



# Sun Netra™ X4200 M2 Server

Experience extreme flexibility and performance  
for your next generation networks



## Highlights

- Telcordia Network Equipment Building Standard (NEBS) Level 3 certification and ETSI compliance, for reliable operation in severe environmental conditions
- Space efficient, less than 20-inch deep rack-optimized 2 RU design
- Enhanced system uptime supported by redundant AC or DC power supplies, hot-pluggable disk drives, and support for hardware RAID (0 + 1)
- Simplified state-of-the-art maintenance with the Integrated Lights Out Management (ILOM)
- Exceptional expandability and I/O performance with four PCI slots, four Ethernet ports and support for DDR2 memory
- Extreme storage flexibility with the option of supporting four internal disk drives and no DVD or two internal disk drives with a DVD
- Choice of operating systems: Solaris OS, and Linux



The Netra™ X4200 M2 server combines the proven ruggedness and reliability of Sun Netra products with the performance and efficiency of next generation AMD Opteron™ processors to deliver dramatic application throughput while conserving energy and space. This compact power-saving server also increases flexibility with a choice of operating systems and storage capacity.

### Power and efficiency

With up to two Next Generation dual-core processors, the Netra X4200 M2 server packs massive compute power into its less than 20-inch deep 2 RU enclosure. Its high compute density and energy efficient processors can help relieve space, power, and cooling constraints in today's infrastructures and datacenters.

### Flexibility and choice

The Netra X4200 M2 carrier-grade server offers flexibility and choice. It runs both 32-bit and 64-bit applications on multiple operating systems and offers the choice of two or four internal hard drives to maximize storage capacity. In addition to running the Solaris™ Operating System, the server also provides support for Linux, offering customers unmatched agility, efficiency, and investment protection.

The Netra X4200 M2 server also integrates four gigabit Ethernet ports to provide connectivity for high-speed, high-bandwidth networking.

### Extreme reliability

As with other Netra servers, the Netra X4200 M2 is a ruggedized NEBS Level 3 certified and ETSI compliant server, making it ideal for the most demanding applications in the toughest environments. System uptime is also enhanced by redundant hot-swappable AC/DC power supplies and hot-pluggable hard disk drives. Additionally, the Netra X4200 M2 server comes with Integrated Lights Out Management (ILOM), enabling simple remote monitoring and management from anywhere on the network.

# Netra™ X4200 M2 Server Specifications

## Processor

- Up to two dual core Next Generation AMD Opteron processors, model 2214 HE (embedded class version)

### Cache per processor

- 1 MB Level 2 Cache per core

## Main memory

- Eight DIMM slots (four DIMM slots per CPU socket), DDR2/667 registered ECC DIMMs (128-bit plus ECC databus), system maximum of 32 GB. Support 1 GB, 2 GB and 4 GB DIMMs

## System architecture

- Three 8.0 GB/s HyperTransport links per processor and 10.7 GB/s access between each processor and memory

## Standard/integration interfaces

### Network

- Four 10/100/1000 Mb/s Ethernet

### Network management

- One 10/100 Mb/s Ethernet port

### Serial management

- One TIA/EIA-232-F asynchronous RJ45 port

### USB

- Two 2.0 USB ports (rear)

### Expansion bus

- Three full-height PCI-X slots for 64-bit 133 MHz, 2x full-length, 1x-half-length
- One PCI-Express slot for MD2 low profile cards (support x1, x4 and x8 width cards)

### SAS

- Four-Channel SAS Interface, internal access only

### Video

- One VGA Video port (HD-15)

### Alarms

- Four fail-safe, dry contact alarms (critical, major, minor and user) (DB-15)

## Mass storage and media

### Internal disk option 1

- Up to two 146 GB 2.5" 10K rpm SAS disks, providing a maximum capacity of 292 GB, internal Hardware RAID 1 (mirroring) and RAID 0 (striping) supported, internal DVD RW Drive

### Internal disk option 2

- Up to four 146 GB 2.5" 10K rpm SAS disks, providing a maximum capacity of 584 GB, internal Hardware RAID 1 (mirroring) and RAID 0 (striping) supported, no DVD

