

Sun StorageTek™ 5320 NAS Appliance

Powerful, Affordable NAS Appliance Keeps Up with Demanding Business Requirements



> The Sun StorageTek™ 5320 NAS appliance delivers the benefits of storage consolidation and centralized backup to multiprotocol IT environments. With support for UNIX®, Linux, and Windows clients, the appliance simplifies file sharing between disparate platforms.

Highlights

- Enterprise-class features, such as file system journaling, checkpointing, remote mirroring, antivirus, clustering, and system redundancy help keep businesses running
- Compliance archiving software addresses the most stringent regulatory requirements for electronic storage media retention and protection
- Multiprotocol appliance integrates seamlessly and securely supports data sharing between UNIX® and Windows clients
- Integrated real-time antivirus scanning feature protects data from computer viruses
- iSCSI target support enables block-level data access over an IP-based Ethernet network
- Appliance is simple to manage, optimizes floor space, and includes CIFS and NFS licenses to help reduce cost and complexity
- Available as a Sun™ System Pack which combines the product with services in one optimized offering

The Sun StorageTek 5320 NAS appliance offers advanced business continuity functions to help protect data and keep businesses running smoothly. It features file system journaling, checkpointing, remote mirroring, and clustering option, combined with a completely fault-tolerant, Fibre Channel or Serial-ATA, back-end RAID array to deliver very high levels of availability and performance. Set up as a single head or as a dual-clustered NAS server configuration, the appliance provides quick deployment, simple manageability, seamless integration, and flexible policy-based services. In addition, it's easy to operate and effortless to manage, and it can be set up in about 15 minutes, thanks to its highly intuitive wizard. Designed to grow along with the business, this powerful NAS appliance can easily be scaled to 134 terabytes of raw FC or to 336 terabytes of raw SATA RAID-protected storage.

The optional Sun StorageTek™ Compliance Archiving Software enables the appliance to store and protect regulated and reference information to help reduce legal risk and meet regulatory and business compliance, including SEC 17a-4 requirements. The software provides write-once, read-many (WORM) functionality for file systems that allows the specification of minimum retention periods, and administrative lockdown facilities that ensure that files

marked as WORM cannot be inadvertently removed prior to their retention period. To provide for disaster recovery situations over distance, the optional Sun StorageTek™ File Replicator provides remote data mirroring between Sun StorageTek™ NAS systems. In the event of a source system failure or disaster, the mirrored file system on the target appliance can be promoted to continue delivering data during the failure.

Added value and cost savings with Sun™ System Packs

The Sun StorageTek 5320 NAS appliance is available as a Sun™ System Pack, which combines the product with services in one optimized offering. Sun System Packs for storage go beyond the traditional warranty and include 24-hour technical support by phone, extended on-site coverage hours, Sun Vendor Integration Platform (SunVIP™) cross-vendor/platform interoperability problem management, and access to online learning resources to help you accelerate performance from day one. In short, companies can get the flexible storage they want and the services they need at a price that's less than purchasing the hardware and services separately—and in some cases, less than the storage product warranty.

Engage the storage experts

Sun StorageTek service professionals help address storage challenges by delivering integrated services and solutions that optimize and manage storage performance. Sun's recognized, world-class service and customer care provide the confidence that technology investments are protected and that the business will be responsive to change.

Sun can help pinpoint opportunities to reduce costs, mitigate business risk, and better leverage information assets. Sun's consulting and managed services offer clear and simple choices in solutions that address regulatory concerns, complex storage growth, resource management, and scalability challenges. Covering over 125 countries Sun's storage

service professionals can help you gain and sustain measurable results with the reliability and flexibility that enterprises require.

Learn More

For additional information on the Sun StorageTek 5320 NAS appliance, go to: sun.com/storage/tek/nas

Sun StorageTek™ 5320 NAS Appliance Specifications

Processors and memory

CPU	One 2.6 GHz AMD Opteron™ processor with one MB cache
Memory	Four GB DDR1/400 ECC registered DRAM

Standard/integrated interfaces

Network	Four standard 10/100/1000BaseT Ethernet ports. Up to three optional dual-port 10/100/1000BaseT Ethernet NICs
SCSI	One optional Ultra 320 SCSI multimode (SE/LVD)
USB	Two USB ports (bottom for USB connection, top for factory use only)
Expansion bus	Five internal PCI-X 64-bit (three available for expansion)
Fibre Channel	Two standard dual-port two Gb/s FC HBA. One optional for tape backup

Software/operating system

Operating system	StorageTek™ 5000 NAS OS—storage-optimized operating system
File system	64-bit journaling file system, checkpoints, online extensible/expandable capacity, NTFS streams support, quotas: user, group, and directory tree, Unicode
File access protocols	CIFS/SMB, NetBIOS, NFS v2 and v3, FTP
Block access protocol	iSCSI target
Directory and name services	ADS (LDAP, Kerberos v5), NT 4.0 multiple master domains (MMD), DNS, WINS, NIS, NIS+, local files
Network services	DHCP, NTP, RDATE, network status monitor
Access control	Windows 2003, 2000, and NT 4.0 access control lists and access tokens, UNIX credentials and permissions, credential mapping, directory tree quotas, user and group quotas, checkpoints, SMB/CIFS shares, UNIX exports, approved lists, trusted host lists, netgroups, cross-platform file locking (limitations), cross-platform authentication

