



Sun's Netra™ t 1400 and Netra t 1405 Servers

The high-performance, rack-ready systems for telecommunications and service providers.

For telecommunications, service and network equipment providers, and traditional computing environments needing high-performance, reliable, rackable systems, Sun's Netra™ t 1400 and Netra t 1405 servers are an ideal fit. Fitting easily into standard telecom racks, these carrier-grade systems are designed for sustained, reliable operations in severe

environmental conditions. Plus, AC and DC power options, lights-out management capabilities, and telecom alarms features make the Netra t 1400 or Netra t 1405 server a powerful solution for an environment where high-performance and reliability are a must.

HIGHLIGHTS

- Up to four UltraSPARC™-II processors provide excellent price/performance
- Ruggedized, compact chassis fits into standard 19-in. telecom racks (23- and 24-in, 600-mm options available)
- Telecom alarms for remote system monitoring, with front-panel LED and interface to remote consoles
- Lights-out management allows many management tasks to be performed remotely
- AC/DC power supply options for operation in both telecom and service provider installations
- Front accessible and exchangeable disk drives for easy maintenance
- Scalable Solaris™ Operating Environment provides a common OS platform from development to deployment

Sun Netra t 1400 and Netra t 1405 Servers

Designed specifically for telecommunications and service providers, the Netra t 1400 and Netra t 1405 servers' high-performance CPUs, high-speed memory, PCI connectivity, Ultra SCSI disk, and high-speed interconnects set the industry standard for performance and uptime.

PROCESSOR

Architecture	Up to four 64-bit UltraSPARC-II processors at 440 MHz
Memory management	MMU with 64 I-TLB entries and 64 D-TLB entries, 8192 hardware-supported contexts
Cache	16 KB data and 16 KB instruction on chip Secondary: 4 MB external (per CPU module)

MAIN MEMORY

	Total of 16 DIMM memory slots available
	Minimum 256 MB and up to 4 GB (using 64 MB and 256 MB DIMMs)
	Note: DIMMS must be installed in sets of four

STANDARD INTERFACES

Network	Ethernet/Fast Ethernet, STP (10-BaseT and 100-BaseT)
I/O	40 MB/sec Ultra SCSI
Serial	Two RS-232C/RS-423 serial ports (DB25)
Parallel	Centronics-compatible parallel port (DB25) (ECP mode capable)
Expansion slots	Four full-size slots conforming to PCI specification 2.1 Slot 1: 33/66 MHz 64-bit, 5V/3.3V supply, 3.3V signaling Slot 2 & 3: 33 MHz 32/64-bit, 5V/3.3V supply, 5V signaling Slot 4: 33 MHz 32-bit, 5V/3.3V supply, 5V signaling A range of PCI cards is available, including cards for Ethernet, ATM and serial I/O
Alarms card	DB15 connector with relay connections for alarms, RJ45 serial port for remote management

MASS STORAGE AND MEDIA

Internal CD	Optional 644 MB SunCD™ ; 32X-speed, Photo CD compatible
Internal tape	Optional 12 to 24 GB DDS3, 4 mm
Internal disk	Up to four 18 GB disks
External storage	All Ultra SCSI devices

SOFTWARE SUPPORTED

Operating environment	Solaris 2.6, Solaris 7
Programming tools	Sun WorkShop™
Languages	Java™, all standard Sun-supported languages
Alarms card driver	Available as an option on separate CD

ENVIRONMENT

Power	Choice of AC or DC
DC power	Three (n + 1 redundant) DC power supplies -48/60V DC nominal, 330W, dual input (Netra t 1400)
AC power	Three (n + 1 redundant) AC power supplies 100/240V AC nominal, 330W, dual input (Netra t 1405)
Operating	5° C to 40° C (41° F to 104° F) 20% to 80% relative humidity, noncondensing between elevations of -300 to 3000 meters
Short term	-5° C to 55° C (23° F to 131° F), 5% to 90% relative humidity, noncondensing at a maximum elevation of 1,800 meters (max. 96 hours)
Nonoperating	-40° C to 70° C (-40° F to 158° F), 10% to 95% relative humidity, noncondensing between elevations of -300 to 12,000 meters
Tape streamer	5° C to 40° C (41° F to 104° F)
ETSI ETS 300-19-2-3	Table 3.1, Climatic
Acoustic noise emission	Less than 60 dBA (GR 63 Core Test Method)
Seismic	Meets GR-63-CORE requirements for earthquake risk zone 4 Meets ETS 300-19-2-3, A1 operating requirements

REGULATIONS

Safety	UL 1950/CSA C22.2 No. 950, EN 60950 (73/23/EEC), IEC 950
Emissions	CFR Title 47 FCC Part 15, EN 55022 (89/336/EEC), (EN61000-3-2, Netra t 1405 only), Low Voltage Directive (73/23/EEC), CE Mark (93/68/EEC)
Immunity	EN 50082-1 (89/336/EEC)

CERTIFICATIONS

	Safety cULus Mark, GS Mark (Netra t 1405 only), CE Mark, Bauart Mark (Netra t 1400 only) EMC CE Mark (93/68/EEC), FCC authorized Class A
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DIMENSIONS AND WEIGHTS

Chassis	Height 26.4 cm (10.4 in./6U) Width 43.18 cm (17 in.) Depth 50.47 cm (19.9 in.)
Enclosure	Fits into 19-, 23-, 24-in., 600 mm (requires mounting kit, 19-in flanges supplied with product, others available as options)

UPGRADES

	Upgrades from Sun and other platforms and expansion options are available.
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NETRA CARRIER-GRADE COMPUTER SYSTEMS

Netra t 1	Netra t 1120/1125	Netra FT 1800 (height 33 U)	Netra st D130	Netra st A1000/D1000
				

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LFC 1.2 Printed in USA 11/99 DE1082-0/15K