


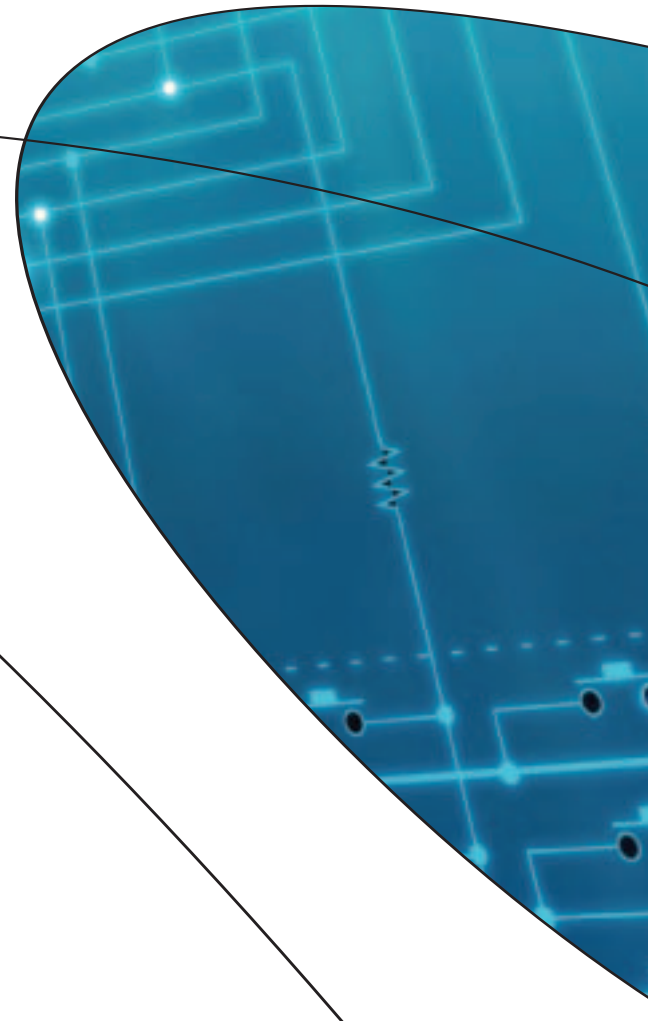


HITACHI
DATA SYSTEMS



Hitachi TagmaStore™ Network Storage Controller Model NSC55

Partner Beyond Technology





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The NSC55 delivers proven enterprise-class functionality—virtualization of externally attached storage, logical partitioning, and universal replication—in cost-effective modular, rackmounted packaging.

Delivering Enterprise-class Functionality

As pressure from government and regulatory agencies for long-term data protection and retention intensifies, your organization is confronted with storage issues resembling those that burden larger enterprises: escalating data growth, application performance and availability, business continuity, backup windows, and complex infrastructures. Unlike larger enterprises, however, organizations like yours are typically limited by budget, staff, and data center space.

Hitachi TagmaStore™ Network Storage Controller model NSC55, powered by Hitachi Universal Star Network™ crossbar switch architecture, delivers the enterprise-class functionality introduced with the industry-leading Hitachi TagmaStore Universal Storage Platform—virtualization of external storage, logical partitioning, and universal replication—in a cost-effective, small-footprint package.

The NSC55 provides entry-level enterprises and fast-growing organizations with performance, availability, and reliability as well as advanced data/storage management and replication features previously not available to the modular market. You can now aggregate heterogeneous storage devices into a virtual pool and manage them through a single, centralized console using a common set of tools, simplify their storage environments, maximize the use of existing resources, and reduce total cost of ownership. Further, externally attached storage inherits advanced Hitachi software functionality. For example, you can now implement robust business continuity strategies across heterogeneous midrange storage, with such industry-leading software as Hitachi TrueCopy™ Remote Replication software or Hitachi Universal Replicator for Hitachi TagmaStore™ Universal Storage Platform.

A New Category of Storage

According to IDC, the Universal Storage Platform represents a new category of storage, “potentially market-changing” products

in the storage solutions market. The NSC55 extends this category to the modular market, providing:

- ∴ Controller-based virtualization and management of as much as 16PB of internal and attached storage
- ∴ Eight logical partitions, dedicating cache, ports, and internal/external capacity to ensure application quality of service (QoS)
- ∴ Universal replication across heterogeneous storage for business continuity

This enables you to deploy applications within a new framework, fully leveraging and adding value to current investments, while more closely aligning IT and business initiatives. As an integral component of Application Optimized Storage™ solutions from Hitachi Data Systems, the NSC55 provides a foundation for matching application requirements to different classes of storage in open systems and mainframe environments.

For large enterprises, the NSC55 can serve in distributed storage environments, as a remote site target for remote replication, or for cost-effective archival of mainframe data in virtualized, externally attached SATA storage. With more than 50 percent of the Fortune 100 companies on its roster of longstanding customers, Hitachi Data Systems has the experience and technology to meet the storage challenges of companies of every size.

