IBM System Storage Product Guide

Today, information has become the lifeline for business sustainability and competitive advantage. Companies of all sizes—companies like yours—are searching for practical ways to create business value—to get their arms around information, correlate insights and to confidently predict outcomes and take action.

For CIOs, the information era poses unique challenges: how to cost-effectively store, archive and retrieve a virtual explosion of new information, how to protect and secure that information, meet compliance requirements and make that information accessible for business insight, where and when it's needed.

Without a dynamic information infrastructure, you may be facing higher operational costs and greater exposure to business risks.

IBM offers Information Infrastructure solutions to help you efficiently manage information growth, support compliance, reduce storage and archiving costs and enable continuous access to information in support of business requirements.

Learn more about IBM Information Infrastructure, including the full range of data storage solutions and companion software and services offerings at: **ibm.com**/information_infrastructure.

What's New?

IBM has invested billions of dollars to enhance System Storage™ products and services to better meet the information infrastructure needs of businesses like yours. This Product Guide features several new products:

- IBM System Storage TS7650 ProtecTIER® Data Deduplication Appliance

- IBM XIV® Storage System IBM System Storage

- SAN Volume Controller Entry Edition

- IBM System Storage N6060 series

- IBM Self-encrypting Storage and Key Management Solution (TKLM + LTO bundle)

- IBM Virtual Tape for Mainframe (VTFM)

The following products featured in this guide have been significantly enhanced:

- IBM System Storage DS8000® R4.2 Disk System with new options for drive-level disk encryption, Solid State storage, and 1 TB SATA drives

- IBM System Storage DS3000 Express

- IBM Comprehensive Data Protection Solution (TSM Fastback bundle)

