

# SKY-6420

## 4U Rackmount Intel® Xeon® Scalable Series GPU Server, Supporting 10 x PCIe x16 Double-Deck Cards Plus 1 x PCIe x16 and 1 x PCIe x8 Single-Deck Cards



### Features

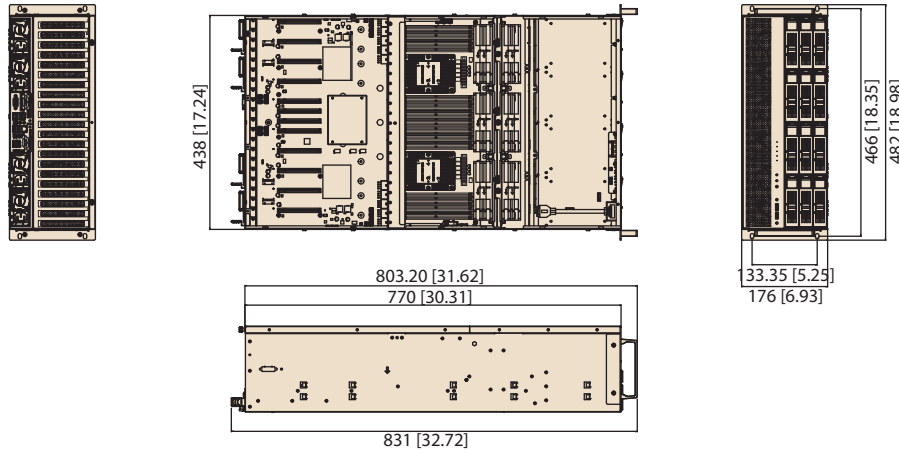
- Processor: Dual Intel® Xeon® Scalable Series
- Memory: 24 x DDR4 REG 2666/2400/2133/1866 MHz DIMM / Intel Optane DC Persistent Memory, up to 6TB
- Remote Management: IPMI function support
- Expansion: Supporting 10 \* PCIe x16 double-deck card with peer to peer feature + 1\* PCIe x16 single-deck FH/HL card + 1\*PCIe x8 card
- PSU: 4800W 3+1 redundant power supply with 80 PLUS Platinum level certification
- Easy maintenance system fan: 6 x 12CM system fan with Hot-Swappable feature

