

# Netra™ 1280 Server



Powerful, reliable, rack-ready, and vertically scalable.

## Key feature highlights

Telcordia NEBS (Network Equipment Building Standard) Level-3 certification for reliable operation in severe environmental conditions.

Scales up to twelve 900MHz UltraSPARC® III Cu processors and supports up to 96GB of memory to provide headroom for future growth.

Hot-swap CPU/memory board with Dynamic Reconfiguration, dual-grid (2N) hot-swap DC power supplies, hot-swap disks, and Lights Out Management (LOM) for reduced downtime and easier maintenance.

Compact chassis with 22-inch depth fits a wide range of industry standard racks, including most 24-inch/600mm two and four-post racks.

Two integrated Gb Ethernet ports and an integrated 160MB/s Ultra3 SCSI port for high speed network and disk attachments.

For a commercial, AC powered version of the Netra 1280 server, please refer to the Sun Fire™ V1280 server.

A complementary addition to the Netra™ carrier-grade product family, the Netra 1280 server defines a new class of vertically scalable ruggedized servers. This cost-effective server packs up to twelve 900MHz UltraSPARC® III Cu processors, 96GB of memory and a 9.6GB/sec system bandwidth into a 12U high, 22-inch deep form factor—making it the only server in its class that can be deployed in most 24-inch/600mm industry standard racks. The Netra 1280 server also delivers Enterprise-class reliability, availability and serviceability (RAS) features like hot-swap CPU/memory boards, Lights Out Management, front and back LEDs, a removable system configuration card and dual grid DC power. Powered by the reliable, scalable Solaris™ Operating Environment, the NEBS Level-3 certified Netra 1280 server delivers an outstanding solution for service and network equipment providers, the telecommunications industry and other applications in less than ideal environments.



# Netra™ 1280 Server

## Specifications

### Processor

Number	4, 8, or 12
Architecture	UltraSPARC IIIcu, Superscalar SPARC V9, ECC Protected
Cache per processor	Level 1: Parity protected 32 KB instruction and 64 KB data on chip (single-bit errors are corrected) Level 2: 8 MB external cache

### System

CPU/memory boards	Up to 3 CPU/memory boards, with 4 processors each and up to 32 GB memory per board; maximum 12 processors per server
Main memory	Up to 96 GB of memory capacity per system
I/O	2 integrated gigabit Ethernet ports (66MHz) 1 integrated Ultra 160 SCSI port (66MHz) 6 open 7" PCI slots (64 bit, one 66 MHz and five 33 MHz)
System interconnect	9.6GB/s Sun Fireplane interconnect. System bus with redundant data, address and response crossbar interconnect

### Storage

Internal	Two 366B Ultra160 SCSI internal disks DVD-ROM internal drive DDS-4 tape drive (optional)
External	Direct attach to Sun StorEdge™ tape libraries and disk arrays, including: Sun StorEdge T3, S1, D2, A1000, D1000, 3300, 3900, 6900, 9900

### Availability

Dynamic Reconfiguration of CPU/Memory boards, hot CPU upgrades, redundant Sun Fireplane Interconnect, redundant network connections, hot swap disks, smart fans, 2N redundant hot swap power supplies, hardened Operating System Kernel, hardened I/O drivers, systems configuration card, proactive self diagnostics, end-to-end data integrity, including ECC, and cluster support.

### Resource Management

Solaris Resource Manager, Solaris Bandwidth Manager

### Software

Operating System	Solaris 8 Operating Environment (version 02/02 or later)
Languages	C, C++, Pascal, FORTRAN, Java™
Networking	ONC™/NFS,™ TCP/IP, SunLink™, OSI, X.25, DCE, Netware
System monitoring	Solaris Management Console, Sun Management Center 3.0
System and network management	Sun Cluster, Sun OpenBoot™ firmware, Solaris Web Start, Solstice DiskSuite™, SunScreen™ Secure Net, VERITAS File System, VERITAS Volume Manager, Solaris Resource Manager, Solaris Bandwidth Manager

### Environment

DC power	-48VDC or -60VDC
Optimum	22°C (72°C) at 45% non-condensing humidity
Range	5°C to 40°C (41°F to 104°F) normal operating at 5% to 85% continuous humidity; -5°C to 55°C at 5% to 90% continuous humidity for <96 hours under the limits of Telcordia SR-3580 (NEBS) Level-3

Altitude Up to 3048 meters (10,000 ft)

### Regulations

Meets or exceeds the following requirements:

Safety	North America: UL 60950 third edition, CSA C22.2 No 60950-00 third edition (Certified: UL and UL for Canada) European Community: EN 60950:2000, (Certified: UL for Germany/GS-Mark and GOST R for Russia) Worldwide except North America: IEC 60950:1999 and CB Bulletin (Certified: DEMKO and UL for Argentina/IRAM S-Mark)
RFI/EMI	Class A: Australia/New Zealand AS/NZ 3548, Industry Canada ICES-003, European Community EN55022/CISPR22, Japan VCCI, Taiwan CNS 13438, and US FCC 47CFR15.B
Immunity	EN55024, i.e. EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, and EN61000-4-11
Environmental	Telcordia SR-3580, NEBS level-3

Purchase these products from the Sun™ Store, [sun.com/store](http://sun.com/store), or contact your Sun Sales Rep or an authorized Sun reseller near you.

### Dimensions and Weight

Height	527mm (20.75 in.)—12RU
Width	445mm (17.5 in.)
Depth	558mm (22 in.) excluding cable arm
Weight	110–132 kg (240–290 lb.)
Rack-mount enclosure	All Sun racks and most third party 24" (600mm) and deeper racks 2 per 4 post rack, 1 per 2 post rack

### Upgrades

Sun Enterprise™/Netra™	Trade-in allowances are available for Sun Enterprise 420R, 450, 35x0, 4x00, and Netra t 140x servers
Older Sun systems	Older Sun servers and other vendors' systems are eligible under Sun's Server Consolidation Program
Other vendors' systems	Trade-in programs for other vendors' systems are also available. For more information, contact your local Sun sales representative or authorized Sun reseller.

### Services

Sun provides a worldwide services portfolio that helps enable customers to develop a Netra 1280 solution designed for reliability, availability, serviceability, and growth. Sun can assist you to build an architecture plan, assess your current IT infrastructure, improve staff skills and efficiencies, and properly install your Netra 1280 system into your environment. Services highlights include: Enterprise Installation Services, Learning Services, Architecture Services, Migration/Consolidation Services, and the Accredited Installation Provider program. For more information on Sun Services, please visit <http://www.sun.com/service>.

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