Netra™ 240 Server
(DC version)

Driving next-generation networks.

Key feature highlights

Built to Last: Network Equipment Building Standard (NEBS) Level 3 certified and ETSI-compliant for reliable operation under the most severe environments, providing protection from temperature, humidity, pollutants, and electrical hazards.

Compact: The Netra™ 240 server's 2U-high design with 20-inch depth offers high compute density with ample space for cable management.

Expandable: Up to two 1.28-GHz UltraSPARC® IIIi processors, 8 GB of memory, three PCI slots, and two 73-GB 15K-rpm SCSI disk drives enable future expandability.

Adaptable: Fits a wide range of industry-standard racks including 19-inch, 23-inch, and 600-mm two- and four-post racks.

High Availability: Hot-swappable and redundant disk drives and DC power supplies, front and back system LEDs, four integrated Gigabit Ethernet ports, System Configuration Card, and Advanced Lights Out Manager offer easier maintenance and reduced downtime.

Security and Investment Protection: The Netra 240 server, with 64-bit UltraSPARC IIIi mircoprocessors and the Solaris™ Operating System, enables an architecture that is robust and reliable, scales readily, provides binary compatibility with existing applications, and maintains consistency across all tiers of the network.

Reliable and rugged to meet the toughest data center requirements.

The Netra 240 server is the latest generation of Sun's carrier-grade, dual-processor servers designed to meet the needs of the most demanding applications, under the most strenuous environmental conditions. This ruggedized server offers high-availability and expandability features in a rack-optimized, affordable, 2U package. The Netra 240 server integrates four auto-negotiating Gigabit Ethernet ports to provide multiple connectivity for high-speed, high-bandwidth networking. System uptime is enhanced by hot-swappable, front-accessible disk drives and redundant hot-swappable power supplies. Additionally, the Netra 240 server comes standard with the System Configuration Card and serviceability features to enable quick system upgrades and repair while the Advanced Lights Out Manager (ALOM) provides simple remote monitoring and management from anywhere on the network.

The Netra 240 server enables binary and application compatibility through an end-to-end SPARC®/Solaris architecture, increasing operation efficiency while eliminating costs for application porting. The system comes preinstalled with the Solaris Operating System, providing the most scalable, secure, and available operating system in its class. Offering seamless migration to next-generation network services, the innovative Netra 240 server delivers a compelling solution for deployments in any computing environment.

Netra 240 Server Specifications

Architecture

Processor Options

Processor	One to two 1.28-GHz UltraSPARC® IIIi
Architecture	64-bit, four-way Superscalar SPARC® V9
Cache	64-KB data, 32-KB instruction, and 1-MB integrated L2
Main memory	Four DIMM slots per processor registered DDR-1 SDRAM (PC2100), 128-bit and ECC databus. System configuration from 512 MB to 8 GB

Standard Integrated Interfaces

Network	Four 10/100/1000 BaseT Ethernet
Network management	One 10 BaseT Ethernet
Serial management	One TIA/EIA-232-F (RJ45) port
Serial	One TIA/EIA-232-F asynchronous (DB9) port
SCSI	One Ultra160 SCSI multimode (SE/LVD)
USB	Two OHCI-1.0-compliant interfaces, supporting dual speeds of 12- and 1.5-Mbits/sec. each
Expansion bus	Three internal PCI 2.2-compliant expansion slots: • One 64-bit, 33/66-MHz 3.3 V full-length • Two 64-bit, 33-MHz 5 V half-length
Alarms	Four fail-safe, dry-contact alarms (critical, major, minor, and user) with external reset input via DB15-pin connector
System Configuration Reader and Card (removable)	Front-accessible for transfer of system configuration information, including Host ID, MAC address, NVRAM
Security	Optional Sun™ Crypto Accelerator 500 card, offering security protocol acceleration via daughter card

