



NetApp®



Datasheet

NetApp SteelStore

The industry's most scalable enterprise-class cloud integrated storage

KEY BENEFITS

- Reduces time, cost, and risk by up to 90% compared to traditional backup and archive methods.
- Integrates with existing backup applications preserving existing investments and your team's workflow.
- Accelerates data protection by reducing data volumes by up to 30x and speeding data transport 4x.
- Is FIPS 140-2 compliant and offers end-to-end encryption.
- Supports backup and archive to 95% of public and private cloud storage providers.

Business Challenge

Traditional backup and recovery solutions fall short because they are:

- **Too slow.** Users expect instant recovery and minimal data loss, but legacy backup and recovery strategies can't keep pace. As a result, many organizations fail to meet backup and recovery windows.
- **Too expensive.** As storage grows, companies struggle with the rising cost of protecting that data on premises. Additionally, bandwidth costs and constraints become more acute with larger datasets.
- **Too risky.** Many organizations still rely on tape, which increases companies' risk exposure due to the potential for lost media in transport, increased downtime and data loss, and limited testing ability.

SteelStore Solves Data Protection Headaches

NetApp® SteelStore enterprise-class cloud integrated storage cures data protection headaches by reducing time, cost, and data volumes by up to 90%. SteelStore accelerates cloud onramp by deduplicating, encrypting, and rapidly streaming data to the cloud up to four times faster. SteelStore enables you to seamlessly and securely integrate cloud into your backup and recovery

strategy, while preserving existing investments in backup software by integrating with more than 95% of cloud storage providers in the market and more than 85% of backup software providers. SteelStore's ironclad security capabilities mean that you can sleep peacefully knowing company data is safe and compliant in the cloud.

Key Benefits

Unparalleled efficiency

From the moment of installation, SteelStore is tuned and optimized to compress data and get it to the cloud as quickly as possible. SteelStore can cut data volumes by 90% and reduce transport times by 75%. Additionally, SteelStore minimizes data "gets" to balance fast data retrieval while reducing data transfer fees from your cloud provider. Key features include:

- **Streamlined deployment and management.** Accelerate your cloud storage onramp with rapid deployment and faster data transfers. Reduce tape management overhead and manual tasks that are error-prone and time consuming. Remote monitoring and management capabilities from a GUI-driven management dashboard. Allocate valuable employee resources to other projects.



“A huge advantage of SteelStore is how quickly we can restore data now. With tape, you can lose part of a week’s data depending on when you last backed up, which means you would lose the most recent information. With SteelStore, a full restore can be done within an hour or two and can be done from any location.”

Global Network Manager
Global Manufacturing Company

- **Industry-leading data reduction.** SteelStore uses inline deduplication and compression, resulting in up to 30:1 data reduction ratios—this means you store less data in the cloud and can get it there faster.
- **Network and cloud optimization.** Built-in WAN optimization and deduplication reduces the amount of data transported to the cloud and speeds transfer times by up to 4x. SteelStore intelligently throttles data “gets”, which saves you money (and time).

Enterprise scale on an open platform

SteelStore enables you to seamlessly and securely integrate cloud into your backup and recovery strategy, while preserving existing investments in backup software. Looking for choice? SteelStore can target more than 95% of cloud storage providers in the market and more than 85% of backup software providers. You can replicate/archive to a second data center of your own or to a cloud services provider of your choice. Key features include:

- **Scales to more than 28PB with a single appliance.** Can be deployed as a physical, or cloud-based appliance. SteelStore appliances can store up to 5.6PB of logical data locally and up to 28.8PB in the cloud making it the most scalable cloud-integrated storage on the market.

- **Compatibility with your existing backup software.** Love your backup software? So do we! SteelStore is compatible with 85% of the leading backup and archiving software solutions, including EMC, Symantec, IBM, and CommVault. Don’t waste time and effort ripping and replacing your backup software and retraining administrators.
- **Cloud choice and agility.** Pick a cloud, any cloud, and most likely SteelStore will support it. SteelStore supports all of the leading cloud providers and over 95% of all cloud storage solutions on the market today. Cloud providers rise and fall, and you never want your data stuck with a cloud provider. SteelStore cloud agility allows you to free your data.