### Specifications

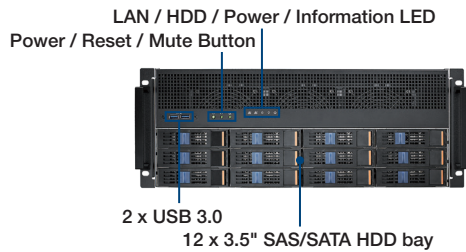
|                          |                                  |   |                                      |
|--------------------------|----------------------------------|---|--------------------------------------|
| Processor System         | Chipset                          | Intel C622 Chipset  |                                      |
|                          | CPU                              | Dual Intel LGA 3647-P0 for Intel® Xeon® Scalable Series processor (up to 160W TDP)        |                                      |
|                          | Memory                           | 24 x DDR4 REG 2666/2400/2133/1866 MHz DIMM / Intel Optane DC Persistent Memory, up to 6TB |                                      |
| Graphics                 | Controller                       | Aspeed AST2500  |                                      |
|                          | VRAM                             | 64 MB   |                                      |
| Expansion Slot           | Slot 1                           | PCIe x16 slot (Gen3 x16 link), for double-deck 4.376"(H)/10.5"(L) expansion cards         |                                      |
|                          | Slot 2                           | PCIe x16 slot (Gen3 x16 link), for double-deck 4.376"(H)/10.5"(L) expansion cards         |                                      |
|                          | Slot 3                           | PCIe x16 slot (Gen3 x16 link), for double-deck 4.376"(H)/10.5"(L) expansion cards         |                                      |
|                          | Slot 4                           | PCIe x16 slot (Gen3 x16 link), for double-deck 4.376"(H)/10.5"(L) expansion cards         |                                      |
|                          | Slot 5                           | PCIe x16 slot (Gen3 x16 link), for double-deck 4.376"(H)/10.5"(L) expansion cards         |                                      |
|                          | Slot 6                           | PCIe x16 slot (Gen3 x16 link), for single-deck add on cards.                              |                                      |
|                          | Slot 7                           | PCIe x16 slot (Gen3 x8 link), if Slot8 populated with single-deck add on card             |                                      |
|                          | Slot 8                           | PCIe x16 slot (Gen3 x16 link), for double-deck 4.376"(H)/10.5"(L) expansion cards         |                                      |
|                          | Slot 9                           | PCIe x16 slot (Gen3 x16 link), for double-deck 4.376"(H)/10.5"(L) expansion cards         |                                      |
|                          | Slot 10                          | PCIe x16 slot (Gen3 x16 link), for double-deck 4.376"(H)/10.5"(L) expansion cards         |                                      |
|                          | Slot 11                          | PCIe x16 slot (Gen3 x16 link), for double-deck 4.376"(H)/10.5"(L) expansion cards         |                                      |
|                          | Slot 12                          | PCIe x16 slot (Gen3 x16 link), for double-deck 4.376"(H)/10.5"(L) expansion cards         |                                      |
| Drive Bay                | 2.5" (Internal)                  | -   |                                      |
|                          | 3.5" (Front Accessible/Hot Swap) | 12 (support 2.5"/3.5" drive)  |                                      |
| Ethernet                 | Interface                        | 2 x 10GbE   |                                      |
|                          | Controller                       | Intel X557-AT2  |                                      |
| Front I/O Interface      | USB                              | 2 x USB 3.0   |                                      |
|                          | USB                              | 4 x USB 3.0   |                                      |
| Rear I/O Interface       | PS/2                             | -   |                                      |
|                          | COM                              | 2 (Optional)  |                                      |
|                          | Display                          | 1 x VGA   |                                      |
|                          | RJ-45                            | 3 (1 is dedicate NIC for IPMI)  |                                      |
| Internal connector       | USB                              | 3 (2 USB3.0, 1 USB 3.0 Type-A)  |                                      |
|                          | COM                              | 2   |                                      |
|                          | LPC                              | -   |                                      |
| Watchdog Timer           | Output                           | System reset  |                                      |
|                          | Interval                         | Programmable, 1~255 sec   |                                      |
| Power Supply             | Power Output Wattage             | 80 PLUS Platinum 3+1 4800W redundant Power Supply (Depends on input voltage)              |                                      |
|                          | Input Range (each unit)          | 100-127 V <sub>AC</sub> (Output: 1000W)<br>200-240V <sub>AC</sub> (Output: 1600W)         |                                      |
| Cooling                  | Chassis Fan                      | 6 x 120 x 38 (Internal) + 4 x 80 x 38 (External, Optional)                                |                                      |
|                          | Air Filter                       | -   |                                      |
| Miscellaneous            | LED Indicators                   | Power status, System Information, HDD activity, LAN1 & LAN2                               |                                      |
|                          | Front Button                     | Power, Reset, PSU Alarm Mute  |                                      |
|                          | Remote Management                | Advantech Remote Monitoring Utility   |                                      |
| Environment              | Temperature                      | Operating   | Non-Operating                        |
|                          |                                  | 0 ~ 35° C (32 ~ 85° F)  | -40 ~ 60° C (-4 ~ 140° F)            |
|                          | Humidity                         | *0 ~ 30° C (32 ~ 85.9° F) for NVidia Tesla V100   | 95% @ 60° C                          |
|                          | Vibration (5 ~ 500 Hz)           | 0.25 Grms   | 2 G (unit only)/2.16G (with packing) |
|                          | Shock                            | 5G (with 11ms duration, half since wave)  |                                      |
| Physical Characteristics | Dimension (W x H x D)            | 438 x 176 x 770 mm (17.24" x 6.93" x 30.31")  |                                      |
|                          | Package Dimension (W x H x D)    | 685 x 400 x 1050 (26.96" x 15.74" x 41.33")   |                                      |
|                          | Weight (N.W. / G.W.)             | 28kg / 41kg   |                                      |

