

Sun Fire™ X4500 Server

The industry's first data server



Highlights

- Highest storage density available with 48 hot-swappable SATA HDDs (24 TB in a 4U form factor)
- Jaw-dropping prices—half the cost of traditional solutions
- Unprecedented data integrity and dramatically simplified administration with the Solaris™ OS and Solaris ZFS
- Incredibly high throughput rates—demonstrated up to one GB/s from disk to network and up to two GB/s from disk to memory
- The Sun Fire™ X4000 family of servers raises the bar for industry-standard servers
- Four integrated Gigabit Ethernet ports for maximum network expandability
- Provision, monitor, and manage with the recommended Sun N1™ System Manager
- Supports RHEL 4 U4 Linux and Windows 2003
- Try risk-free for 60 days. Sign up for a free trial at sun.com/tryandbuy



Sun is changing the server landscape by defining the data server. The Sun Fire™ X4500 server, the world's first data server, integrates powerful AMD Opteron™ processors with massive data storage and throughput. The server delivers the highest storage density available, incredibly high throughput rates, and jaw-dropping prices. Customers can deploy applications in ways that previously were not possible—or cost-effective.

Get ahead and stay ahead

By integrating state-of-the-art server and storage technologies, the Sun Fire X4500 server delivers the remarkable performance of a four-way x64 server, the highest storage density available (with 24 TB in 4U of rack space), and incredibly high data throughput at very low cost. This allows customers to host their applications and data on a single integrated platform with breakthrough pricing of \$2/GB.¹ For applications that are driven by storage density, high-bandwidth requirements, and lowest cost, the Sun Fire X4500 server delivers the highest storage density available (approximately two to five times the density of alternatives) and incredibly high throughput rates (demonstrated up to one GB/s from disk to network and up to two GB/s from disk to memory)²—at half the cost of traditional solutions. Plus, it runs virtually any x86 application.

Designed from the ground up to facilitate system management, the Sun Fire X4500 server's architecture provides Sun's Integrated Lights Out Manager (iLOM) as well as state-of-the-art remote automation that integrates at the datacenter level. With zero-touch capabilities managed through a variety of interface options, the architecture simplifies installation, deployment, and maintenance. The Sun Fire X4500 server also features one of the most advanced file systems, Solaris ZFS, which delivers groundbreaking capabilities by automating administrative tasks, protecting data from corruption, and providing virtually unlimited scalability.

The Sun Fire x4500 server is available as a Sun System Pack which combines the server with the right services, helping customers to get the most value from their assets.

¹ Specific configurations only
² Specific benchmark configurations only

Sun Fire X4500 Server Specifications

Architecture

Processor

- Two dual-core AMD Opteron processors, Model 285

Cache

- One-MB Level 2 per core

Main memory

- Eight DDR-I DIMM slots (four DIMM slots per CPU socket); 16 GB with two-GB DIMMS

System architecture

- 8.0 GB/s HyperTransport link with 6.0 GB/s access between processor and memory

Hard disk

Hard disk supported

- 48 hot-swappable, 3.5-inch SATA II HDD internal disks: 500-GB 7, 200-RPM disks available; 24 TB total

RAID configuration

- Software RAID enabled by RAID-Z in Solaris ZFS, other Linux, or Window RAID code

Standard/integrated interfaces

- Network: Four 10/100/1000Base-T Ethernet ports, RJ45 connector
- Network management: One dedicated 10/100Base-T Ethernet port, RJ45 connector
- Serial: One TIA/EIA-232-F asynchronous, RJ45 connector
- SATA: Six eight-port SATA controllers, internal access only
- USB: Four USB 2.0 ports (two front and two rear)
- Video: VGA video port
- Expansion slots: Two internal MD2 low-profile 64-bit PCI-X slots @ 133 MHz

Software

Operating systems

- Solaris 10 Operating System preinstalled
- Standard Linux distributions, RHEL 4 U4, 64-bit
- Windows 2003 Standard and Enterprise version 32-bit and 64-bit

Languages

- C/C++, FORTRAN
- Java™ programming language
- All other standard Sun-supported languages

Networking

- ONC™, ONC+™, NFS™, WebNFS™, TCP/IP, SunLink™, OSI, MHS, IPX™/SPX, SMB technologies, and XML

Management

- Integrated Lights Out Manager (ILOM) service processor providing: CLI (in-band and out-of-band), IPMI 2.0 (in-band and out-of-band), SNMP (out-of-band only)
- Sun N1™ System Manager—manage from one to hundreds of systems from a central location

Environment

AC power

- 200-240 V AC, 50-60 Hz, 10 A

Operating temperature/humidity (single nonrack system)

- 5°C to 32°C (37°F to 91°F), 10-90 percent relative humidity, noncondensing, 27°C max. wet bulb

Nonoperating temperature/humidity (single, nonrack system)

- -40°C to 65°C (-40°F to 149°F), up to 93 percent relative humidity, noncondensing, 38°C max. wet bulb

Operating altitude (single nonrack system)

- Up to 3048m; maximum ambient temperature is derated by 1°C per 300m above 900m

Nonoperating altitude (single nonrack system)

- Up to 4000m

Acoustic noise (single nonrack system)

- LwAd (1B = 10 dB): At or below 25°C, 7.5B, at max. ambient, 8.5B
- LpAm bystander: At or below 25°C, 65 dB, at max. ambient, 75 dB

Mounting option

- 19-inch rackmount kit

Learn More

Available as a Sun System Pack. Maximize IT value while lowering total cost of acquisition and ownership. For more information on the Sun Fire X4500 server, visit sun.com/x4500

Power

- Dual-redundant, hot-swappable power supply
- UL maximum input power: 1,800W
- Power supply output rating: 1,500W
- Maximum system consumption 1,100W

Regulations (meets or exceeds)

- Safety: IEC60950, UL/CSA60950, EN60950, CB scheme with all country differences
- RFI/EMI: FCC Class A, Part 15 47 CFR, EN 55022, CISPR 22, EN300-396: v1.31, ICES-003
- Immunity: EN55024, EN300-386:v1.3.2

Certifications

- Safety: cULus Mark, CE Mark, GOST R, S-Mark
- EMC: CE Mark (93/68/3EEC); Emissions and Immunity—Class A Emissions Levels: FCC, VCCI, C-Tick, MIC, GOST R2, BSMI2
- Other: Labeled per WEEE (Waste Electrical and Electronic Equipment) Directive

Dimensions and weight

Height

- 6.89 inches/175.05 mm

Width

- 17.28 inches/439 mm

Depth

- 29.52 inches/749.90 mm

Weight

- 170 lbs./77 kg

Warranty

- Two-year, next business day