D A T A S H E E T

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 standalone 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 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 212TB (inter-mix of SATA and Fibre Channel drives) or 88TB (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 meet 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.
- System 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.
- Account authorization limits authority to change the system.

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 Midsized Organizations

- 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	212.5TB Fibre Channel–SATA Intermix 88.4TB Fibre Channel
Internal disk drive operations (Fibre Channel, unless otherwise noted)	73GB (15K RPM) 146GB (15K RPM) 300GB (10K & 15K RPM) 400GB (10K RPM) 500GB SATA (7200 RPM) 750GB SATA (7200 RPM) 1TB SATA (7200 RPM)
Disk drive interface	SATA–Fibre Channel intermix
Host interface	Fibre Channel: 4 @ 1, 2, or 4 Gb/sec iSCSI: 4 @ 1Gb/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
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-5
- RAID-1
- RAID-6
- RAID-1+0

Availability

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

Performance

Minimum-maximum cache	2GB–8GB
Cache binding	Hitachi Cache Residency Manager feature
Logical partitioning	Hitachi Cache Partition Manager feature 2–16 partitions

Software

Management Software	Hitachi Resource Manager utility package and Hitachi Storage Command 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 Dynamic Link Manager software
Heterogeneous SAN management	Hitachi Storage Command 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.

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
- Management/configuration with Hitachi Storage Command Suite

Leverage for Applications or Enterprise Tiered Storage

- Exchange Server, enterprise resource planning (ERP), customer relationship management (CRM), database, backup or tape replacement
- Combine with Hitachi enterprise-class storage for data lifecycle management solutions in a tiered storage environment