## Software

### Operating system

- Solaris support beginning with Solaris 11/06 Operating system, 64-bit
- Red Hat Enterprise Linux
- SuSE Linux Enterprise Server

### Enterprise infrastructure software

- Sun Java™ Enterprise System software (90 day evaluation)

### Management

- ILOM Service Processor providing:
  - DMTF CLP-based CLI over SSH, Web-based GUI over HTTPS/HTTP, IPMI 2.0, SMP v1, v2c, and v3, remote graphical access over Ethernet and remote storage over Ethernet. N1 System Manager support

## Power supplies

- Two redundant DC or AC hot-swappable power supplies

### Maximum power supply rating

- 550W

## Environment

### DC power

- 48VDC or -60VDC (12.7A at -48VDC, 10.2A at -60VDC)

### AC power

- 100-240 VAC, 50-60 Hz (6.5A @ 100 to 120 VAC, 3.2A @ 200 to 240 VAC)

### Temperature (operating)

- 5°C to 40°C, (41°F to 104°F), Short Term -5°C to 55°C (23°F to 131°F)

### Relative humidity (operating)

- 5% to 85% relative humidity, non-condensing

### Short term

- 5% to 90% relative humidity, non-condensing, but not to exceed 0.024 kg water/kg dry air (0.053 lbs. water/2.205 lb. dry air)

### Altitude (operating)

- Up to 3000 meters (9,850 feet) @ 40°C

### Temperature (non-operating)

- 40°C to 70°C (-40°F to 158°F)

### Relative humidity(non-operating)

- Up to 93% relative humidity non-condensing, 38°C (100.4°F) max wet bulb

### Altitude (non-operating)

- Up to 12,000 meters (40,000 feet)

### Declared acoustics

- Operating/idling acoustic noise 7.0B (LwAd, 1B = 10 dB)

## Dimensions and weight

H: 89 mm (3.5 inches)

W: 442 mm (17.4 inches) including the bezel

D: 508 mm (20 inches) maximum depth

### Weight

- 35 lbs. (fully configured without PCI cards) the two disk option
- 37.2 lbs. fully configured without PCI cards) the four disk option

## Get the details.

Learn more about the Netra X4200 M2 server by visiting [sun.com/Netra/X4200](http://sun.com/Netra/X4200). For more information on the Netra product line, visit [sun.com/netra](http://sun.com/netra)

### Enclosure

- Fits into standard 19-inch rack wide rack. Rack kit included: 19-inch 4-post. Additional rack kits available: 19-inch 2-post, 23-inch 2-post, 600 mm x 600 mm and 19-inch 4-post slide adjustable

## Regulations (meets or exceeds the following requirements)

### Safety

- UL/CSA-60950-1, EN60950-1, IEC60950-1 CB Scheme with all country deviations, IEC825-1, 2, and CFR21 part 1040

### Ergonomics

- EK1-ITB-2000

### RFI/EMC

- EN55022/CISPR22 Class A, FCC CFR47 Part 15 Class A, EN61000-3-2, EN61000-3-3

### Immunity

- EN55024/CISPR24

### Telecommunications

- EN300-386: Telecordia SR 3580 NEBS Level 3 Regulatory Markings CE, FCC, ICES-003, C-tick, VCCI, GOST-R, MIC, UL/cUL, UL/DEMKO/GS, UL/S-mark, BSMI, CCC

### ETSI

- EN 300 019-2-1,2,3, Class 1.2, 2.3, 3.1E
  - Except -5°C cold start
  - Except condensing humidity
  - Except rain

### Seismic

- GR-63-CORE requirements for earthquake zone 4

### Other

- Restriction of Hazardous Substances (RoHS) labeled, per WEEE (Waste Electrical and Electronics Equipment) directive (2002/95/EC)

## Warranty

### Warranty duration

- 1 year

### Hardware coverage/response time

- Business hours/next business day

### Hardware phone coverage/response time

- Business hours/within 8 hours

### Delivery method

- Parts exchange or on-site