Ironclad security and compliance

SteelStore’s ironclad security capabilities mean that you can sleep peacefully knowing company data is safe and compliant in the cloud. Strong encryption of data on site, in transit, and at rest within the cloud means your data remains secure. Encryption keys remain safe under administrator control in your data center and can be rotated as required by security policy. Key features include:

- **Provides encryption and compliance.** Ensure data at rest is safe using AES 256-bit encryption, compliant with FIPS 140-2 Level 1. Protect data in-flight with industry-standard SSL or IPSEC encryption with keys managed locally by your security department. Role-based access controls and integration with TACACS and RADIUS.
- **Shrinks recovery time and data loss.** Reduce RTO by retrieving data faster in a disaster by accessing locally cached backups on the SteelStore appliance. Reduce RPO by immediately getting data offsite so recovery points are as recent as your latest backup, rather than the last time tapes were shipped offsite.
- **Eliminates tape risks.** Tape is an inherently risky and time-intensive medium. Not only is it prone to failure, but it also must be physically shipped from site to site, giving opportunities for data leaks.

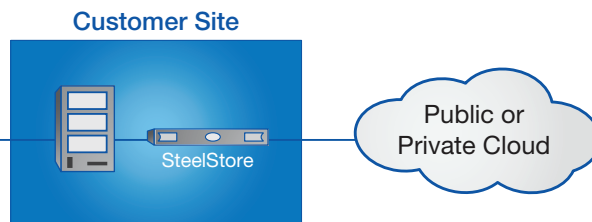
How It Works

SteelStore is an enterprise-class cloud integrated storage appliance that enables you to securely and efficiently leverage public and private cloud as part of your backup and recovery strategy. SteelStore seamlessly

Backup Software

NetApp SnapProtect*
ArcServe
Commvault Simpana
EMC Networker
Dell vRanger
HP Data Protector
IBM Tivoli
Storage Manager (TSM)
Microsoft SQL
Oracle RMAN
Symantec NetBackup
Symantec Backup Exec
Veeam

*Select platforms supported



Cloud Service Providers

NetApp StorageGrid Web scale
Amazon (Glacier and S3)
AT&T Synaptic Storage as a Service
Caringo Cloud Builder
Cleversafe
Clouddian Cloud Builder
Dunkel Cloud
EMC Atmos
OpenStack platforms
Evault LTS2
Google Cloud
HP Cloud Services
IBM Softlayer
Rackspace
Savvis
Swisscom
Telefonica
Telus
Verizon Terremark
Windows Azure

Figure 1) SteelStore provides seamless integration with leading applications and cloud service providers.

integrates with existing backup software and will compress, deduplicate, encrypt, and stream data to the cloud provider of your choice. SteelStore intelligently caches recent backups locally to disk while vaulting older versions to the cloud, allowing for rapid restores with off-site protection. This results in a cloud economics-driven backup and recovery strategy with faster recovery, reduced data loss, ironclad security, and minimal management overhead.

SteelStore Lowers Adoption Barriers for Cloud Storage

Many organizations are excited by the prospect of leveraging cloud economics, but soon find themselves daunted by the many barriers associated with the public cloud. SteelStore was designed to help customers vault over these barriers by:

Maintaining security and compliance in a multi-tenant environment

“If you do your homework [about cloud providers], you’re going to get a higher level of security in the cloud than what you can provide at your own facilities.”

– Director of IT,
Engineering Services Company

Coping with large volumes of data and limited bandwidth

SteelStore deduplication reduced the amount of data stored by a home building company in the cloud from 39TB to just 7TB and copied the data to Azure in one week.

Enabling rapid deployment for faster cloud onramp

“It took longer to find screws for the brackets to mount it in the server rack than to get the SteelStore appliance up and running.”

– Senior IT Engineer,
Manufacturing Company

Making sure that employees have rapid access to data

“A huge advantage of SteelStore is how quickly we can restore data now. With tape, you can lose part of a week’s data depending on when you last backed up, which means you would lose the most recent information. With SteelStore, a full restore can be done within an hour or two and can be done from any location.”

– Global Network Manager,
Global Manufacturing Company

Mitigating risks related to disaster recovery and vendor lock-in

“We have in place a robust disaster recovery strategy spanning multiple sites, and we have actually exceeded the requirements we established for our DR plan. By using SteelStore, we back up to the appliance’s cache, and we also move the data outside our organization.”

