra SuperServer SYS-220U-MTNR

2U Ultra with 6 NVMe/SAS/SATA bays and 8 PCIe slots



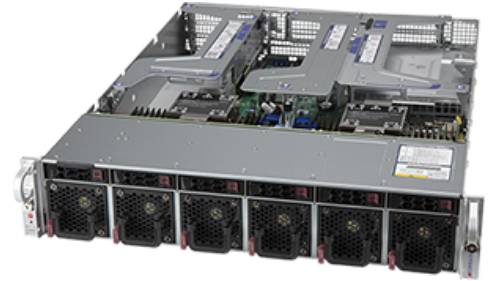
More details here

## Key Applications

Virtualization, HPC, Cloud Computing, High End Enterprise Server, Software Defined Storage, Application Tier Service Provider, 5G/Telco,

## Key Features

- Dual Socket P+ (LGA-4189) 3rd Gen Intel® Xeon® Scalable Processors;
- Intel® C621A Chipset;
- 32 DIMM Slots; Up to 8TB DRAM; Up to 8TB Intel® Optane™ Persistent Memory (up to 12TB with DRAM); 3200/2933/2666 ECC DDR4 LRDIMM; RDIMM; Intel® Optane™ Persistent Memory 200 series;
- 1 PCIe 4.0 x16 (LP)  
1 PCIe 4.0 x16 (FH, 10.5"L)  
5 PCIe 4.0 x8 (FH, 10.5"L)  
1 internal PCIe 4.0 x8 (in x16 slot, LP);
- Flexible networking options;
- 6x 2.5" hot-swap hybrid NVMe/SATA/SAS drive bays;
- 6 heavy duty fans with optimal fan speed control;
- 1600W redundant Titanium level power supplies;



### Form Factor

2U Rackmount  
Enclosure: 437 x 89 x 574mm (17.2" x 3.5" x 22.6")  
Package: 625 x 253 x 1154mm (24.6" x 9.96" x 45.43")

### Processor

Dual Socket P+ (LGA-4189)  
3rd Gen Intel® Xeon® Scalable processors  
Up to 40C/80T; Up to 60MB Cache per CPU

### GPU

Max GPU Count: Up to 4 double-width or 6 single-width GPUs  
Supported GPU: NVIDIA PCIe: T4, RTX A6000, RTX A5000, A40, A30, A16, A2, A100, A10

### System Memory

Slot Count: 32 DIMM slots  
Max Memory (2DPC): Up to 8TB 3200MT/s ECC DDR4 RDIMM/LRDIMM  
Supports Intel® Optane™ persistent memory 200 series

### Drive Bays Configuration

Default: Total 6 bays  
• 6 front hot-swap 2.5" NVMe/SAS\*/SATA drive bays  
(\*SAS support may require additional storage controller and/or cables)

### Expansion Slots

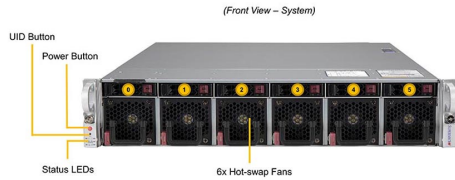
Default  
• 1 PCIe 4.0 x16 FH/10.5"L slot  
• 5 PCIe 4.0 x8 FH/10.5"L slots  
• 1 PCIe 4.0 x8 LP slot  
• 1 PCIe 4.0 x16 LP slot

### On-Board Devices

SATA: SATA (6Gbps) ; RAID 0/1/5/10 support  
NVMe: NVMe; RAID 0/1/5/10 support  
Chipset: Intel® C621A  
Network Connectivity: 2 RJ45 10GBASE-T with Intel® X710-AT2 (optional)  
2 RJ45 10GBASE-T with Intel® X710-TM4 (optional)  
2 SFP+ 10GbE with Intel® X710-TM4 (optional)  
No NIC option supported

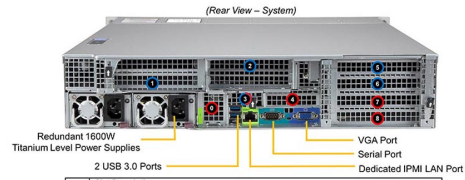
### Input / Output

LAN: 1 RJ45 1 GbE Dedicated BMC LAN port  
USB: 2 USB 3.0 ports(rear)  
Video: 1 VGA port  
DOM: 2 SuperDOM (Disk on Module) ports



Slot	Description
1 - 4	2.5" Hot-swap NVMe/SAS3/SATA3 Drive Bays (NVMe from CPU1)**
5 - 8	2.5" Hot-swap NVMe/SAS3/SATA3 Drive Bays (NVMe from CPU2)**

\*SAS3 support requires additional parts in optional parts list  
 \*\*NVMe support requires additional parts in optional parts list



Slot	Description
1	Ultra Riser Networking Slot
2	PCI-E 4.0 x16 Slot (FH, 10.5L)
3	PCI-E 4.0 x8 (in x16) Slot (FH, 10.5L); (PCI-E 4.0 x16 Slot with AOC-2UR68G4)
4	PCI-E 4.0 x8 (in x16) Slot (Internal LP) from CPU2; (from CPU1 with AOC-2UR68G4)
5	PCI-E 4.0 x16 Slot (LP)
6	PCI-E 4.0 x8 Slot (FH, 10.5L) <sup>1</sup>
7	PCI-E 4.0 x8 Slot (FH, 10.5L) <sup>1</sup>
8	PCI-E 4.0 x8 Slot (FH, 10.5L) <sup>1</sup>
9	PCI-E 4.0 x8 Slot (FH, 10.5L) <sup>1</sup>
10	PCI-E 4.0 x8 Slot (FH, 10.5L) <sup>1</sup>

1. Optional RSCW2-68G4 enables PCIe x16 in slots 5, 7. Slots 6,8 will be disabled.

System Cooling	Fans: 6x 6cm heavy duty fans with optimal fan speed control Air Shroud: 2 Air Shrouds
Power Supply	1x 1600W Redundant Titanium Level (96%) Hot-plug power supply
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 7 +1 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: 66 lbs (30 kg) Net Weight: 40 lbs (18.2 kg) Available Color: Black Front & Silver Body
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	<a href="#">Super X12DPU-6</a>
Chassis	CSE-219ULTS-R1K62P