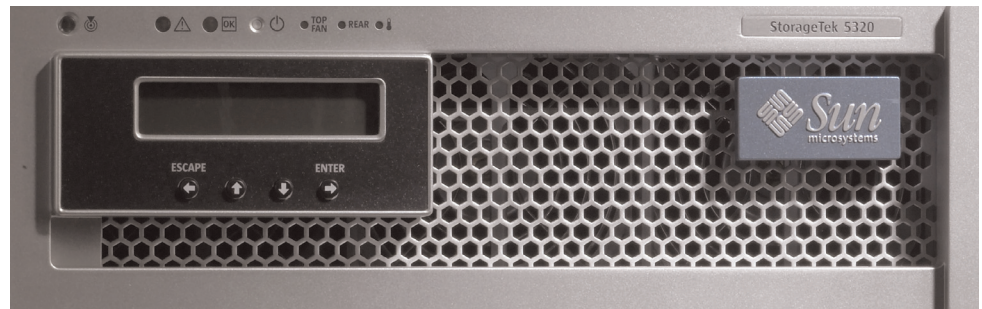




STORAGETEK™

## Sun StorageTek™ 5320 NAS Appliance

Powerful, affordable NAS appliance keeps up with demanding business requirements



### Highlights

- Enterprise-class features such as file system journaling, checkpointing, remote mirroring, antivirus, clustering, and system redundancy help keep your business running.
- Compliance archiving software addresses your most stringent regulatory requirements for electronic storage media retention and protection.
- Multi-protocol appliance integrates seamlessly and securely supports data sharing between UNIX and Windows clients.
- Integrated real-time antivirus scanning feature protects your 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.

> The Sun StorageTek™ 5320 NAS Appliance delivers the benefits of storage consolidation and centralized backup to multi-protocol IT environments. With support for UNIX®, Linux, and Windows clients, the appliance simplifies file sharing between disparate platforms. The StorageTek 5320 NAS Appliance offers advanced business-continuity functions to help protect your data and keep your business 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 installs in less than 15 minutes, thanks to its highly intuitive wizard. Designed to grow along with your business, this powerful NAS appliance can easily be scaled to 134 terabytes of raw FC or to 224 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 StorageTek File Replicator provides remote data mirroring between 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.

### Engage the storage experts

Sun StorageTek service professionals help you address storage challenges by delivering integrated services and solutions that optimize and manage storage performance over the life of your data. Our recognized, world-class service and customer care give you confidence that your technology investment is protected and that your business will be responsive to change. We can help you pinpoint opportunities to reduce costs, mitigate business risk, and better leverage information assets. Our consulting and managed services offer clear and simple choices in solutions that address your regulatory concerns, complex storage growth, resource management, and scalability challenges. Covering over 125 countries, more than 2100 dedicated storage service professionals can help you gain and sustain measurable results with the reliability and flexibility that you require.

# Sun StorageTek™ 5320 NAS Appliance Specifications

## Processors and memory

CPU	One 2.6 GHz AMD Opteron with 1 MB cache
Memory	4 GB DDR1/400 ECC registered DRAM

## Standard/integrated interfaces

Network	Four standard 10/100/1000BaseT Ethernet ports. Up to 3 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 (3 available for expansion)
Fibre Channel	Two standard dual-port 2Gb/sec 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 CIFS/SMB, NetBIOS, NFS v2 and v3, FTP
File access protocols	iSCSI target
Block access protocol	iSCSI target
Directory and name services	ADS (LDAP, Kerberos v5), NT 4.0 multiple master domains (MMDD), DNS, WINS, NIS, NIS+, local files
Network services	DHCP, NTP, RDATE, network status monitor
Access control	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, approve 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 5.1 (ML06); HP HP-UX 11i; Red Hat Linux EE 2.1; SUSE Linux ES 9
iSCSI	Solaris™10 iSCSI Software Initiator; Initiator; Microsoft iSCSI Software Initiator
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 v2 and v3, 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	Symantec AntiVirus™ for Network Attached Storage and Computer Associates eTrust® Antivirus scan engine; (must license separately from their respective vendors)

## NAS head enclosure

Dimensions	Height: 3.45 in. (8.76 cm); width: 17.52 in. (44.5 cm); depth: 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 'StorEdge 5300 Storage (Non-RoHS)'

External disk	RAID expansion unit (REU): up to 14 x FC HDDs FC Disk expansion unit (DEU): up to 14 x FC HDDs SATA DEU: up to 14 x SATA HDDs	
Disk drive capacity	146 GB or 300 GB FC, 400 GB SATA	
Maximum expansion units	REU: 4 DEU: FC — up to 28 (7 per REU); SATA — up to 28 (7 per REU)	
Maximum capacity per enclosure	FC: 4.2 TB (raw)/3.06 TB (usable RAID 5 with hot spare) SATA: 5.6 TB (raw)/4.0 TB (usable RAID 5 with hot spare)	
Maximum system capacity	FC: 134 TB (raw)/98.1 TB (usable RAID 5 with hot spare) SATA: 179.2 TB (raw)/128.1 TB (usable RAID 5 with hot spare)	
Dimensions	REU	DEU
Height	5.21 in. (13.2 cm)	5.1 in. (12.9 cm)
Width	17.6 in. (44.5 cm)	17.6 in. (44.7 cm)
Depth	22.1 in. (56.1 cm)	22.1 in. (56.1 cm)
Maximum weight	95 lbs (43 kg)	91 lbs (41 kg)
AC Power	Voltage Range: 90-264 VAC; Frequency: 47-63 Hz 5.2 A Max. @ 115 VAC; 2.6 A Max. @ 230 VAC	
Hazardous Substance Regulations	N/A	
Safety and emissions	EC 60950, EN 60950, UL 60950, UL 1950, 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	

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

External disk	RAID Controller Unit (RCU): up to 16 x FC or SATA HDDs Disk expansion unit (DEU): up to 16 x FC or SATA HDDs	
Disk drive capacity	300 GB FC, 500 GB SATA	
Maximum expansion units	RCU: 4 DEU: up to 24 (6 per RCU)	
Maximum capacity per enclosure	FC: 4.8TB (raw)/3.6TB (usable, RAID 5 with hot spare) SATA: 8.0TB (raw)/6.0TB (usable, RAID 5 with hot spare)	
Maximum system capacity	FC: 134 TB (raw)/101TB (usable, RAID 5 with hot spare) SATA: 224TB (raw)/169TB (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 VAC; Frequency: 47-63 Hz 5.8 A Max. @ 115 VAC; 2.9 A Max. @ 230 VAC	
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.

### Learn More

For additional information on this product, go to: [www.sun.com/storage/5000/](http://www.sun.com/storage/5000/)