

## NEPTUNE 2U-AS

COMPACT 2U, HIGH-DENSITY, INTEL® 6TH GENERATION XEON®, 16" DEEP, ALUMINUM, RACKMOUNT SERVER

### PROCESSOR

- (2) LGA 4710 processor sockets
- Supports up to (2) 6th Gen. Intel® Xeon® Scalable Processors (Max TDP 350W)
- 6700E/P or 6500P Series System-on-Chip (Chipset)

### MEMORY

- (16) DIMM Slots (8 per CPU)
- DDR5 ECC memory
- 1.1V modules: up to 6400 MT/s
- MCRDIMM up to 8000 MT/s (requires P Series processor)

### NETWORK

- (2) 10GbE RJ45 LAN
- (2) 1GbE RJ45 LAN
- (1) 1GbE RJ45 management LAN

## PRODUCT DESCRIPTION

The Jensen Beach Technologies Neptune 2U-AS is a compact, modular 2U rugged rackmount server designed for high-performance computing in space-constrained and environmentally demanding deployments. Constructed from corrosion-resistant machined aluminum and measuring only 16 inches in system depth, the Neptune 2U-AS is engineered for installations where depth limitations and environmental exposure are critical design factors.

The platform supports dual 6th Generation Intel® Xeon® Scalable processors and incorporates a dual-ROM architecture to enhance firmware resiliency and system reliability. Designed and assembled in the United States, the Neptune 2U-AS platform is configurable to meet specific program, mission, or application requirements.

## ADDITIONAL SPECIFICATIONS

### PCIe Expansion

- Up to (6) PCIe Gen5 x16 expansion slots depending on configuration
- (1) PCIe Gen5 x16 expansion slot in GPU configuration

### Removable Storage

- (4) U.2 SSDs, up to 15mm SATA 3 or NVMe PCIe Gen5 x4

### Video Output

- (1) VGA

### USB

- (2) USB-C 3.2 (Front)
- (2) USB-A 3.2 (Front)
- (2) USB-A 3.2 (Rear)

### Serial Ports

- (1) RJ45

### Internal Storage

- (2) M.2 slots with PCIe Gen4 x4 interface
- Supports 2280 and 22110 sizes

### Power Supplies

- (2) CRPS units

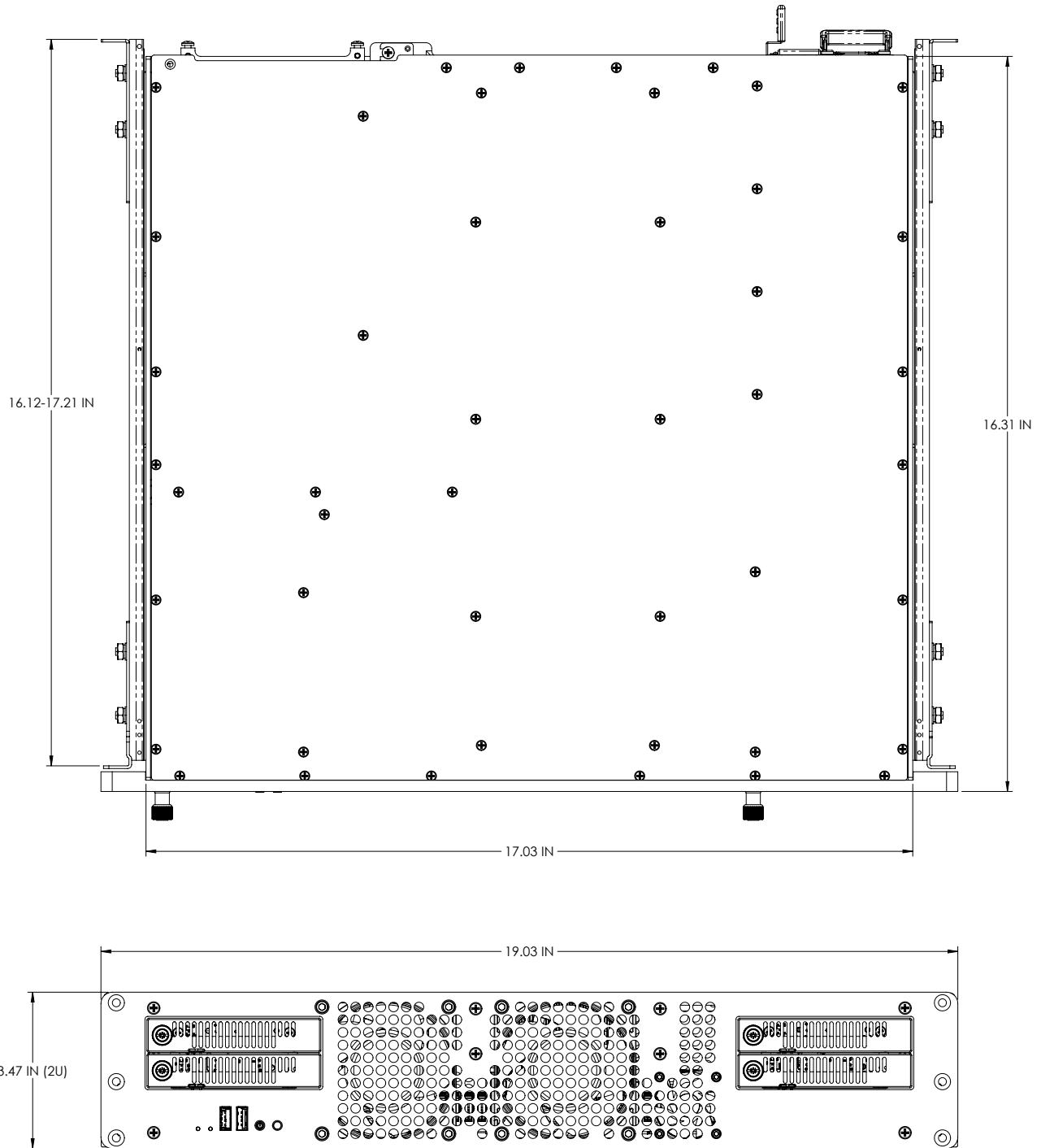
### Security Features

- Optional TPM 2.0
- Optional ProT Module

### Verified Compatible OS

- RHEL 6.8
- RHEL 7
- Windows Server 2022
- CentOS 7

## DIMENSIONAL DRAWING



### RUGGEDIZATION LEVEL 1 – INDUSTRIAL

- Operating Temp: 0°C to +55°C
- Storage Temp: -50°C to +100°C
- Vibration: 0.002 g/Hz (10–2000 Hz random), 2 g sinusoidal (5–500 Hz)
- Shock: 20 g peak sawtooth, 11 ms
- Humidity: Up to 95% RH

### RUGGEDIZATION LEVEL 2 – EXTENDED

- Operating Temp: -20°C to +65°C
- Storage Temp: -50°C to +100°C
- Vibration: 0.002 g/Hz (10–2000 Hz random), 2 g sinusoidal (5–500 Hz)
- Shock: 20 g peak sawtooth, 11 ms
- Humidity: Up to 95% RH with varying temperature, 10 cycles, 240 hours

### RUGGEDIZATION LEVEL 3 – RUGGED

- Operating Temp: -40°C to +75°C
- Storage Temp: -50°C to +100°C
- Vibration: 0.04 g/Hz (20–2000 Hz with a flat response to 1000 Hz), 6dB/octave roll-off from 100 to 2000Hz
- Shock: 40 g peak sawtooth, 11 ms
- Humidity: Up to 95% RH with varying temperature, 10 cycles, 240 hours