Business Benefits

Simplify Management

- ∴ Improve utilization and flexibility by aggregating internal NSC55 storage and externally attached Hitachi and third-party storage systems (EMC, HP, IBM, and Sun) into a single, flexible virtual pool.
- ∴ Use a single console and a common set of software tools to manage any storage resources connected to the NSC55.

Model NSC55 Specifications

| Software | |
|---|--|
| Hitachi HiCommand® Suite | Yes |
| Hitachi Universal Volume Manager | Yes |
| Hitachi Virtual Partition Manager | Yes |
| Hitachi Universal Replicator | Yes |
| Hitachi ShadowImage™ In-System Replication | Yes |
| Hitachi TrueCopy™ Remote Replication | Yes |
| Hitachi Copy-on-Write Snapshot | Yes |
| Hitachi Data Retention Utility | Yes |
| Hitachi Business Continuity Manager | Yes |
| Hitachi Server Priority Manager | Yes |
| Hitachi Volume Migration | Yes |
| Hitachi Compatible Mirroring for IBM® FlashCopy® V2 | Yes |
| Hitachi Compatible PAV for IBM z/OS® | Yes |
| Hitachi Compatible Replication for IBM XRC | Yes |
| Hardware | |
| Connectivity: Minimum/Maximum Host Ports | 16/48 Fibre Channel, 16 FICON, 16 ESCON, 8 NAS |
| Maximum Virtual Host Ports | 16,384 |
| Maximum LUNs | 16,384 |
| Minimum/Maximum Disk Drives | 5/240 |
| Drive Types (Fibre Channel) | 73GB, 146GB, 300GB |
| Maximum Internal Capacity | 72TB |
| Maximum Internal and External Capacity | 16PB |
| Minimum/Maximum Cache | 4GB/64GB |
| Minimum/Maximum Control Memory | 2GB/8GB |
| Private Virtual Storage Machines | 8 |

Note: All capacities are based on 1GB = 1,000,000,000 bytes 1TB = 1000GB

- Automate storage management functions to help enhance administrator productivity.

Maximize Availability and Performance

- Count on the proven, third-generation Universal Star Network crossbar switch architecture.
- Ensure application QoS by partitioning storage resources.
- Match application requirements to storage attributes and improve storage cost-effectiveness, meet service level agreements, and respond quickly to evolving business needs.
- Ensure business continuity by simplifying and unifying data replication between heterogeneous storage systems.

Facilitate Regulatory Compliance

- Meet regulatory compliance and corporate governance requirements for tamperproof long-term data retention.
- Build the foundation of a complete data lifecycle management solution by enabling the dynamic, nondisruptive movement of data between different tiers of storage.

- Lower costs by archiving mainframe data to virtualized, externally attached SATA-based storage systems.

Optimize the Data Center Environment

- Gain enterprise-class availability, performance, and connectivity in a space-conscious, rackmounted modular storage system.
- Deploy applications within a new framework, whether for tiered storage, for business continuity, or to simplify the storage infrastructure.
- Consolidate open systems, mainframe, and NAS data onto fewer physical storage devices to minimize maintenance costs and lower software license fees, capital expenditures, and environmental costs.
- Protect investments and reduce total cost of ownership by extending the useful life of existing storage systems.

Feature Highlights

- Delivers enterprise-class embedded virtualization capabilities
- Scales to 72TB of internal capacity
- Enables management of as much as 16PB of internal and external storage through a single console
- Tunes and balances workloads in real time transparent to application and users
- Allows the creation of eight Private Virtual Storage Machines, partitioning and dedicating capacity, cache, and ports to applications, ensuring QoS
- Supports heterogeneous multiplatform connectivity: Fibre Channel, IBM ESCON® and FICON®, NAS, and iSCSI (future option)
- Provides a comprehensive set of storage management services, including application-centric storage area management
- Facilitates transparent, nondisruptive movement of data between heterogeneous storage tiers with Hitachi HiCommand® Tiered Storage Manager software
- Supports heterogeneous data replication when used with Hitachi Universal Replicator software
- Leverages the third-generation Universal Star Network architecture
- Provides enterprise-class functionality in a form factor scaled to fit data centers in midsized enterprises

Enable Enterprise-class Availability and Reliability Scaled to Meet Your Business Needs. We're at Your Service.

The Hitachi Data Systems Global Solution Services team can help you design and implement the optimal storage infrastructure to meet your business and application requirements with assessment, planning, design, and implementation services that support the NSC55 and the entire suite of Hitachi storage products. Global Solution Services consultants assist with identifying and prioritizing your performance, availability, and cost requirements; designing and cost-justifying the most appropriate storage infrastructure; and implementing and configuring the optimal solution to meet your needs.

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