



RUGGED F420 SERVER

Military-Grade 4U Rugged Rackmount Server

The **F420** is a rugged 4U server built for high-performance computing in the most demanding and mission-critical environments. Designed in a durable, short-depth chassis, it's SWaP-optimized for military, aerospace, and industrial platforms that require scalable, field-ready performance. With shock-rated internals, and front-access I/O, the F420 ensures durability and reliability in extreme conditions.

Powered by the latest Intel® Xeon® scalable processors, and supporting up to dual-slot NVIDIA RTX GPUs, the F420 delivers exceptional graphics, compute, and AI performance. With tool-less drive access, high-speed cooling, and MIL-STD-810F/G compliance, the F420 is ideal for field-deployed compute systems, rugged edge environments, and real-time data processing applications.

- 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

28VDC, 500W AC

Chassis Type

Aircraft-Grade Aluminum



Technical Specifications

Dimensions

Height: 7.00 inches, Width: 17.75 inches, Depth: 20.00 inches
Weight: 45-50 lbs

CPU

Latest Intel Xeon Scalable Processor

GPU

Latest NVIDIA GPU Graphics Card

RAM

Up to 2TB

Expansion Slots

Qty: 14, full height

External Bays

Qty: 12

USB Ports

Qty: 8

Power Supply

28VDC, 500W AC

System Board

Extended ATX Motherboard

Storage SSD

Up to 15.36TB NVMe

Cooling

Thermostatically controlled via motherboard

Chassis Type

Lightweight aluminum chassis

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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