Mass Storage and Media

Internal disk	Up to two hot-swap Ultra160 SCSI, 73-GB, 15K-rpm disks
Internal DVD	Optional slim-line ATAPI DVD-ROM Optional slim-line DVD-RW
External disk	Sun StorEdge™ 3310 Sun StorEdge A1000 Sun StorEdge D1000 Sun StorEdge A5200 Sun StorEdge D2 Sun StorEdge S1 Sun StorEdge T3A,T3B Sun StorEdge 6120 Sun StorEdge 6320
External tape	Sun StorEdge Unipack 4-mm DAT DDS-S (DAT Tape DDS-3) Sun StorEdge Unipack 4-mm DAT DDS-S (DAT Tape DDS-4) Sun StorEdge L8 (LTO 2 and SDLT 320 versions)

Software

Operating system	Solaris™ 8 (hardware release 7/03)
Languages	C/C++, FORTRAN, Java programming languages; all other standard Sun-supported languages
Networking	ONC, NFS, TCP/IP, SunLink, OSI, MHS, IPX/SPX
Management	SunVTS™, SRS Net Connect, SRM, ALOM
High availability	Sun™ Cluster 3.X, Netra HA Suite Foundation Services 2.1 6/03

Power Supplies

Type	400 W DC, hot-swap
Redundancy	1+1 with independent power cords
Maximum DC input (typical)	364 W

Environment

DC power	-40 V to -75 V DC (range), single or dual power sources -48 V or -60 V DC (nominal)
Operating temperature	-5° C to 45° C (23° F to 113° F); short term -5° C to 55° C (23° F to 131° F), 5% to 93% relative humidity, noncondensing
Nonoperating temp	-40° C to 70° C (-40° F to 158° F), up to 93% relative humidity, noncondensing
Altitude (operating)	Up to 3000 m
Altitude (non-operating)	Up to 12000 m
Acoustic noise	Declared noise emissions in accordance with ISO 9296: Operating: 7.0 B [LWAd(1B=10dB)] Idling: 7.0 B [LWAd(1B=10dB)]
ETSI	EN 300-019-2-1,2,3, Table 3.1 and Table 3.1E
Seismic	GR-63-CORE requirements for earthquake zone 4

Regulations (meets or exceeds the below requirements):

Safety	IEC60950, UL/CSA60950, EN60950
RFI/EMI	FCC Class A, part 15 47 CFR, EN55022, CISPR 22, EN 300-386:2001 V1.3.1, ICES-003
Immunity	EN55024
Certifications	Safety: cULus Mark, TUV GS Mark, CE Mark, CCC, GOST R EMC: CE Mark (93/68/EEC), FCC authorized Class A, VCCI, BSMI, C-Tick, MIC Telecommunication: Telcordia GR-63 CORE, GR-1089-CORE, SR 3580 NEBS Level3

Dimensions and Weight

Height	87.4 mm (3.44 in.), 2RU
Width	425 mm (16.73 in.) not including bezel 442 mm (17.4 in.) including bezel
Depth	483 mm (19 in.) to rear connectors 508 mm (20 in.) overall maximum depth
Weight	16.3 kg (36 lbs); 18.6kg (41 lbs) fully configured with rackmount kit
Enclosure	Fits into a standard 19-inch-wide rack. Rack kit included 19-inch four-post. Additional rack kits available 19-inch two-post, 23-inch two-post, 600 mm x 600 mm, and 19-inch four-post slide adjustable up to 800 mm

Upgrades

Upgrades for the Netra 240 server are available through the Sun Upgrade Advantage Program. Contact your local Sun Sales representative for details.

Warranty

Hardware support one year return to Sun, parts repair and replacement
Software installation 90 days
Call response eight hours
Delivery return to Sun

Target Applications

Wireless—home/virtual location registries (HLR/VLR), 3G—UMTS/GGCN/SSGN
Unified Messaging
Short Messaging Services (SMS)
Multimedia Messaging Services (MMS)
Streaming Video Services
Intelligent Network (IN)
VOIP—Softswitch, Signalling Gateway, Media Server, Application Server
OA&M, OSS/BSS application areas

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