

Hitachi Workgroup Modular Storage 100

For small and mid-sized organizations, the all-SATA Hitachi Workgroup Modular Storage 100 offers a highly scalable, reliable and cost-effective platform for Microsoft® Windows and other business applications, consolidation, first SAN deployment, NAS access, backup or data archiving.

Enterprise-class Solutions for Small and Mid-sized Customers

Small and mid-sized 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 business requirements to storage attributes. With Hitachi Workgroup Modular Storage 100 Hitachi Data Systems provides proven solutions in a cost-effective package.

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 are supported.
- Use NAS connectivity options for collaborative file-sharing applications.
- Scale to over 79TB of Serial ATA (SATA) storage to keep up with data growth.
- Support very large numbers of servers and applications with 512 LUNs.
- Use advanced features—Cache Partition Manager and RAID-6—to help improve performance, reliability and usability.

- Benefit from easy-to-use software utilities for configuration and management.
- Provision your storage directly from Microsoft Windows using the Plug-and-play SAN Kit for Hitachi Modular Storage, the first Microsoft designated Simple SAN Solution for Windows Server Environments.
- Partition and dedicate cache to maximize performance of high-I/O applications.
- Power Savings Service reduces utility charges.
- 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.

Protect Critical Data

- Enhanced SATA data protection for unmatched data availability and resiliency
- RAID-6 for high availability
- Hi-Track® Monitor for 24/7 diagnostics
- Fully redundant and hot-swappable components to keep applications online
- Within system volume replication or incremental copies for frequent backups

Build a First Storage Network or Extend an Existing One

- Plug-and-play SAN Kit for Microsoft Simple SAN and SAN Starter solutions
- Diskless boot for SAN-attached servers

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 the Midrange Market

- Hitachi Adaptable Modular Storage 1000
- Hitachi Adaptable Modular Storage 500
- Hitachi Adaptable Modular Storage 200
- Hitachi Workgroup Modular Storage 100

Workgroup Modular Storage 100 Specifications

Physical Characteristics

Raw capacity	78.75TB SATA
Internal disk drive options	500GB SATA (7200 RPM) 750GB SATA (7200 RPM)
Disk drive interface	SATA
Host interface	Fibre Channel: 4 @ 1, 2, or 4 Gbit/sec iSCSI: 4 @ 1Gbit/sec NAS: 8 @ 1Gbit/sec
Minimum/maximum number of disk drives	4–105 SATA
Model upgrade options	NO
Number of controllers	1 or 2
Maximum host connections (Workgroup Modular Storage 100 supports Fibre Channel and iSCSI on same device with an optional bridge)	4 Fibre Channel OR 4 iSCSI OR 8 NAS OR 2 Fibre Channel AND 2 iSCSI
Maximum attached hosts through virtual ports	512
Active loops per number of disk drives (Active loops per drive tray/disk drives per tray)	2/15
Maximum LUNs	512

RAID Support

- RAID-1 ■ RAID-5
- RAID-1+0 ■ RAID-6

Availability

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

Performance

Minimum-maximum cache	512MB–2GB
Cache binding	Hitachi Cache Residency Manager feature
Logical partitioning	Hitachi Cache Partition Manager feature 2-6 partitions

Software

Management software	Hitachi Resource Manager™ utility package, Hitachi Storage Management and HiCommand® Suite
Common APIs	YES—across Hitachi storage systems
Point-in-time copy	Hitachi ShadowImage® Replication software, Hitachi Copy-on-Write Snapshot software, and 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 Storage Management and HiCommand 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 any model of the Hitachi Universal Storage Platform™ family

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

- High-capacity storage for network attached storage (NAS) applications
- System management and configuration using Hitachi Storage Management and HiCommand® Suite software

Leverage for Applications or Enterprise Tiered Storage Deployments

- Small and mid-sized business applications such as: Microsoft Exchange Server, ERP, CRM, NAS filer, backup applications or tape replacement
- Archival and long-term tamperproof data retention to meet regulatory requirements
- Combined with Hitachi enterprise-class storage to create complete data lifecycle management solutions within a tiered storage environment

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