

# UP SuperServer SYS-510P-WTR

1U WIO with 4 hot-swap 3.5" NVMe/SAS/SATA bays and 3 PCIe 4.0 x16 slots



More details here

## Key Applications

Virtualization, Cloud Computing, Enterprise Server, Data Center Optimized,

## Key Features

- Single Socket P+ (LGA-4189) 3rd Gen Intel® Xeon® Scalable processors. Up to 270W TDP.;
- 8 DIMMs; Supports 3DS DDR4-3200: RDIMM/LRDIMM/Intel® Intel® DCPMM;
- 2 PCIe 4.0 x16 (FHFL) slots, 1 PCIe 4.0 x16 (LP) slot;
- Intel® Ethernet Controller X550 2x 10GbE RJ45;
- 4x hot-swap 3.5" Hybrid SATA3/NVMe drive bays, SAS3 with additional SAS controller card; Onboard 1x NVMe/SATA M.2;
- Redundant Platinum 500W Power Supply;

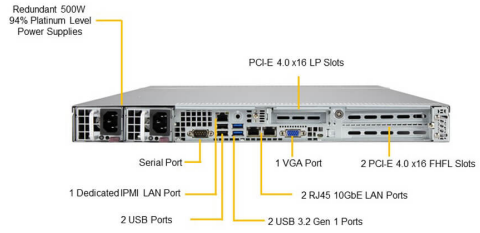


|                                 |   |
|---------------------------------|---|
| <b>Form Factor</b>              | <p>1U Rackmount</p> <p>Enclosure: 437 x 43 x 650mm (17.2" x 1.7" x 25.6")</p> <p>Package: 596.9 x 215.9 x 855.98mm (23.5" x 8.5" x 33.7")</p>   |
| <b>Processor</b>                | <p>Single Socket P+ (LGA-4189)</p> <p>3rd Gen Intel® Xeon® Scalable processors</p> <p>Up to 40C/80T; Up to 60MB Cache</p>   |
| <b>GPU</b>                      | <p>Max GPU Count: Up to 1 single-width GPU</p> <p>Supported GPU: NVIDIA PCIe: A2, T1000, T400</p> <p>CPU-GPU Interconnect: PCIe 4.0 x16 CPU-to-GPU Interconnect</p>   |
| <b>System Memory</b>            | <p>Slot Count: 8 DIMM slots</p> <p>Max Memory (1DPC): Up to 2TB 3200MT/s ECC DDR4 RDIMM/LRDIMM</p> <p>Supports Intel® Optane™ persistent memory 200 series</p>  |
| <b>Drive Bays Configuration</b> | <p>Default: Total 4 bays</p> <ul style="list-style-type: none"> <li>• 4 front hot-swap 3.5" PCIe 4.0 NVMe*/SAS*/SATA drive bays</li> </ul> <p>(*NVMe/SAS support may require additional storage controller and/or cables, please see the optional parts list for details)</p> <p>M.2: 1 M.2 PCIe 3.0 x4 NVMe/SATA slot (M-key 2280/22110)</p> <p>Peripheral Bays: 2 slim bays (optional)</p>  |
| <b>Expansion Slots</b>          | <p>Default</p> <ul style="list-style-type: none"> <li>• 2 PCIe 4.0 x16 FHFL slots</li> <li>• 1 PCIe 4.0 x16 LP slot</li> </ul>  |
| <b>On-Board Devices</b>         | <p>SATA: SATA (6Gbps) ; RAID 0/1/5/10 support</p> <p>NVMe: NVMe; RAID 0/1/5/10 support(Intel® VROC RAID key required)</p> <p>Network Connectivity: 2 RJ45 10GbE with Intel® X550</p>  |
| <b>Input / Output</b>           | <p>LAN: 2 RJ45 10 GbE LAN ports (Intel® X550)</p> <p>1 RJ45 1 GbE Dedicated BMC LAN port (IPMI shared on LAN port 1)</p> <p>USB: 2 USB 3.2 Gen1 Type-A ports(rear)</p> <p>2 USB 2.0 Type-A ports(rear)</p> <p>2 USB 3.2 Gen1 ports(Header)</p> <p>1 USB 3.2 Gen1 Type-A port</p> <p>1 USB 2.0 port(Header)</p> <p>Video: 1 VGA 2 port</p> <p>Serial: 1 COM port(Rear)</p> <p>1 COM port(Header)</p> <p>DOM: 2 SuperDOM (Disk on Module) portswith built-in power</p> <p>TPM: 1 TPM header</p> |

(Front View – System)



(Rear View – System)



**System Cooling**

Fans: Up to 5 counter-rotation PWM 40x40x56mm Fan(s)  
 Up to 1 AOC cooling Fan(s) (optional)  
 Air Shroud: 1 Air Shroud

**Power Supply**

2x 500W Redundant (1 + 1) Platinum Level (94%) power supplies

**System BIOS**

BIOS Type: AMI 32MB SPI Flash EEPROM

**Management**

SuperCloud Composer® (SCC); 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: 7+1 Phase-switching voltage regulator  
 Monitors for CPU Cores, Chipset Voltages, Memory  
 Fan: Fans with tachometer monitoring  
 Pulse Width Modulated (PWM) fan connectors  
 Status monitor for speed control  
 Temperature: Monitoring for CPU and chassis environment  
 Thermal Control for fan connectors

**Dimensions and Weight**

Weight: Gross Weight: 48 lbs (21.77 kg)  
 Net Weight: 24 lbs (10.89 kg)  
 Available Color: Black

**Operating Environment**

Operating Temperature: 10°C to 35°C (50°F to 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 X12SPW-TF](#)

**Chassis**

**CSE-815TS-R504WBP6**