Supported clients

CIFS, FTP	Microsoft Windows NT 4.0/2000/2003/XP
NFS, FTP	Sun Solaris™ 2.6, 7, 8, 9, 10; Sun Solaris x86 9, 10; IBM AIX; HP HP-UX; Red Hat Enterprise Linux; SUSE Linux ES
iSCSI	Solaris™ 10 iSCSI Software Initiator; Microsoft iSCSI Software Initiator; Red Hat Enterprise Linux 4 Update 4 software iSCSI initiator; QLogic QLA4052C iSCSI initiator for Windows
Remote management	SNMP, Remote Syslog
System administration	Web (HTTP-based on Java™ platform) GUI, telnet, Rlogin, Rsh, SSH, console command line interface (CLI)
Mail services	SMTP
System monitoring	Disk subsystem via SCSI enclosure services (SES); fans, power supplies, temperature, voltages via IPMI protocol; UPS; network monitor
Tape backup	NDMP v3 and v4, backup with full Unicode, remote backup configuration support with NDMP
Setup and configuration	Web-based GUI
RAID manager	Integrated through Web-based GUI
Antivirus engine supported	Must license separately from their respective vendors <ul style="list-style-type: none"> • Symantec AntiVirus for Network Attached Storage • Computer Associates eTrust Antivirus scan engine • Trend Micro Interscan Web Security Suite AntiVirus engine

NAS head enclosure

Dimensions	H: 3.45 in. (8.76 cm); W: 17.52 in. (44.5 cm); D: 25.2 in. (64 cm)
Weight	52.1 lbs (23.7 kg)
Enclosure	Fits into a standard 19-inch rack
AC Power	Voltage Range: 90-264 VAC; Frequency: 47-63 Hz 4.0 A Max. @ 115 VAC; 2.0 A Max. @ 230 VAC
Safety regulations	IEC60950, UL/CSA60950, EN60950, CB Report with all national differences
RFI/EMI regulations	Class A, FCC CFR47 Part 15, ICES-003, EN55022, EN300 386 v1.3.2
Immunity regulations	EN55024, EN300 386 v1.3.2
Certifications: safety	Safety: cULus, CE, GOST R, S-Mark (CCC exempt as "Storage" product). EMC: Class A, FCC, VCCI, C-Tick, MIC, BSMI, GOST, (CCC exempt as "Storage" product)
Hazardous Substance Regulations	Complies with the Restriction of Hazardous Substances (RoHS) directive 2002/95/EC

Mass storage 'StorageTek 5320 Storage (RoHS-Compliant)'

External disk	RAID Controller Unit (RCU): up to 16 x FC or SATA HDDs.
Disk drive capacity	Disk Expansion Unit (DEU): up to 16 x FC or SATA HDDs FC: 146 GB 15K-rpm 4 Gb/s, 300 GB 15K-rpm 4 Gb/s, 300 GB 10K-rpm 2 Gb/s SATA: 500 GB 7,200-rpm 3 Gb/s, 750 GB 7,200-rpm 3 Gb/s
Maximum expansion units	RCU: 4 DEU: up to 24 (6 per RCU)
Maximum capacity per enclosure	FC: 4.8 TB (raw)/3.6 TB (usable, RAID 5 with hot spare) SATA: 12.0 TB (raw)/8.3 TB (usable, RAID 5 with hot spare)
Maximum system capacity	FC: 168 TB (raw)/126.8 TB (usable, RAID 5 with hot spare) SATA: 420 TB (raw)/292 TB (usable, RAID 5 with hot spare)
Dimensions	REU DEU
Height	5.1 in. (12.95 cm) 5.1 in. (12.95 cm)
Width	17.6 in. (44.7 cm) 17.6 in. (44.7 cm)
Depth	22.5 in. (57.15 cm) 22.5 in. (57.15 cm)
Maximum weight	88 lbs (40 kg) 85 lbs (38.5 kg)
AC power	Voltage range: 90-264 V AC; frequency: 47-63 Hz 5.8 A max. @ 115 V AC; 2.9 A max. @ 230 V AC
Hazardous substance regulations	Complies with the Restriction of Hazardous Substances (RoHS) directive 2002/95/EC
Safety and emissions	EC 60950, EN 60950, UL 60950, FCC Part 15 (47CRF15B), CISPR 22 (EN55022-RF Radiated and Conducted Emissions), IEC 61000-3-2, IEC 61000-3-3
Immunity	CISPR 24 (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

Note: Refer to the product Web page for the latest list of supported iSCSI initiators and antivirus engines.