



**EVOKING TRUST**



**RACK MOUNT SINGLE SOCKET 2 U  
SERVER/ MONITORING WORKSTATION**

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# Specification

## WAVESYS RACK MOUNT SINGLE SOCKET 2U SERVER/MONITORING WORKSTATION

**IP-03R-MNVR8B2U-32/50/100**



2U FRONT



2U BACK

1. 2nd Gen Intel® Xeon® Scalable Processors Single Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 165W TDP
2. Up to 1.5TB 3DS ECC RDIMM, DDR4-2933MHZ;  
Up to 1.5TB 3DS ECC LRDIMM, DDR4-2933MHZ,  
in 6 DIMM slots;
3. Up to 1TB Intel® Optane DC Persistent Memory  
in memory mode (Cascade Lake Only)
4. Intel® C621 Chipset
5. Expansion slots: 2 PCI-E 3.0 x16, 1 PCI-E 3.0 x8 (in x8)
6. 2 GbE LAN ports
7. 8 x 3.5" or 2.5" drive slots.
8. Supports 12V DC power input
9. I/O: 1 VGA, 2 COM, TPM header
10. 5 USB 3.0 (2 rear, 1 Type-A, 2 via header), 6 USB 2.0  
(2 rear, 4 via headers)
11. M.2 NGFF connector
  - M.2 Interface: PCI-E 3.0 x4
  - Form Factor: 2242, 2280
  - Key: M-Key
  - Double Height Connector
12. Dual/Quad Display

# Specification



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|--------------------------|---------------------|--|
| Physical Stats           | Form Factor         | 2U   |
|                          | Dimensions          | 9.6" x 9.6" (24.38cm x 24.38cm)  |
| Processor/ Cache         | CPU                 | 2nd Gen Intel® Xeon® Scalable Processors Single Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 165W TDP   |
|                          | Core                | Upto 28 core   |
|                          | Note                | <ul style="list-style-type: none"> <li>•BIOS version 3.0a or above is required to support 2nd Generation Intel® Xeon® Scalable Processors-SP</li> <li>•BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake-R)</li> </ul> |
| System Memory            | Memory Capacity     | <ul style="list-style-type: none"> <li>•Up to 1.5TB 3DS ECC RDIMM, DDR4-2933MHz</li> <li>•Up to 1.5TB 3DS ECC LRDIMM, DDR4-2933MHz, in 6 DIMM slots,</li> <li>•Up to 1TB Intel Optane DC Persistent Memory in memory mode (Cascade Lake Only)</li> </ul>                               |
|                          | Memory Type         | 2933/2666/2400/2133MHz ECC DDR4 RDIMM, LRDIMM  |
|                          | DIMM Sizes          | <ul style="list-style-type: none"> <li>•RDIMM: 8GB, 16GB, 32GB, 64GB</li> <li>•LRDIMM: 32GB, 64GB, 128GB</li> <li>•3DS LRDIMM: 64GB, 128GB, 256GB</li> </ul>   |
|                          | Memory Voltage      | 1.2V   |
|                          | Error Detection     | Corrects single-bit errors   |
| On-Board                 | Chipset             | Intel® C621  |
|                          | SATA                | 8 slots(6Gbps)<br><br>RAID 0,1,5,10  |
|                          | IPMI                | ASPEED AST2500   |
|                          | Network Controllers | Dual LAN with 1GbE with Intel® X722+ Marvell 88E1512   |
|                          | Graphics            | Nvidia Quadro T400 2GB DDR6  |
| Input / Output           | LAN                 | 2x1GbE LAN ports   |
|                          | USB                 | 6 USB 2.0 ports (2 rear + 4 headers)<br>5 USB 3.0 ports (2 rear + 2 headers + 1 Type A)  |
|                          | Video Output        | 1 VGA port /2 HDMI port  |
|                          | Serial Port/Header  | 2 COM Port (1 rear )   |
|                          | TPM                 | TPM Header   |
| Storage and Power Supply | Drive Slots         | 8 x 3.5" or 2.5" drive slots   |
|                          | Power Supply        | 1+1 500W Redundant Power supply  |

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|-----------------------|--|---|
| Expansion Slots       | PCI-E  | 2 PCI-E 3.0 x16,<br>1 PCI-E 3.0 x8  |
|                       | M.2  | <ul style="list-style-type: none"> <li>• M.2 Interface: PCIE 3.0 x4</li> <li>• Form Factor: 2242,2280</li> <li>• Key: M-Key (RAID 0,1 support)</li> <li>• Double Height Connector</li> </ul>  |
| System BIOS           | BIOS Type  | AMI UEFI  |
|                       | BIOS Features                                      | <ul style="list-style-type: none"> <li>•ACPI 6.0</li> <li>•RTC ( Real Time Clock Wakeup)</li> <li>•SMBIOS 3.0 or later</li> </ul>   |
| Management            | Software   | Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, Watchdog   |
|                       | Power Configurations                               | <ul style="list-style-type: none"> <li>•ACPI Power Management</li> <li>•Power-on mode for AC power recovery</li> </ul>  |
| PC Health Monitoring  | Voltage  | +1.8V, +12V,+3.3V,+5V,+5V standby, 3.3V standby, 8-fan status, Chassis intrusion header, Monitors CPU voltages, Supports system management utility, VBAT  |
|                       | FAN  | 8x 4-pin fan headers (up to 8 fans), Fan speed control Overheat LED indication, PWM fan speed control, System level control   |
|                       | Temperature LED                                    | CPU thermal trip support, PECL CPU/System Overheat LED, UID/Remote UID, Suspend static indicator LED  |
|                       | Other Features                                     | ACPI power management, Control of power-on for recovery from AC power loss, CPU thermal trip support for processor protection, M.2 NGFF connector, ROHS, UID, WOL   |
| Operating Environment | Operating Temperature Range                        | 0°C ~60°C (32°F~140°F)  |
|                       | Non-Operating Temperature Range                    | -20°C~60°C (-4°F~140°F)   |
|                       | Operating Relative Humidity Range                  | 10%~85% (non-condensing)  |
|                       | Non-Operating Humidity Range                       | 10% ~ 95% (non-condensing)  |
| Application software  | Optional Application Software Preloaded at Factory | <ol style="list-style-type: none"> <li>1. Video Management software-WVMS</li> <li>2. Video Content Analytics-WVCA</li> <li>3. Face recognition Software- WVMS-FR</li> <li>4. Licence Plate Recognition Software-WVMS-LPR</li> </ol> |