

SX-12SH Series

Enterprise Hybrid SAN Storage Platform

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PRODUCT OVERVIEW:

SX-12SH Series is a high-availability enterprise storage platform designed for virtualization, database, backup, surveillance, and business-critical applications. Featuring a 12-bay architecture, scalable expansion capability, flexible host connectivity, and advanced data protection technologies, the platform provides reliable and centralized storage for modern IT environments.

The series is available in both dual-controller and single-controller configurations, allowing organizations to choose the deployment model that best fits their operational and budget requirements.

AT A GLANCE PLATFORM OVERVIEW:

- 12-Bay Enterprise SAN Storage Platform
- Dual Controller and Single Controller Models
- Up to 256 GB ECC Memory per Controller
- SAS 12 Gb/s Storage Architecture
- 10GbE iSCSI Connectivity Standard
- Optional 25GbE iSCSI Connectivity
- Optional 16G / 32G Fibre Channel Connectivity
- Integrated Snapshot & Replication Services
- SSD Cache Acceleration
- Automated Data Tiering
- Up to 492 Drive Expansion Capability
- Up to 10.82 PB Raw Capacity

PLATFORM FOUNDATION

Every system within the SX-12SH Series is built upon four core technology pillars that define platform performance, reliability, protection, and scalability.

PERFORMANCE

A combination of multi-core processing, ECC memory architecture, flash acceleration technologies, and high-speed storage connectivity enables the platform to support demanding enterprise workloads while maintaining consistent application performance.

Key Technologies

- Multi-Core Processing Architecture
- DDR4 ECC Memory
- SSD Cache Acceleration
- Automated Data Tiering
- High-Speed SAS Backend
- Intelligent Data Placement

AVAILABILITY

Continuous access to business data remains a critical requirement for modern IT operations. The SX-12SH Series incorporates multiple availability mechanisms designed to minimize service interruption and simplify maintenance activities.

Availability Features

- Active-Active Controller Design*
- Automatic Failover & Failback*
- Redundant Power Supplies
- Redundant Cooling System
- Hot-Swappable Components
- Cache Protection Technology
- Online Software Upgrade Capability

✦✦✦ Applicable to SX-12SH-R model.

PROTECTION

Integrated protection services help safeguard critical business information against hardware failures, operational errors, and unexpected outages.

Protection Services

- RAID Protection
- Point-in-Time Snapshots
- Local Volume Cloning
- Remote Replication
- Disaster Recovery Support
- Cache Data Protection

SCALABILITY

The architecture supports seamless storage growth through external expansion systems, allowing organizations to increase storage resources as business requirements evolve.

- Scalability Features
- Scale-Up Architecture
- Expansion Shelf Support
- Online Capacity Expansion
- Multi-Petabyte Growth Capability

QUEUE DYNAMICS & CHECKOUT MANAGEMENT

Item	Specification
Product Type	Recommends shifting staff to busier areas or opening more checkout counters based on live arrival spikes.
Series	SX-12SH
Controller Options	Dual Controller Active-Active / Single Controller Upgradeable
Processor	64-Bit Quad-Core Processor
Memory Type	DDR4 ECC DIMM
Standard Memory	8 GB per Controller
Memory Slots	4 per Controller
Maximum Memory	Up to 256 GB per Controller
Drive Bays	12 × 3.5"
Storage Interface	SAS 12 Gb/s
Supported Drives	SAS HDD, NL-SAS HDD, SAS SSD, SED SSD
SATA Drive Support	Available on SX-12SH-E
Internal Raw Capacity	Up to 264 TB
Maximum Raw Capacity	Up to 10.82 PB
Maximum Drive Count	Up to 492
Hot-Swap Drives	Supported

HOST CONNECTIVITY

Interface	Availability
1GbE Management Port	Standard
10GbE SFP+ iSCSI	Standard
10GbE RJ45 iSCSI	Optional
25GbE SFP28 iSCSI	Optional
16G Fibre Channel	Optional
32G Fibre Channel	Optional
PCIe Expansion Slots	2 × PCIe Gen3 x8

EXPANSION CONNECTIVITY

Item	Specification
Expansion Interface	12Gb SAS
Expansion Ports	2 per Controller
Expansion Shelves	Supported
Maximum Drive Count	492 Drives

STORAGE SERVICES

Category	Features
RAID Support	Recommends shifting staff to busier areas or opening more checkout counters based on live arrival spikes.
Advanced Protection	SX-12SH
Capacity Services	Dual Controller Active-Active / Single Controller Upgradeable
Performance Services	64-Bit Quad-Core Processor
Data Protection	DDR4 ECC DIMM
Replication	8 GB per Controller

SECURITY & MANAGEMENT

Category	Features
Security	HTTPS, SSH, CHAP Authentication, Self-Encrypting Drive Support
Management	Web GUI, Serial Console, REST API
Monitoring	Event Monitoring, Performance Analytics, Capacity Reporting

PHYSICAL SPECIFICATIONS

Item	Specification
Dimensions (H × W × D)	88 × 438 × 515 mm
Net Weight	Net Weight
Gross Weight	18.8 kg
System Fans	4
Power Supply	Dual 850W Redundant
Power Consumption	407W

MODEL OPTIONS

Model	Specification
SX-12SH-R	Dual Controller Active-Active Enterprise Storage System
SX-12SH-E	Single Controller Upgradeable Enterprise Storage System