

Sun Netra™ T5220 Server

Cutting-edge throughput,
high-density, carrier-grade server



Highlights

- Telcordia NEBS Level 3 certification, for reliable operation in severe environmental conditions
- Enables up to 64 simultaneous execution threads using the UltraSPARC® T2 “system on a chip” processor
- Exceptional performance, unequalled energy savings, and space-efficient, rack-optimized, 2 RU, 20 in.-deep design
- Integrated virtualization technology, enabling more than 1,250 isolated domains per rack
- Integrated on-chip cryptographic acceleration and 10 Gigabit Ethernet (GbE) enable secure computing at wire speed
- Expandability and I/O performance from six PCI slots and four Ethernet interfaces
- Enhanced system uptime with high on-chip RAS, redundant power supplies, hot-pluggable disk drives, and support for hardware RAID (0 and 1)



The Sun Netra™ T5220 server, with maximum energy and space efficiencies to meet the ever-increasing demands of the network infrastructure, is a ruggedized, compact, 20 in.-deep server that provides an ideal platform for virtualization and consolidation, offering 64 virtual systems in a single server.

The Sun Netra T5220 server is ideal for network applications where throughput, power, cooling, and space are key issues. It harnesses the power of the UltraSPARC T2 processor, which delivers up to eight cores and 64 simultaneous execution threads, enabling massive levels of consolidation and virtualization. Media gateway controllers, security systems, IP traffic management systems, telecom operations and maintenance, signaling gateways, and a host of defense, military, and intelligence applications can benefit from the UltraSPARC T2 processor’s CMT (chip multithreading) architecture. In addition, the processor incorporates key functions including security and 10 GbE technology. All of this power and functionality is packed in a compact, carrier-grade, rack-optimized, 2 RU, 20 in.-deep enclosure.

The Sun Netra T5220 server features Integrated Lights Out Manager (ILOM) for remote management and administration, with a ruggedized enclosure to minimize downtime due to environmental conditions. The server includes hot-swappable, redundant, AC or DC power supplies and hot-pluggable disk drives.

As with other Sun Netra servers, the Sun Netra T5220 server is NEBS Level 3 certified and ETSI compliant, making it ideal for the most demanding applications in the toughest environments. The server also offers integrated no-cost virtualization technologies with a choice of Solaris Containers and Logical Domains (LDDoms). By offering 64 virtual systems in a single server, the Sun Netra T5220 server enables ultimate consolidation along with unequalled energy savings and space efficiency.

Sun Netra T5220 Server Specifications

Processor

Up to eight-core, 1.2 GHz UltraSPARC T2 processors; one processor per system, maximum 64 threads

Main memory

16 FB-DIMM slots. Up to 64 GB memory (up to 128 GB memory when 8 GB DIMMs are available)

System architecture

SPARC® V9 architecture, ECC protected, 4 MB integrated L2 cache per CPU

- Dual, multithreaded, 10 GbE PCI Express (PCIe) integrated onto chip
- Eight floating-point units
- On-board cryptography supporting 10 embedded security industry-standard ciphers

Standard/integration interfaces

Network: Four: 10/100/1000 Mb/sec Ethernet; up to 2x optional 10 GbE XAUI connections

Network management:

One 10/100 Mb/sec Ethernet port

Serial management: One TIA/EIA-232-F asynchronous RJ-45 port

USB: Two 2.0 USB ports (rear)

Expansion bus: Three PCIe slots for MD2 low-profile cards — two x4 electrical/x8 mechanical, one x8 electrical/x8 mechanical — two of these slots are shared with 10 GbE XAUI cards

One PCIe slot for full-height, full-length cards — x8 electrical/x16 mechanical

Two PCI-X slots for full-height cards (1x full-length, 1x half-length) — 64-bit, 133 MHz

Serial: One serial port — DB-9

Alarms: Four fail-safe, dry contact alarms: critical, major, minor, and user — DB-15

Mass storage and media

- Up to four internal 146 GB SAS drives (2.5 in.); one slimline DVD-R/W
- External storage, go to: sun.com/storagetek

Software

Operating systems: Supports the Solaris OS — beginning with the Solaris™ 10 OS 8/07

Virtualization

Integrated, open-source, no-cost virtualization technology provides the flexibility and power of 64 virtual systems in a single server

Remote Management

ILOM

Power supplies

Two 1+1 redundant DC or AC hot-swappable power supplies
Maximum power supply rating: 650 W

Environment

DC power: -48 V DC or -60 V DC

AC power: 100–240 V AC, 50–60 Hz

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

Operating relative humidity: 5–85%, noncondensing

Short-term relative humidity: 5–90%, noncondensing, but not to exceed 0.024 kg water/kg dry air (0.053 lbs.water/2.205 lbs. dry air)

Operating altitude: Up to 3,000m (9,850 ft.) at 40° C

Nonoperating temperature: -40° C to 70° C (-40° F to 158° F)

Nonoperating relative humidity: Up to 93%, noncondensing, 40° C (104° F)

Nonoperating altitude: Up to 12,000m (40,000 ft.)

Acoustic noise: Operating/idling 7.2 B (LwAd: 1 B = 10 dB)

ETSI: EN 300019-2-1,2,3, Class 1.2, 2.3, 3.1E (except condensing humidity and rain)

NEBS: NEBS Level 3 certified by Telcordia

Seismic: GR-63-CORE requirements for Earthquake Zone 4

Learn More

To learn more about the Sun Netra T5220 server, go to: sun.com/netra/t5220.

Dimensions and weight

Height: 87.1mm (3.43 in.)

Width: 445mm (17.52 in.) including bezel

Depth: 526mm (20.71 in.) max., to PSU handles

Depth: 501mm (19.72 in.) to rear I/O

Weight: 17.5 kg (38.5 lbs.) fully configured without PCI cards

Regulations (meets or exceeds the following requirements)

Safety: UL/CSA 60950-1, EN 60950-1, IEC 60950-1 CB Scheme with all national differences, IEC 825-1, 2, and CFR 21 part 1040

RFI/EMC: EN 55022/CISPR 22 Class A, FCC CFR 47 Part 15 Class A

Immunity: EN 55024/CISPR 24, EN 61000-3-2, EN 61000-3-3

Telecommunications: EN 300 386

Regulatory markings: CE, FCC, ICES-003, C-Tick, VCCI, GOST-R, MIC, UL/cUL, S-Mark, BSMI, CCC

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

Upgrades

The Sun Netra T5220 server is eligible for the Sun Upgrade Advantage Program.

Customers can trade in their old Sun or non-Sun servers and receive a discount toward the price of their new Sun Netra T5220 server. For more details on the Sun Upgrade Advantage Program, go to: sun.com/ibb.

Warranty

Hardware support: One year

Call response: Eight hours, business hours

Delivery: Return to Sun

Customer-installable hardware product: Yes