

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, unequaled energy savings, and space-efficient, rack-optimized, 2 RU, 20-inch-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-inch-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-inch-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 (LDMs). By offering 64 virtual systems in a single server, the Sun Netra T5220 server enables ultimate consolidation along with unequaled energy savings and space efficiency.

Sun Netra T5220 Server Specifications

Specifications

Processor

Four-, six-, and eight-core, 1.2 GHz UltraSPARC T2 processors; one processor per system, maximum 64 threads

Architecture

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

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

Maximum memory

16 FB-DIMM slots. System maximum of 64 GB

Standard integration interfaces

- Network: Four 10/100/1000 Mbps Ethernet; up to 2x optional 10 GbE XAUI connections
- Expansion bus: Two eight-lane PCIe, two four-lane PCIe, two PCI-X (one full-length/full-height, one half-length/full-height)
- USB: Two 2.0 USB ports

Mass storage and media

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

Software

Operating system: 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

Power supplies

Two hot-swappable 650 W power supply units, AC/DC (PSUs), providing N + 1 redundancy

Remote Management

- Management: Integrated Lights Out Manager
- Telecom features: Dry contact alarms

Environment

Operating temperature

- Sea level to 900m (3,000 ft.) 5° C to 35° C (at sea level)
- Above 900m (3,000 ft.) Decrease maximum temperature as altitude increases by 1° C/300m (1.6° F/1,000 ft.)

Nonoperating temperature

- Sea level to 900m (3,000 ft.) -40° C to 65° C
- Above 900m (3,000 ft.) -40° C to 60° C

Operating relative humidity

10–90% RH, noncondensing, 27° C wet bulb

Nonoperating relative humidity

93% RH 35° C, noncondensing

Operating altitude

0–3,000m (0–10,000 ft.)

Nonoperating altitude

0–12,000m (0–40,000 ft.)

Operating input voltage range

100–240 V AC

Maximum operating input current

4.5 A at 100–120 V AC, 2.25 A at 200–240 V AC

Operating acoustic noise

(LwAd 1 B = 10 dB): 7.7 B

ETSI: EN300019-2-1, 2, 3 Class 1.2, 2.3, 3.1E (except condensing humidity and rain)

NEBS Level 3 certified by Telcordia

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

Regulatory compliance

Safety

UL/CSA-60950-1, EN60950-1, IEC60950-1 CB Scheme with all country deviations, IEC825-1, 2, CFR21 part 1040, CNS14336, GB4943

Ergonomics

EK1-ITB-2000

RFI/EMC

EN55022 Class A, 47 CFR 15B Class A, ICES-003 Class A, VCCI Class A, AS/NZ 3548 Class A, CNS 13438 Class A, KSC 5858 Class A, GB9254 Class A, EN61000-3-2, GB17625.1, EN61000-3-3

Learn More

To learn more about the Sun Netra T5220 server, go to sun.com/servers/netra/t5220. For more information about the entire Netra product line, go to sun.com/netra.

Immunity

EN55024, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11

Telecommunications

EN300-386

Regulatory markings (pending)

CE, FCC, ICES-003, C-tick, VCCI, GOST-R, BSMI, MIC, UL/cUL, UL/DEMKO/GS, UL/S-mark, CCC

Dimensions and weight

- Height: 87.37mm (3.44 in.) 2 RU
- Width: 425.45mm (16.75 in.)
- Depth including power supply handles: 525mm (20.67 in.)
- Weight: 15.81 kg (34.78 lbs.)

Upgrades

The Sun Netra T5220 server is eligible for the 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 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