## Dimensions

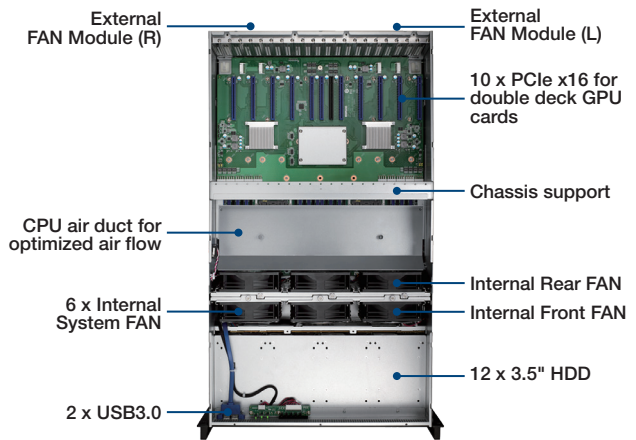
Unit: mm [inch]



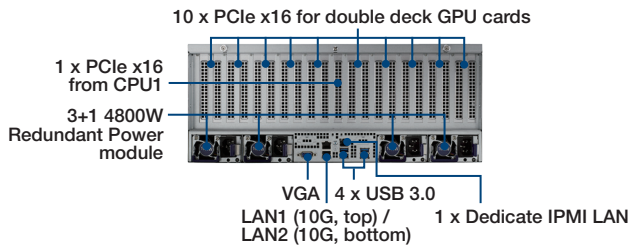
## Front View



## Inside View



## Rear View



## Ordering Information

| Part Number    | HDD | M.2 2280 | VGA Chip | RJ45 | IPMI | Power supply  |
|----------------|-----|----------|----------|------|------|---------------|
| SKY-6420-R48A1 | 12  | 1        | AST 2500 | 3    | YES  | 3+1 4800W RPS |

## System Contents

| Items  | Advantech P/N  | Quantity |
|--|----------------|----------|
| CPU Heatsink                                 | 1960081155N101 | 2        |
| CPU Clip for Heatsink                        | 1651003167-01  | 2        |
| Startup Manual                               | 2041642000     | 1        |
| GPU Extend Bracket                           | 1960087346N000 | 10       |
| Add on Card Bracket for Thermal Optimization | 1960086607N000 | 7        |

## Optional Accessories

| Part               | Number Description  |
|--------------------|---|
| PCA-TPM-00A1E      | TPM Module  |
| 1700019414         | COM port cable (1 port)   |
| 968AE00066         | Slide Rail  |
| 1700024753-01      | GPU Power cable for CPU-8P (15CM) For Tesla GPU card with CPU-8P connector                          |
| 1700030122-01      | GPU Power cable for PCIe 8P+8P (30CM) For Quadro/RTX/Titan GPU card with PCIe power connector.      |
| 96CB-MSASH-MSASH-1 | mSASHD to mSASHD 100cm for RAID card cable out at top side  |
| 1700025065-01      | mSASHD to mSASHD 85cm for RAID card cable out at rear side  |
| 98R16420100        | Internal hot-swappable FAN kit (Front)  |
| 98R16420200        | Internal hot-swappable FAN kit (Rear)   |
| 98R16420300        | External Optional FAN Kit (Left)  |
| 98R16420400        | External Optional FAN Kit (Right)   |
| 98R16420500        | Optional top cover for RTX / Titan GPU card. With this cover, system will exceed standard 4U height |