Hitachi TagmaStore™ Adaptable Modular Storage Model AMS1000

For medium-to-large businesses, model AMS1000 provides a very flexible, scalable, cost-effective modular storage system for Microsoft Exchange Server, ERP, CRM, and other business applications, tiered and standalone storage, consolidation, SAN deployment, backup, or data archiving.

Enterprise-class Solutions at a Modular Price

Medium-sized businesses 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 midsized customers these proven solutions in modular, cost-effective packaging—including the Hitachi TagmaStore™Adaptable Modular Storage model AMS1000.

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 and/or Fibre Channel connectivity are supported.

:: Use NAS connectivity options for collaborative file-sharing applications.

:: Consolidate SAN, iSCSI, and NAS onto a single platform (any two protocols supported).

:: Deliver application-specific performance, availability, and protection

across systems—from a few terabytes to more than 170TB—with both Serial ATA (SATA) and 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 4,096 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 over 170TB of SATA and Fibre Channel intermix or to 129TB 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.

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

- :: Within-system volume replication or incremental copies provide frequent and nondisruptive backups.
- :: Remote replication is enabled by Hitachi TrueCopy™ Remote Replication software.

Extend an existing SAN or deploy in a tiered architecture
- :: Manage and configure your systems using Storage Management and Hitachi HiCommand® Suite software.

- :: Extend your SAN to smaller servers using iSCSI connect option (AMS1000 supports dual protocols).
- :: Employ archival and long-term tamperproof data retention to meet regulatory requirements.
- :: Combine with Hitachi enterprise-class storage for complete data lifecycle management solutions within a tiered storage environment.

Adaptable Modular Storage—Model AMS1000 Specifications

Physical Characteristics

Raw capacity	173.8TB* SATA Intermix 129.4TB Fibre Channel
Internal raw capacity (300GB Fibre Channel, 400GB SATA)	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	4–450 Fibre Channel 0–420 SATA
Model upgrade options	NO
Number of controllers	2
Maximum host connections (AMS1000 supports Fibre Channel, NAS, and iSCSI; any two protocols supported on same device)	Fibre Channel: 8 @ 1, 2, or 4 Gbit/sec OR 4 Fibre Channel ports AND iSCSI: 4 @ 1Gbit/sec OR NAS: 8 @ 1Gbit/sec
Maximum attached hosts through virtual ports	1024
Active loops per number of disk drives	8/15
Maximum LUNs	4096

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	4GB–16GB

Cache binding	Hitachi Cache Residency Manager feature
Logical partitioning	Hitachi Cache Partition Manager feature 4–32 partitions

Software

Management software	Hitachi Resource Manager™ utility package, Storage Management and Hitachi HiCommand® Suite
Common APIs	YES—across Hitachi storage systems
Remote copy	Hitachi TrueCopy™ Remote Replication (synchronous)
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

* Available Q2 2006