# Lenovo Storage S2200

## Enterprise-class features at affordable prices



## Simplicity At Its Core

The Lenovo® Storage S2200 SAN array offers simplicity, speed and scalability. With its easy-to-use management interface, the S2200 makes complex administrative storage tasks simple. There's no need for an additional dedicated resource to manage this array. Setup is also simple using the intuitive navigation; out-of-the-box and deployed in under an hour. The Lenovo S2200 offers a great balance between simplicity and performance.

## Designed To Fit

The S2200 gives you a choice of supported connectivity choices and offers impressive capacities. Choose between SAS, Fibre Channel or iSCSI to integrate into your existing network. The S2200 supports up to 96 drives and can have mixed LFF and SFF enclosures in the same array, allowing this device to provide you with the flexibility you need in your business.

And the S2200 has in-chassis controller upgrades without data migration. Just swap out the S2200 controller with the S3200 controller and you can experience greater performance, additional fabric support, and greater capacity. The S2200 is designed not only to fit into your business, but to grow with your business.

### **Business Optimized**

Designed to be always on with 99.999 percent availability, your company can depend on the S2200. Configured with dual controllers, redundant power supplies and hot-swap drives and fans, your data is available when you need it. As your storage needs grow, the S2200 scales out with thin positioning allowing your array to grow with you. No matter if you are a large enterprise or a small business, and need a simple, flexible and optimized entry SAN, the Lenovo S2200 is the right choice to support your data needs.

## Why Lenovo

Lenovo is the leading provider of x86 systems for the data center. The portfolio includes rack, tower, blade, dense and converged systems, and supports enterprise class performance, reliability and security. Lenovo also offers a full range of networking, storage, software and solutions, and comprehensive services supporting business needs throughout the IT lifecycle.

#### Product features

- · Entry SAN with enterprise features
  - Simple management GUI, no storage administration needed
  - Scale out options with Thin Provisioning allows you to grow your SAN in pace with your business
  - High-performance storage to support demanding applications at entry price points
- Fits into your existing environment with flexible configurations and options
  - Supports up to 96 drives
  - Fits into a variety of environments with Fibre Channel or iSCSI fabrics
  - Mix LFF and SFF enclosures in the same array
- · Optimized to grow with your business
  - In-chassis controller upgrades without data migrations or downtime
  - Designed to be always on with 99.999% availability
  - High availability configurations: dual controllers, redundant fans, hot-swap drives and fans

### Hardware summary

- Large Form Factor or Small Form Factor models
- Multiple drive-types supported
- Active/Active RAID Controller
- 2 ports per controller for maximum value
- 8 Gb FC or 1/10 Gb iSCSI or 6/12 Gb SAS
- Flexible Interface Options (CNC)
- Easy setup and user interface
- · Standard and encrypted disk support
- Hybrid configurations

#### **Unique Technology**

- · Real-time storage tiering
- Battery-Free cache protection
- · Low latency cache mirroring

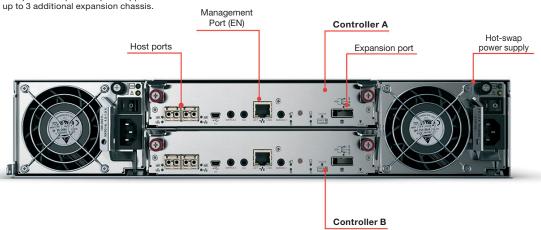
#### Performance Highlights

- 80,000 Read IOPS
- 3300 MBps Read
- 2400 MBps Write

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#### **CONTROLLER LAYOUT**

- Supports 8 Gbps Fibre Channel, 10 Gbps iSCSI or 12 Gbps SAS Fabrics.
- 6 Gbps SAS Expansion port supports up to 3 additional expansion chassis



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## Benefits

Virtualized Storage	Virtual Storage allows "pooled" storage across multiple drive types, improving I/O by 2.5x without impacting applications
SSD Read Cache	<ul> <li>Delivers priority access to "hot" data in SSD cache, increasing cache capacity by 200x</li> <li>Rapid RAID Rebuild – Only rebuilds the stripe where the corruption occurred, not the space or other stripes. This significantly decreases the time it takes to recover lost data.</li> </ul>
Virtualized Snapshots	Each snapshot is an equal volume and supports full read/writes and can be standalone or nested
Thin Provisioning	Provision volumes independent of physical storage. Only purchase the storage you need and add more as you grow.
Common Drives	Simplify your drives, the S2200 has common drives with Lenovo System x servers.
Full Drive Encryption	Keep your data locked down with 256-bit AES encryption
High Availability	Hot-swap dual controllers, redundant PSU, hot swappable HDDs and fans, automatic failover, multi-path support, and data protection keep your data always available, built to be 99.999% available.
Battery-less Cache Backup	No need to change or manage batteries, the battery-less cache back up provide plenty power to transport your cache data to flash storage in case of a power outage.
Synchronous Caching	Provides instant cache mirroring with better write performance than with non-mirrored cache.
Great Capacity	• Support for up to three expansion enclosures, E1012, supports up to 12 x 3.5-inch drives; E1024, supports up to 24 x 2.5-inch drives; and the S2200 supports up to 96 drives in a variety of configurations: SSDs, 2.5-inch HDDs, and 3.5-inch HDDs.
In-Chassis Upgrades	S2200 controller modules can be upgraded to the S3200 controller without migrating data or experiencing downtime.



The Lenovo Storage S2200 controller unit with three E1024 expansion units delivers a total of 96 drives.

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## **Specifications**

Host Interface	6Gbps SAS or 1/10Gbps iSCSI or 8Gbps Fibre Channel
Single/Dual Controller	Dual controller
RAID Support	RAID 0, 1, 5, 6, 10
Fans and Power Supplies	Fully redundant and hot swappable
Supported Drives	2.5-inch SAS Drives: 300 GB, 600 GB at 15,000 rpm 2.5-inch SAS Drives: 600 GB, 900 GB, 1.2 TB at 10,000 rpm 2.5-inch NL-SAS SED Drives: 600 GB, 900 GB, 1.2 TB at 10,000 rpm 2.5-inch NL-SAS Drives: 1 TB at 7,200 rpm 2.5-inch SAS SSD: 400 GB, 800 GB, 1.6 TB 3.5-inch NL-SAS Drives: 2 TB, 4 TB, 6 TB, 8 TB at 7,200 rpm 3.5-inch NL-SAS SED Drive: 4 TB at 7,200 rpm
Cache per Controller	6 GB per controller
LUNs per System	1024 maximum and 128 TB LUN size
Volumes per System	2048 maximum
Snapshots per Volume	254 maximum
Expansion Units (3 max)	E1012: 12 x 3.5-inch drives; E1024: 24 x 2.5-inch drives
Snapshots	64 included
Optional Licenses	Hybrid Real-Time Tiering, 256 snapshots, 512 snapshots
Warranty	3-year limited warranty, 9x5 next business day parts only

## For More Information

To learn more about the Lenovo Storage S2200, contact your Lenovo representative Business Partner or visit **lenovo.com**/systems/storage

