

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 midsize 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 73GB (10K & 15K RPM)
(300GB Fibre Channel, 146GB (10K & 15K RPM)
400GB SATA) 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

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