CORE SYSTEMS

RUGGED M316S SERVER

Military-Grade Rugged 3U Rackmount Server

The **M316S** is a rugged 3U short-depth server built for high-performance computing in space-constrained, mission-critical environments. Designed with a durable sheet-metal and all-aluminum chassis, it is SWaP-optimized for reliable operation in demanding conditions. Tested to meet military specifications, it features shock-mounted, hot-swappable drives, secure cable retention, and transit-ready options for mobile deployments.

Powered by the latest Intel® Xeon® processors and supporting the latest NVIDIA® GPUs, the M316S delivers strong compute and graphics performance for data-intensive applications. With six full-height PCIe slots, flexible storage, and robust I/O expandability, it's ideal for defense, aerospace, and industrial workloads requiring scalable performance in a compact rugged form factor.

- Application-specific design
- Tested to meet military standards
- Built in the USA

Featured Specifications

CPU
Latest Intel Xeon Scalable Processor

GPU
Latest NVIDIA GPU Graphics Card

RAM
Up to 2TB

Power
Power options available

Chassis Type
Aircraft-Grade Aluminum

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Technical Specifications

Dimensions
Height: 5.25 inches, Width: 17.00 inches, Depth: 16.00 inches
Weight: 30-35.00 lbs

CPU
Latest Intel Xeon Scalable Processor

GPU
Latest NVIDIA GPU Graphics Card

RAM
Up to 2TB

Expansion Slots
Qty: 6, low profile

External Bays
Qty: 2

USB Ports
Qty: 4

Power Supply
28VDC, 600W AC

PCIE Expansion
Multiple slot combinations available

Storage SSD
Up to 15.36TB NVMe

System Board
Extended ATX Motherboard

Cooling
80mm high speed, high volume fans

Environmental Specifications

Operational Temperature
MIL-STD-810F, Method 501.5, Procedures I/II: -15°C to +55°C

Storage Temperature
MIL-STD-810F, Method 501.5, Procedures I/II: -15°C to +55°C

Humidity
MIL-STD-810F, Method 507.4: 95% RH, 48 hours at 40 – 65°C

Altitude
MIL-STD-810F, Method 500.4: 12,500 ft operation; 40,000 ft transport

Vibration
MIL-STD-810G, Method 514.6: 4.43 GRMS, 5-20000Hz, 60 min/axis

Shock
MIL-STD-810G, Method 516.6: 20g, 11ms functional; 40g, 11ms crash hazard

EMC
MIL-STD-461F: CE & RE emissions

Work With Core Systems Today

Core Systems designs and builds rugged servers, displays, mission computers, and integrated cabinet solutions for military and industrial applications. From our 85,000 sq. ft. San Diego facility, we deliver cutting-edge, durable computing solutions for mission-critical needs.

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