HITACHI
D A T A   S Y S T E M S

Hitachi TagmaStore™ Adaptable Modular Storage Model AMS500

For small-to-midsized businesses, model AMS500 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 SMB Customers

Small-to-midsized businesses (SMBs) are facing big-company challenges of escalating data growth, availability, and 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 Application Optimized Storage™ solutions to match application requirements to storage attributes. Now Hitachi Data Systems brings SMB customers these proven solutions in modular, cost-effective packaging—including the Hitachi TagmaStore™ Adaptable Modular Storage model AMS500.

Business Benefits

Gain high-end performance and capacity, priced for the midrange

- :: Move from server-internal storage to scalable external storage, consolidate multiple storage systems into one, or build a first storage area network (SAN); either iSCSI or Fibre Channel connectivity supported.
- :: Use NAS connectivity options for collaborative file-sharing applications.
- :: Deliver application-specific performance, availability, and protection across systems—from a few terabytes to more than 86TB (SATA intermix drives) or 64TB (Fibre Channel drives).

- :: Use advanced features—Cache Partition Manager and RAID-6—to help improve performance, reliability, and usability.
- :: Partition and dedicate cache to maximize performance of high-I/O applications.
- :: Support outstanding performance for virtually any workload, with 2,048 logical units (LUNs).
- :: Choose between SATA intermix and Fibre Channel to host any workload on the most economical storage system.

Consolidate storage, anticipate growth

- :: Consolidate and centralize management to reduce costs.
- :: Scale to 86.9TB of SATA and Fibre Channel intermix or to 64.7TB of Fibre Channel storage capacity.

Meet compliance requirements, protect data, and reduce recovery times

- :: Enhanced SATA data protection provides unmatched data availability and resiliency.
- :: RAID-6 ensures high availability and flexibility in RAID group rebuild.
- :: Hi-Track® "call-home" service/remote maintenance tool for 24/7 diagnostics keeps potential issues from becoming problems.
- :: Fully redundant and hot-swappable components keep your applications online.
- :: Within-system volume replication or incremental copies provide frequent and nondisruptive backups.

Modular Storage for the Midrange Market

- :: Hitachi TagmaStore™ Adaptable Modular Storage model AMS1000
- :: Hitachi TagmaStore™ Adaptable Modular Storage model AMS500
- :: Hitachi TagmaStore™ Adaptable Modular Storage model AMS200
- :: Hitachi TagmaStore™ Workgroup Modular Storage model WMS100

- **::** Remote replication is enabled by Hitachi TrueCopy™ Remote Replication software.

Build a first storage network or extend an existing one

- **::** Plug-and-play SAN Kits for Microsoft Simple SAN and SAN Starter solutions for easy deployment
- **::** Diskless boot for SAN-attached servers
- **::** High-capacity storage for network attached storage (NAS) applications
- **::** Systems management and configuration using Storage Management and Hitachi HiCommand® Suite software

Leverage for SMB applications or enterprise tiered storage deployments

- **::** Microsoft Exchange Server, ERP, CRM, database, NAS filer, backup applications, or tape replacement
- **::** Archival and long-term tamperproof data retention to meet regulatory requirements
- **::** Complete data lifecycle management solutions within a tiered storage environment when combined with Hitachi enterprise-class storage

Adaptable Modular Storage—Model AMS500 Specifications

Physical Characteristics

Raw capacity	86.9TB SATA Intermix 64.7TB Fibre Channel
Internal disk drive options (Fibre Channel, unless otherwise noted)	73GB (10K & 15K RPM) 146GB (10K & 15K RPM) 300GB (10K RPM) 250GB SATA (7200 RPM) 400GB SATA (7200 RPM) 500GB SATA* (7200 RPM)
Disk drive interface	SATA–Fibre Channel Intermix
Minimum/maximum number of disk drives	4–225 Fibre Channel 0–210 SATA
Model upgrade options	AMS1000 (upgradable on Fibre Channel versions)
Number of controllers	1 or 2
Maximum host connections	Fibre Channel: 4 @ 1, 2, or 4Gbit/sec (4Gbit/sec ports optional) iSCSI: 4 @ 1Gbit/sec NAS: 8 @ 1Gbit/sec
Maximum attached hosts through virtual ports	512
Active loops per number of disk drives	4/15
LUNs	2048

Availability

Nondisruptive component replacement	MAJOR FRU
Nondisruptive hot-pluggable disks	
Nondisruptive microcode updates	
Hi-Track® "call-home" service/remote maintenance tool	

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, Storage Management and Hitachi HiCommand® Suite
Common APIs	YES—across Hitachi storage systems
Point-in-time copy	Hitachi ShadowImage™ In-System Replication, Hitachi Copy-on-Write Snapshot
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
Heterogeneous SAN management	Hitachi HiCommand® Suite

RAID Support

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

Operating Systems Support

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

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

*500GB SATA drives available mid-Q2 2006