

Netra™ T2000 Server

Cutting-edge Throughput, Efficiency



Highlights

- Telcordia NEBS Level 3 certification, for reliable operation in severe environmental conditions
- Enables up to 32 simultaneous execution threads using CoolThreads™ technology
- Chip multithreading technology (CMT) UltraSPARC® T1 processor
- Industry-leading efficiency as defined by Space, Watts, and Performance (SWaP³) metric
- Preloaded Solaris™ 10 OS
- Preinstalled Java™ Enterprise System software
- Space-efficient, rack-optimized two-RU design
- Investment protection with SPARC V9 binary application compatibility
- Enhanced system uptime with high on-chip RAS, redundant power supplies, hot-pluggable disk drives, support for hardware RAID (0 + 1)
- Exceptional expandability, I/O performance from four PCI slots and four Ethernet interfaces



The Netra™ T2000 server delivers breakthrough throughput with dramatic space and power efficiency, to meet the increasing demands of the network infrastructure using Sun's chip multithreading processor architecture. The Netra T2000 server's high compute density and low power consumption address constraints related to space, power, and cooling.

Sun's CoolThreads technology and rugged, reliable features

The Netra T2000 server incorporates the UltraSPARC T1 processor, which delivers up to 32 simultaneous execution threads in a rack-optimized two-RU enclosure. The server integrates four Gigabit Ethernet ports to provide connectivity for high-speed, high-bandwidth networking. System uptime is enhanced by redundant hot-swappable AC/DC power supplies and hot-pluggable disk drives. Additionally, the Netra T2000 server comes with Advanced Lights Out Management (ALOM), enabling simple remote monitoring and management from anywhere on the network.

As with other Netra™ servers, the Netra T2000 server is a ruggedized NEBS Level 3-certified (DC version only) and ETSI-compliant system, making it ideal for the most demanding applications in the toughest environments. With the Solaris 10 Operating System, this server provides a highly efficient and secure application environment. These capabilities, along with UltraSPARC processor-based server binary compatibility, provide customers with unmatched agility, efficiency, and investment protection.

Netra T2000 Server Specifications

Processor

Processor: Four-, six-core 1.0 GHz/eight-core 1.2 GHz UltraSPARC T1 processor

Architecture: SPARC V9 architecture, ECC-protected

Cache per processor: 16 KB instruction, eight KB primary, data cache three MB, integrated L2

Main memory

Sixteen DIMM slots, DDR2 with Chipkill and DRam Sparing, ECC-registered DIMMs, system maximum of 32 GB; supports 512 MB, one GB, and two GB DIMMs

Standard/integration interfaces

Network: Four 10/100/1000 Mbps Ethernet

Serial: One DB9 serial port

USB: Two 1.1 USB ports

Expansion bus: Three PCI-X slots for 64-bit 133 MHz, 3x full-height, 2x full-length, 1x half-length

One PCI-Express (PCI-E) slot for low-profile cards (supports x1, x4 and x8 width cards)

Network management: Advanced Lights Out Management (ALOM) system controller with RJ45 serial and 10/100 Mbps Ethernet ports

Mass storage and media

Internal disk: Up to two hot-pluggable 73-GB 2.5-inch 10K rpm SAS disks, providing a maximum capacity of 146 GB

Internal hardware: RAID 1 (mirroring) and RAID 0 (striping) supported

Internal DVD: One slimline DVD drive

External disk: Sun StorEdge™ 3000/6000/T3 Series, Sun StorEdge™ 5210 NAS, A5200, D240 Media Tray, and S1 Array

External tape: Sun StorEdge™ Tape Drives, including SDLT 600, SDLT 320, DAT 72 Tape Drive, LTO 1, LTO 2, LTO 3, Sun StorEdge™ C2, L7, L8 Autoloader, Sun StorEdge™ C4, L100, L180, L25, L500, and L700 Tape Library

Software

Operating system: Solaris OS support, beginning with Solaris 10 6/06 Operating system

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

Power supplies

Two redundant, DC or AC hot-swappable power supplies

Typical operating power: 300 W

Environment

DC power: -48 V DC or -60 V DC (10.4 A at -48 V DC, 8.3 A at -60 V DC)

AC power: 100-240 V AC, 50-60 Hz (5.5A @ 100-120 V AC, 2.6 A @ 200-240 V AC)

Temperature (operating): 5°C to 40°C, (41°F to 104°F), short-term -5°C to 55°C (23°F to 131°F)

Temperature (nonoperating): -40°C to 70°C (-40°F to 158°F)

Relative humidity (operating): Five to 85 percent relative humidity, noncondensing

Short term: Five to 90 percent relative humidity, noncondensing, but not to exceed 0.024 kg water/kg dry air (0.053 lbs. water/2.205 lb. dry air)

Relative humidity (nonoperating): Up to 93 percent relative humidity noncondensing, 38°C (100.4°F) max. wet bulb

Altitude (operating): Up to 3,000m (9,850 feet) @ 40°C

Altitude (nonoperating): Up to 12,000m (40,000 feet)

Declared acoustics: Operating/idling acoustic noise 7.0B (LwAd, 1 B = 10 dB)

Dimensions and weight

Height: 89mm (3.5 inches)

Width: 424mm (16.7 inches)

Depth: 508mm (20 inches)

Learn More

Learn more about the Netra T2000 server by visiting: sun.com/products-n-solutions/hw/networking/t2000.

Weight: 35 lbs. (fully configured without PCI cards)

Regulations (meets/exceeds 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, DC only: 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

Restriction of Hazardous Substances (RoHS) directive 2002/95EC.H-compliant

Warranty

Hardware support: One-year return to Sun; parts, repair, and replacement

Software install: 90 days

Call response: Eight hours

Delivery: Return to Sun

1. SWaP = Space, Watts, and Performance, as defined by the formula Performance/Space/Power.