

Sun Fire™ V445 Server

Setting the standard in network computing



Key Feature Highlights

- Up to four 1.6 GHz UltraSPARC® IIIi CPUs, each with 1 MB L2 cache
- 32 GB memory capacity
- Integrated SAS disk controller
- Four 10/100/1000 Mb/second Ethernet ports
- Solaris™ 10, Solaris 9 Operating System
- Enhanced availability features, including hot-swap disks, cooling fan trays and power supplies
- Eight I/O expansion slots, four PCI-X and four PCIe
- Rack-optimized, 4 RU enclosure
- Hardware RAID 0, 1, and 10
- Front and rear power and fault LED indicators
- Advanced Lights Out Manager
- Socketed System Configuration Card (SSCC) allows system identity to be transferred to standby systems
- Protect your IT investments while improving performance with the Sun Upgrade Advantage Program. Learn more at sun.com/tradeins

Value, Performance and Manageability

Powered by up to four 1.6 GHz UltraSPARC® IIIi processors, the SunFire™ V445 server is a data-center class, entry-level server for Solaris™ applications that provides value, performance and manageability. Hot-plug, front-accessible disk drives; redundant power supplies; cooling fan trays; and a Socketed System Configuration Card that permits easy and quick identity transfer enhance the Sun Fire V445 server's reliability. Easily visible system and component LEDs provide service features that help enable quick diagnosis and repairs, while the system's Advanced Lights Out Management (ALOM) provides remote management and diagnostic capabilities. Features such as eight PCI slots (4 PCI-X and 4 PCIe), four 10/100/1000 Mb/s Ethernet ports, up to eight disk drives, and 32 GB of memory provide scalability for the Sun Fire V445 server – all in a rack-optimized compact, 4 RU package.

Value

UltraSPARC IIIi delivers price/performance and rock-solid Solaris reliability in a rack-optimized enclosure on an entry-level server. Customers can run demanding, mission-critical applications in a low-cost, secure environment.

Low-Cost Network Computing

UltraSPARC IIIi processors and support for the Solaris Operating System, Sun Java™ Enterprise System software, and Sun™ Cluster 3.0 make the Sun Fire V445 the ideal server for Web infrastructure computing, corporate compute farms, hosting, and custom-application deployment.

Reducing Complexity

Advanced Lights Out Management (ALOM) provides remote management functionality, lowering the requirement for onsite staff. The Socketed System Configuration Card increases availability by allowing quick and easy system ID transfer. Support for the Sun™ Install Checker tool enables customers to confirm proper initial system configuration and installation.

Improve TCO

Low acquisition and support costs, low power and cooling requirements, and binary compatibility provide greater flexibility in high-density, horizontal-scaling environments.

Sun Fire V445 Server Specifications

Architecture

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|--------------|---|
| Processor | Two to four UltraSPARC IIIi 1.6 GHz |
| Architecture | 64-bit, 4-way superscalar SPARC® V9 |
| Cache | 64 KB data, 32 KB instruction and 1 MB integrated L2 |

Main Memory

4 DIMM slots per processor, DDR-1 SDRAM system configurations from 4 GB to 32 GB

Standard/Integrated Interfaces

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|------------------------------------|--|
| Network | Four 10/100/1000Base-T Ethernet |
| Network Management | One 10Base-T Ethernet |
| Serial Management | One TIA/EIA-232-F (RJ45) port |
| Serial | One TIA/EIA-232-F asynchronous (DB9) port |
| USB | Four USB 2.0 compliant ports supporting speeds up to 480 Mbps |
| Expansion Bus | Four full-height PCIe Four full-height PCI-X |
| Socketed System Configuration Card | Front-accessible for transfer of system configuration information, including host ID |

Mass Storage and Media

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|---------------|---|
| Internal Disk | Eight hot-plug 10,000-rpm SAS 73 GB disks |
| Internal DVD | One Slimline ATAPI combination CD/DVD-RW |
| External Disk | Sun StorageTek A5100/5200 Arrays Sun StorageTek S1 Array Sun StorageTek 3120 SCSI Array Sun StorageTek 3310 SCSI Array Sun StorageTek 3320 Array Sun StorageTek 3510/3511 FC Arrays Sun StorageTek 3910/3960 Arrays Sun StorageTek 6120 Array Sun StorageTek 6130/6140 Arrays Sun StorageTek 6320 Array Sun StorageTek 6540 Array Sun StorageTek 6920 Array Sun StorageTek 5210 NAS Array Sun StorageTek 5310 NAS Array Sun StorageTek 6960 Array Sun StorageTek 9900 series Sun StorageTek 9940 systems Sun StorageTek T3A/T3B Arrays |
| External Tape | Sun StorageTek DAT 72 tape drive Sun StorageTek LTO 2 Sun StorageTek LTO 2 Sun StorageTek LTO 3 Sun StorageTek SDLT 600 Sun StorageTek C2 autoloader Sun StorageTek L8 autoloader Sun StorageTek C4 Sun StorageTek C10 Sun StorageTek L25/L100 libraries Sun StorageTek L500 Sun StorageTek L180/L700 |

