



Rugged F420 4U Server

Short-Depth SWap-Optimized 4U Server



The F420 Raptor is a rugged 4U server designed to be ultra light with enormous cooling power for flight operations (the F420 has been flight tested to 30,000ft. sustained altitude). The machined aircraft aluminum chassis provides a superior strength to weight ratio and was designed to meet MIL-STD 810F, 167-1, and 461E. The F420 features up to four shock mounted hot swap 2.5" drives (standard or SSD), 7 available full-length slots with card hold downs, and 315 CFM of airflow. All internal cabling is customized and secured to the chassis to optimize airflow and system cooling. The F420 server is built to survive high shock and vibration environments and can be custom configured to meet specific program requirements.

Rugged Military Grade 4U Server

Chassis Height and Depth: 4U, 20" short depth chassis

Drive Count: Four (4) removable hot swap SATA or SAS 2.5 or 3.5 HDDs

CPU Series: X5550 2.66GHz Intel Nehalem Processor (Quad-Core) LGA1366

Power Supply Option: Input 100 to 240 VAC, Output Power 800W

Type of Chassis: Lightweight aluminum chassis



Technical Specifications

Environmental Specifications:	Operational Temperature Range: MIL-STD-810F/G, Method 501.5, Procedures I/II; -10C to +50C with solid state drives Storage: MIL-STD-810F/G, Method 501.5, Procedures I/II; -40C to +75C Humidity: MIL-STD-810F/G, Method 507.4; 48 hour, 95% RH 40-65C with humidity option Altitude: MIL-STD-810F/G, Method 500.4; 12,500ft operation with 40,000ft transport Vibration: MIL-STD-810F/G, Method 514.6 Procedure I; 4.43 GRMS, 5-20000Hzz, 60min/axis with solid state drives Shock: MIL-STD-810F/G, Method 516.6, Procedures I/V; 20g, 11msec functional shock; 40g 11msec crash hazard shock Other: MIL-STD-461F/G CE102 & RE102; Meets using CORESYSTEMS optional 461 EMI Kit
Mechanical:	Height - 7.00 in (17.78 cm), Width - 19.00 in (48.26 cm), Depth - 20.00 in (50.8 cm), Weight - 45 lbs (20.41 kg)
CPU:	X5550 2.66GHz Intel Nehalem Processor (Quad-Core) LGA1366
Expansion Slots:	Two (2) processor – LGA1366 Socket; Twelve (12) memory – DIMM 240-pin; One (1) PCI Express 2.0 x16 – full-length, full-height (x8 mode); Three (3) PCI Express x8 – full-length, full-height; One (1) PCI Express x8 – full-length, full-height (x4 mode); One (1) PCI (5V)
Drive Bays:	2- 3½ inch external; DVDRW optional external
Cooling:	3 x 120mm (205 CFM ea.) front mount
Power Supply Options:	Input 100 to 240 VAC, 50/60Hz auto switching; Output Power 800W
System Board:	ATX 12 inches by 13 inches
Rear I/O:	Four (4) Hi-Speed USB – 4 pin USB Type A; Two (2) Network – Ethernet 10Base-T/100Base-TX/1000Base-T – RJ-45; One (1) Display / video – VGA – 15 pin HD D-Sub (HD-15); One (1) Serial – RS-232 – 9 pin D-Sub (DB-9) surround; One (1) E-SATA port

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