

# Ultra SuperServer SYS-610U-TNR



## 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 PCI-E 4.0 x16 (LP); 1 Internal PCI-E 4.0 x16; 2 PCI-E 4.0 x16 (FH, 10.5"L);
- Flexible networking options;
- 4x3.5" hot-swap hybrid NVMe/SATA/SAS drive bays;
- 8 heavy duty fans with optimal fan speed control;
- 1200W redundant Titanium level power supplies;

[More details here](#)



Form Factor	1U Rackmount Enclosure: 437 x 43 x 754mm (17.2" x 1.7" x 29.7") Package: 605 x 203 x 950mm (23.81" x 7.99" x 37.4")
Processor	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 270W; 3 UPI
Drive Bays	4x 3.5" hot-swap NVMe/SATA/SAS drive bays; 4x 2.5" NVMe hybrid;  Optional RAID support via RAID controller AOC
Expansion Slots	Slot 1: PCI-E 4.0 x16 Internal LP Slot 2: PCI-E 4.0 x16 LP Slot 3: PCI-E 4.0 x16 FH, 10.5"L Slot 4: PCI-E 4.0 x16 FH, 10.5"L
On-Board Devices	SATA: SATA3 (6Gbps); RAID 0/1/5/10 support NVMe: NVMe (16GT/s); RAID 0/1/5/10 support Chipset: Intel® C621A Network Connectivity: 2x 10GbE BaseT with Intel® X710-AT2 (optional) OR 2x 10GbE BaseT and 2x 10GbE SFP+ with Intel® X710-TM4 (optional) No NIC option supported 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	LAN: 1 RJ45 Dedicated BMC LAN port USB: 2 USB 3.0 port(s) (2 rear) Video: 1 VGA port(s) Serial Port: 1 COM Port(s) (1 rear) DOM: 2 SuperDOM (Disk on Module) port



(Front View - System)



Slot	Description
0 - 3	3.5" Hot-swap NVMe/SAS3/SATA3 Drive Bays
4	Slim DVD or 2.5" SSD Bay**
5	Slim Floppy or 2.5" SSD Bay**

\*\*SAS3 support requires additional parts in optional parts list  
 \*\*DVD, Floppy, or 2.5" SSD support requires additional parts in optional parts list

(Rear View - System)



Slot	Description
0	Ultra Riser Networking Slot
1	PCI-E 4.0 x16 Slot (Internal LP)
2	PCI-E 4.0 x16 Slot (LP)
3	PCI-E 4.0 x16 Slot (PH, 10.5" L)
4	PCI-E 4.0 x16 Slot (PH, 10.5" L)

CPU1 CPU2

Cooling System	8x 4cm heavy duty fan(s)
Power Supply	1200W Redundant Power Supplies with PMBus Dimension (W x H x L): 73.5 x 40 x 203 mm Output Type: AC-Input
System BIOS	BIOS Type: AMI 32MB SPI Flash EEPROM
Management	SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; Intel® Node Manager; IPMI 2.0; Redfish API; Supermicro Out of Band (OOB) License (Included with Server)
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	Height: 1.7" (43 mm) Width: 17.2" (437 mm) Depth: 29.7" (754 mm) Gross Weight: 44.5 lbs (20.2 kg) Net Weight: 29.5 lbs (13.4 kg) Packaging: 7.99" (H) x 23.81" (W) x 37.4" (D) Available Color: Black Front & Silver Body
Operating Environment	Operating Temperature: 10°C ~ 35°C (50°F ~ 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-819U3TS-R1K22P-T

