Hitachi Adaptable Modular Storage 1000

For medium- to large-sized businesses, Hitachi Adaptable Modular Storage 1000 is a flexible, scalable, cost-effective storage system for Microsoft® Exchange Server, ERP, CRM and other business applications, as well as 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 Services Oriented Storage Solutions to match application and business requirements to storage attributes. Now Hitachi Data Systems brings medium and midsized customers these proven solutions in modular, cost-effective packaging — including Hitachi Adaptable Modular Storage 1000.

Business Benefits

High-end Performance and Capacity

- 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 are supported.
- Deliver application-specific performance, availability and protection across systems — from a few terabytes (TB) to 424TB — with both Serial ATA (SATA) and Fibre Channel drives.
- Consolidate Fibre Channel and iSCSI storage onto a single platform.
- 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.
- Reduce utility charges with Power Savings Service.
- Support outstanding performance for virtually any workload with 4,096 logical units (LUNs).
- Choose Fibre Channel, SATA II or intermix to host any workload on the most economical storage system.

Consolidate Storage, Expect Growth

- Consolidate and centralize management to reduce costs.
- Scale capacity to over 424TB (SATA-Fibre Channel intermix) or to 176TB (Fibre Channel).
- Combine with Hitachi enterprise-class storage for complete data lifecycle management solutions within a tiered storage environment.

Ensure Compliance, Protection

- Enhanced SATA data protection provides unmatched data availability and resiliency.
- RAID-6 ensures high availability and flexibility in RAID group rebuild.

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 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 1000 Specifications

**Physical Characteristics**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw capacity</td>
<td>424.9TB Fibre Channel–SATA Intermix 176.7TB Fibre Channel</td>
</tr>
<tr>
<td>Internal disk drive operations (Fibre Channel, unless otherwise noted)</td>
<td>73GB (15K RPM) 146GB (15K RPM) 300GB (10K &amp; 15K RPM) 400GB (10K RPM) 500GB SATA (7200 RPM) 750GB SATA (7200 RPM) 1TB SATA (7200 RPM)</td>
</tr>
<tr>
<td>Disk drive interface</td>
<td>SATA–Fibre Channel Intermix</td>
</tr>
<tr>
<td>Host interface</td>
<td>Fibre Channel: 8 @ 1, 2, or 4 Gb/sec iSCSI: 4 @ 1Gb/sec</td>
</tr>
<tr>
<td>Minimum/maximum number of disk drives</td>
<td>4–450 Fibre Channel 0–420 SATA</td>
</tr>
<tr>
<td>Model upgrade options</td>
<td>NO</td>
</tr>
<tr>
<td>Number of controllers</td>
<td>2</td>
</tr>
<tr>
<td>Maximum host connections</td>
<td>8 Fibre Channel CR 4 iSCSI CR 4 Fibre Channel AND 4 iSCSI</td>
</tr>
<tr>
<td>Maximum attached hosts through virtual ports</td>
<td>1024</td>
</tr>
<tr>
<td>Active loops per number of disk drives (Active loops per drive tray/disk drives per tray)</td>
<td>8/15</td>
</tr>
<tr>
<td>LUNs</td>
<td>4096</td>
</tr>
</tbody>
</table>

**RAID Support**

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

**Availability**

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

**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 and Hitachi Storage Command Suite
- Common APIs: YES — across Hitachi data storage systems
- Remote copy: Hitachi TrueCopy® Synchronous and Hitachi TrueCopy Extended Distance software
- Point-in-time copy: Hitachi ShadowImage® Replication software and Hitachi Copy-on-Write Snapshot software
- Backup: Hitachi Data Protection Suite, powered by CommVault®
- Nondisruptive volume migration
- LUN security: Hitachi Volume Security software
- 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 software

**Operating Systems Support**

- IBM® AIX®
- HP-UX
- 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

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- Hi-Track® Monitor for 24/7 diagnostics keeps 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.
- Remote replication is enabled by Hitachi TrueCopy® Remote Replication software bundle.
- Flexible sparing eliminates the need to copy back after a RAID group rebuild.
- Audit logging keeps track of all system changes.
- Account authorization limits authority to change the system.