

## Hitachi Adaptable Modular Storage 500

For small and midsized organizations, Hitachi Adaptable Modular Storage 500 provides a scalable, cost-effective, high-end modular storage system for Microsoft® Exchange Server and other business applications, tiered and stand-alone storage, consolidation, first SAN deployment, backup or data archiving.

### Enterprise-class Solutions for Small and Midsized Customers

Small and midsized organizations are facing big company challenges of escalating data growth, availability and data protection as well as regulatory compliance and complex storage infrastructures. With many years of experience serving FORTUNE 500® companies, Hitachi Data Systems understands these challenges and has developed Services Oriented Storage Solutions that match application and business requirements to storage attributes. Hitachi Data Systems provides proven solutions in modular, cost-effective packaging—including Hitachi Adaptable Modular Storage 500.

### Business Benefits

- Move from server-internal storage to scalable external storage, consolidate multiple storage systems into one, or build a first storage area network (SAN); iSCSI and/or Fibre Channel connectivity are supported.
- Use network attached storage (NAS) connectivity options for collaborative file-sharing applications.
- Use advanced features—Cache Partition Manager and RAID-6—to help improve performance, reliability and usability.
- Deliver application specific performance, availability and protection across systems—from a few terabytes to 162TB (intermix

of SATA and Fibre Channel drives) or 67.5TB (Fibre Channel drives).

- Partition and dedicate cache to maximize performance of high-I/O applications.
- Reduce utility charges with Power Savings Service.
- Support top performance for virtually any workload, with 2,048 logical units (LUNs).
- Centralize storage management: cut costs.
- Choose Fibre Channel, SATA II, or intermix to host any workload economically.

### Ensure Compliance, Protection

- Archival and long-term tamperproof data retention meets regulatory requirements.
- Enhanced SATA data protection provides unmatched data availability and resiliency.
- RAID-6 ensures high availability and flexibility in RAID group rebuild.
- Hi-Track® Monitor diagnostics keep potential issues from becoming problems.
- Fully redundant and hot-swappable components keep applications online.
- Within-system volume replication or incremental copies provide frequent and nondisruptive backups.
- Employs Hitachi TrueCopy® Remote Replication software bundle.
- Flexible sparing eliminates the need to copy back after a RAID group rebuild.
- Audit logging tracks all system changes.

### Business Solutions

Hitachi Data Systems and its Hitachi TrueNorth™ Channel Partners offer industry-leading technology to help organizations of all sizes meet their unique requirements for business continuity, regulatory compliance and data recovery. Together, we provide cost-effective storage products and solutions that leverage world-renowned Hitachi global R&D resources to deliver performance, availability and scalability—supporting business critical applications and strengthening competitive advantage.

### Modular Storage, Priced for the Midrange Market

- Hitachi Adaptable Modular Storage 1000
- Hitachi Adaptable Modular Storage 500
- Hitachi Adaptable Modular Storage 200
- Hitachi Workgroup Modular Storage 100

# Adaptable Modular Storage 500 Specifications

## Physical Characteristics

Raw capacity	162TB Fibre Channel-SATA Intermix 67.5TB Fibre Channel
Internal disk drive operations (Fibre Channel, unless otherwise noted)	73GB (10K & 15K RPM) 146GB (10K & 15K RPM) 300GB (10K & 15K RPM) 500GB SATA (7200 RPM) 750GB SATA (7200 RPM)
Disk drive interface	SATA-Fibre Channel intermix
Host interface	Fibre Channel: 4 @ 1, 2, or 4 Gbit/sec iSCSI: 4 @ 1Gbit/sec, NAS: 8 @ 1Gbit/sec
Minimum/maximum number of disk drives	4-225 Fibre Channel 0-210 SATA
Model upgrade options	Adaptable Modular Storage 1000 (upgradable on Fibre Channel versions)
Number of controllers	1 or 2
Maximum host connections (Adaptable Modular Storage 500 supports Fibre Channel and iSCSI on same device with an optional bridge)	4 Fibre Channel OR 4 iSCSI OR 8 NAS OR 2 Fibre Channel AND 2 iSCSI
Maximum attached hosts through virtual ports	512
Active loops per number of disk drives (Active loops per drive tray/disk drives per tray)	4/15
LUNs	2048

## RAID Support

- RAID-0 (Fibre Channel only)
- RAID-1
- RAID-1+0
- RAID-5
- RAID-6

## Availability

Nondisruptive component replacement	MAJOR FRU
Nondisruptive hot-pluggable disks	
Nondisruptive microcode updates	
Hi-Track® Monitor	

## Performance

Minimum-maximum cache	2GB-8GB
Cache binding	Hitachi Cache Residency Manager feature
Logical partitioning	Hitachi Cache Partition Manager feature 2-16 partitions
Management Software	Hitachi Resource Manager™ utility package, and Hitachi Storage Management and HiCommand® Suite
Common APIs	YES—Across Hitachi data storage systems
Point-in-time copy	Hitachi ShadowImage® Replication software and Hitachi Copy-on-Write Snapshot software
Backup	Hitachi Data Protection Suite, powered by CommVault®
LU-change-ownership	
LUN security	Hitachi Volume Security
Host Storage Domains; Virtual Storage Ports; Multiple LUN0/port	
Storage-system based “write once, read many” (WORM) data protection	Hitachi Data Retention Utility
Dynamic LUN management	YES
Host failover	Hitachi HiCommand Dynamic Link Manager software
Heterogeneous SAN management	Hitachi Storage Management and HiCommand Suite

## Operating Systems Support

- IBM® AIX®
- HP-UX
- Microsoft Windows 2000, Windows Server 2003
- Microsoft Simple SAN compliant
- Sun Solaris
- HP Tru64 UNIX
- SGI IRIX
- Novell NetWare
- Linux
- HP OpenVMS
- VMWare
- Apple MAC OS
- IBM z/OS®, when externally attached to models of the Hitachi Universal Storage Platform™ family

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

- Account authorization limits authority to change the system.

## Build or Extend a Storage Network

- Plug-and-play SAN Kit for Hitachi Modular Storage (for Microsoft Simple SAN and SAN Starter solutions)
- Diskless boot for SAN-attached servers
- High-capacity storage for NAS applications
- Management/configuration with Hitachi Storage Management and HiCommand® Suite

## Leverage for Applications or Enterprise Tiered Storage

- Exchange Server, ERP, CRM, database, NAS filer, backup or tape replacement
- Combine with Hitachi enterprise-class storage for data lifecycle management solutions in a tiered storage environment

## Hitachi Data Systems Corporation

**Corporate Headquarters** 750 Central Expressway, Santa Clara, California 95050-2627 USA  
Contact Information: + 1 408 970 1000 [www.hds.com](http://www.hds.com) / [info@hds.com](mailto:info@hds.com)

**Asia Pacific and Americas** 750 Central Expressway, Santa Clara, California 95050-2627 USA  
Contact Information: + 1 408 970 1000 [www.hds.com](http://www.hds.com) / [info@hds.com](mailto:info@hds.com)

**Europe Headquarters** Sefton Park, Stoke Poges, Buckinghamshire SL2 4HD United Kingdom  
Contact Information: + 44 (0) 1753 618000 [www.hds.com](http://www.hds.com) / [info.uk@hds.com](mailto:info.uk@hds.com)

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