Software

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| Operating System | Solaris 10 OS beginning with 06/06 Solaris 9 OS beginning with 09/05 Solaris 10 OS preinstalled |
| Enterprise infrastructure software* | Sun Java Enterprise System 2004Q2* available on select configurations only |

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|------------|--|
| Languages | C/C++, FORTRAN, Sun Java™ programming language; all other standard Sun-supported languages |
| Networking | ONC™, NFS, TCP/IP, SunLink™, OSI, MHS, IPX™/SPX |
| Management | Sun™ Management Center Sun SNMP Management Agent Advanced Lights Out Management (ALOM) Sun Net Connect Sun Update Connection |

Power Supplies

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| Four hot-swappable for redundancy, two required | |
| Maximum AC Power | 788 W, 2689 BTUs/Hr |
| Typical AC Power | 557 W, 1901 BTUs/Hr |

Environment

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|---------------------------|--|
| AC power | 100 - 240 V AC (50 - 60 GHz) |
| Operating Temperature | 5° C to 35° C (41° F to 95°), 20% to 80% relative humidity, non-condensing, 27° C max. wet bulb |
| Non-operating Temperature | -40° C to 60° C (-40° F to 140°), up to 93% relative humidity, non-condensing, 38° C max. wet bulb |
| Operating Altitude | Up to 3,000 m maximum, ambient temperature is derated by 1° C per 500 m above 500 m |
| Non-Operating Altitude | Up to 12,000 m |
| Acoustic Noise | 6.7 Bels operating and 6.7 Bels idle |

Regulations (meets or exceeds the following)

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|--------------------|---|
| Product Safety | UL/CSA-60950-1, EN60950-1, IEC60950-1 CB Scheme with all country deviations, IEC825-1, 2, CFR21 part 1040, CNS14336 |
| RFI/EMC | EN55022 Class A, 47 CFR 15B Class A, ICES Class A, VCCI Class A, AS/NZ 3548 Class A, CNS 13438 Class A, KSC 5858 Class A, GB 9254 Class A, EN61000-3-2, GB 17625.1, EN61000-3-3 |
| EMI | 47 CFR 15B (Code of Federal Regulations, Part 15, Subpart B) Class A; EN55022 Class A per EMC Directive 89/336/EEC (CE Mark); VCCI Class B; Industry Canada ICES-003; AS/NZ 3548 (Australia/New Zealand); CNS 13438 (Taiwan); KSC 5858 (MIC Mark/Korea) |
| Immunity | EN55024/CISPR24 |
| Telecommunications | EN300-386 |
| Regulatory Marking | CE, FCC, ICES-003, C-tick, VCCI, GOST-R, BSMI, MIC, UL/cUL, UL/S-mark |
| RoHS | Restriction of Hazardous Substances (RoHS) directive 2002/95/EC Labeled per Waste Electrical and Electronic Equipment (WEEE) Directive |

Get the details.

Find out more about the Sun Fire V445 server – an ideal solution for e-mail, hosting, e-commerce, OLTP, online banking, supply chain, database management, inventory management, CRM, ERP, EDA, MCAD, and simulations – by visiting: sun.com/v445.

Immunity Certifications

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|----------------------------------|---|
| IEC 1000 | EN55024 per EMC Directive 89/336/EEC, including IEC 61000-4-2 Electrostatic discharge immunity test IEC 61000-4-3 Radiated, radiofrequency, electromagnetic field immunity test |
| | IEC 61000-4-4 Electrical fast transient/burst immunity test IEC 61000-4-5 Surge immunity test IEC 61000-4-6 Immunity to conducted disturbances, induced by radio-frequency fields IEC 61000-4-8 Power frequency magnetic field immunity test |
| | IEC 61000-4-11 Voltage dips, short interruptions and voltage variations immunity tests |
| Line Distortion | EN 61000-3-2 per EMC Directive 89/336/EEC |
| Voltage Fluctuations and Flicker | EN 61000-3-3 per EMC Directive 89/336/EEC |

Dimensions and Weight

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| Height | 174.5 mm (6.87 in.) |
| Width | 445 mm (17.5 in.) |
| Depth (including bezel) | 644 mm (25.4 in.) |
| Weight | 37 kg (82 lb.) fully configured |
| Enclosure | Fits into a standard 19-inch wide rack-mount kit that complies with EIA-310-D1992 standard |

Upgrades

Upgrades are available for SPARC server and Sun Enterprise™ systems. Contact your local Sun sales representative for details

Warranty

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| Hardware support | 1 year |
| Software install | 90 days |
| Call response | 8 hours |
| Delivery | Second business day, on-site |

* 90 day evaluation version

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