– Manager of IT Services, Unified
Solutions Communications Company

Learn More About SteelStore

To learn more, go to www.netapp.com/steelstore.

About NetApp

Leading organizations worldwide count on NetApp for software, systems and services to manage and store their data. Customers value our teamwork, expertise and passion for helping them succeed now and into the future.

www.netapp.com

STEELSTORE APPLIANCES MODEL SPECIFICATIONS

Steelstore 3030 V3.2	Backup mode (Controller and shelves)	Archival Mode (Controller only)
	SS3030	SS3030
Appliance Useable Disk Cache Capacity ^(d)	32TB	32TB
Appliance Cloud Capacity ^(a,b)	160TB	up to 10PB
Appliance Logical Data Size in Cloud ^(e)	4.8PB	up to 10PB
Additional Shelves Supported	5	None
Max System Useable Disk Cache Capacity	192TB	32TB
Max System Cloud Capacity ^(a,b)	960TB	up to 10PB
Max System Logical Data Size in Cloud ^(e)	28.8PB	up to 10PB
RAID protection level	RAID-6	RAID-6
Network integration	2 x 1GbE onboard, choose one of (4 x 1GbE or 2 x 10GbE)	2 x 1GbE onboard, choose one of (4 x 1GbE or 2 x 10GbE)
Maximum ingress throughput, aggregate GB/Hr ^(c)	3500 ^(c)	350 ^(c)

(a) Base-2 capacity (1TB = 1024*1024*1024*1024 bytes)

(b) Max LAN throughput can be expected upto the amount listed, requires 10GE in those models that support it

(c) Requires 3.2 S/W

(d) Base-10 capacity (1TB = 1000*1000*1000*1000 bytes)

(e) Backup mode TB assuming 30X dedupe, Archive mode assumes 50% compression

(f) Archival mode # of files; Capacities assume 100Mbyte average file size

PHYSICAL SPECIFICATIONS

Model	SS3030 Controller	SS1002 Shelf
Profile	2U	2U
Memory	96-192GB	n/a
Front Swappable Drives ⁽ⁱ⁾	12*4TB	12*4TB
Connectivity	2 * 1G Copper NIC	2 * 6G SAS
Connectivity Options	4 * 1GE Copper or 2 * 10GE Fibre w/ SR or LR SFP	n/a
Redundant Power Supplies	Yes	Yes
Power [Watts] (Typical)	338	270
BTU/hr	1154 BTU/hr (338W) typical	920 BTU/hr, 270W (typical operating conditions @ 110VAC)
Temperature ⁽ⁱⁱ⁾	5° to 35°C Operating, 1° to 50°C Non-operating	5° to 40°C (35°C max. above 2,000m) Operating, -40° to 60°C Non-operating
Relative Humidity ⁽ⁱⁱⁱ⁾	20% to 80% non-condensing Operating, 8% to 80% non-condensing Non-Operating	20% to 80% non-condensing Operating, 5% to 80% non-condensing Non-operating
Operating Acoustic noise	Sound Power Operating less than or equal to LWAd 7.0 Bels	Sound Power Operating <Lwa 6.3Bels
System Dimensions (LxWxH) ^(iv)	87.9mm H x 449mm W x 707mm D (3.46" x 17.68" x 27.83")	630mm x 483mm x 87.9mm (24.8" x 19" IEC Rack Compliant x 2 EIA Units)
Packaging Dimensions	Overwrap internal Dims: 310mm H x 595mm W x 895mm D (0986667-01)	880mm x 680mm x 345mm (34.6" x 26.8" x 13.6")
Max Weight (without packaging)	32kg (71 lbs) with drives	26kg (57.2lbs) with drives
Rail Information	Mounting rail kit included	Mounting rail kit included

(i) Hot swappable drives

(ii) Operating altitude up to 10,000 feet except in China 6,562 feet (2,000m)

(iii) In China – for use in non-tropical locations

(iv) Length is without bezel

The availability, export or re-export of these products or specific features are subject to the export laws and regulations of the U.S., EU, Singapore, and the laws and regulations of any applicable foreign agency or authority.



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