



TRITON 1U-SX

COMPACT 1U, HIGH-DENSITY, INTEL® 5TH GENERATION XEON®, 20" DEEP, RACKMOUNT SERVER

PROCESSOR

- (2) LGA 4677 processor sockets
- Supports up to (2) 5th Gen. Intel® Xeon® Scalable Processors
- Intel® C741 Chipset

MEMORY

- (16) DIMM Slots (8 per CPU)
- DDR5 ECC memory
- 1.1V modules: up to 5600 MT/s
- Up to 2 TB RAM

NETWORK

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

PRODUCT DESCRIPTION

The Jensen Beach Technologies Triton 1U-SX is a compact, modular 1U rugged rackmount server designed for high-performance computing in space-constrained environments. The platform supports Intel® 5th Generation Xeon® Scalable processors and provides extensive I/O, storage, and expansion flexibility for mission-critical and industrial applications.

With a chassis depth of approximately 20 inches, the Triton 1U-SX is well suited for deployment in vehicles, shelters, aircraft racks, and other installations where depth and weight are constrained. Systems are designed and assembled in the United States and can be configured to meet specific program and environmental 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

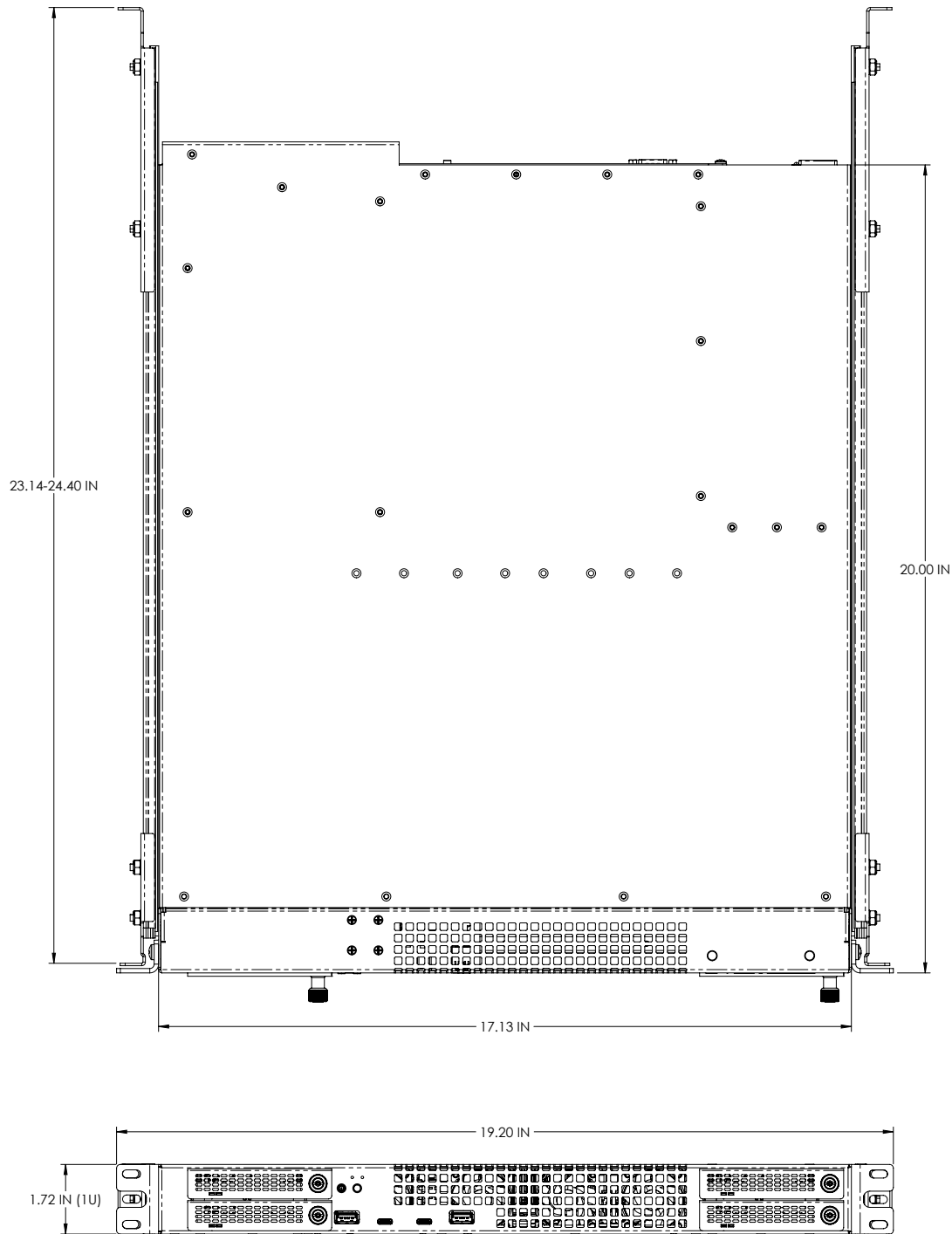
Security Features

- Optional TPM 2.0

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