Media tape	Highlights	Technology	Capacity			Part number	Related products	Part number
			Length (m/feet)	native	Compressed (typical)			
Enterprise tape	• Custom labeling and initialization services are available • Server tracks help improve data integrity • Cartridge intermix within libraries supports smooth migration, legacy systems • Write Once Read Many (WORM) functionality • Machine type/model: 3599	3592 Tape Cartridge	825/2706 825/2706 610/2001 610/2001 246/810 246/810	700 GB/1 TB 700 GB/1 TB* 300/500/640 GB 300/500/640 GB* 60/100/128 GB 60/100/128 GB*	2.1/3 TB 2.1/3 TB 900 GB, 1.5/1.9 TB 900 GB, 1.5/1.9 TB 180/300/384 GB 180/300/384 GB	23R9830 23R9831 18P7534 18P7538 24R0316 24R0317	3592 Cleaning Cartridge	18P7535
		3590 Tape Cartridge	320/1050	10/20/30 GB	30/60/90 GB	05H4434 05H3302-J-less	3590 Cleaning Cartridge	05H4435
		3590E Tape Cartridge	634/2070	20/40/60 GB	60/120/180 GB	05H3188 08L6091-K-less		
.31" MP tape	• Unique midpoint load mechanism enables the system to locate data fast • Durable cartridge case helps protect the tape • Self-contained tape path helps improve reliability and extend tape life • Almost instantaneous head/tape contact at load time speeds processing	IBM Magstar™ MP Fast Access Linear Tape Cartridge	167/54	5 GB	15 GB	05H2462—B 08L6187—C	Cleaning Cartridge	05H2463
		Magstar MP Fast Access Linear Tape Cartridge—XL	227/745	7 GB	21 GB	08L6663-C-XL		
LTO® tape	• Media uses industry-leading, interchangeable LTO format • Cartridge is highest-capacity open standard tape cartridge available • Custom labeling is available • IBM-exclusive Statistical Analysis and Reporting System (SARS) statistics are stored in cartridge memory • High durability helps support automation environments • Machine type/model: 3589	Ultrium 4 Ultrium 4* Ultrium 3 Ultrium 3* Ultrium 2 Ultrium 1	820/2690 820/2690 680/2231 680/2231 609/1998 609/1998	800 GB 800 GB 400 GB 400 GB 200 GB 100 GB	1600 GB 1600 GB 800 GB 800 GB 400 GB 200 GB	95P4436 95P4450 24R1922 96P1203 08L9870 08L9120	Ultrium Cleaning Cartridge (all) Leader Pin Attachment Kit 5-pack LTO Ultrium 4 tapes 5-pack LTO Ultrium 3 tapes	35L2086 23R7008 08L9129 95P4278 95P2020
Optical cartridge	• Suitable for storing data that can be overwritten and has a finite life span • WORM media helps safeguard against data being erased or changed	3996 Ultra Density Optical (UDO)	NA	30 GB 30 GB* 60 GB 60 GB*		23R2568 23R2567 59H5629 59H5628		
DLTtape	• Cartridge labelling area and labels are included • VS1 Data Cartridge	VS1	563/1850	80 GB	160 GB	18P8923	Cleaning Cartridge - VS160	18P8924
VXA-2/3	• Durable coating can resist oxidation and moisture • Advanced archival and capacity properties are included • Wide selection of compatible cartridge capacities support daily or full backups • Media enclosure shutter locks out dirt and debris	VXA 8 mm—X6 VXA 8 mm—X10 VXA 8 mm—X23	62/203 124/406 230/754	40 GB 80 GB 160 GB	80 GB 160 GB 320 GB	24R2134 24R2136 24R2137	Cleaning Cartridge—X-MEDIA	24R2138
4 mm Tape	• Precision-matched tape reels and reel heights help support reliable operation • Proprietary hub lock helps reduce positioning errors to improve data integrity • Improved media coating helps reduce head friction and provide cleaner operation	DDS-3	125/410	12 GB	24 GB	59H3465	Cleaning Cartridge—4 mm 4 mm format	21F8763 23R5638
		DDS-4	150/492	20 GB	40 GB	59H4456		
		DAT72 DAT160	170/557 190/700	36 GB 80 GB	72 GB 160 GB	18P7912 23R5635		
8 mm Tape	• Special media formulation can help reduce drop-out to improve reliability • Rigid magnetic stability specification helps increase coercivity to prolong shelf life and improve read reliability	AME	22/73	2.5 GB	5 GB	59H2671	Cleaning Cartridge—AME	35L1409
			170/557	20 GB	40 GB	59H2678		
SLR (QIC) cartridges	• Sophisticated mirror optics support BOT and EOT recognition • Advanced media-binder process provides ultra-clean operation • Stringent wheel-pin perpendicularity specification enables smoother operation and fewer re-reads • Proprietary belt design provides steady tension • Special stippled base-plate design helps provide rigidity and a stable tape path • Cartridge cover shields against static discharge and airborne debris • Durastat on drive rollers dissipates static 1-888-IBM-MEDIA **ibm.com**/storage/media	5.25" SLR5/QIC-4GB-DC	458/1500	4 GB	8 GB	59H3660	QIC 5.25" MLR/SLR Cleaning Cartridge (50 uses)	35L0844
		5.25" MLR1/QIC-5010-DC	458/1500	16 GB	32 GB	59H4175		
		5.25" MLR3/QIC-5120-DC	462/1515	25 GB	50 GB	59H4128		
		5.25" SLR60	274/900	30 GB	60 GB	19P4209		
		5.25" SLR60	366/1200	37.5 GB	75 GB	24R0146		
		5.25" SLR100	47/156	5 GB	10 GB	35L0661		
		5.25" SLR100	457/1500	50 GB	100 GB	35L0968		

* WORM version

IBM Global Services for System Storage and Storage Networking

Data Storage Services from IBM can help you achieve business objectives by creating cost-effective data storage solutions that address the requirements of key business applications. These solutions can support multiple platforms and product vendors, helping to provide enhanced protection for critical business data, increased asset utilization, availability and reliability levels with reduced management costs.

IBM Global Services, as the leading data storage services provider, brings best practices from its thousands of customer engagements to work with your employees to integrate new solutions and technology with your business and IT needs. IBM offers a comprehensive portfolio of data storage services including:

Assess
- Analysis of enterprise information needs and environment
- Defined enterprise-wide storage strategies
- Quantified business benefits

Plan
- Backup/restore and business continuity planning
- Performance and capacity planning
- Enterprise security architecture
- Storage migration and consolidation

Design
- Networked storage architecture design
- SAN configuration and integration services
- Proof of concept, validation and certification

Implement
- Implementation, testing and migration services
- Education and training
- Installation, relocation, cabling and site preparation

Run
- Business and application recovery services
- Systems monitoring and management
- Managed Storage Services

IBM Global Services has a track record in offering services for open and mainframe storage, data migration, installation and support services for IBM and non-IBM environments. Some examples are:
- IBM Storage Strategy Assessment assists with the vision and strategy, assessment, architecture and conceptual designs to help customers optimize their storage infrastructure to new architectures.
- IBM Planning Services for 3494 Automated Tape Library and Virtual Tape Server can help improve tape storage management and gain control of an often expanding library of tapes.
- IBM Operational Support Services for Tivoli Storage Manager assists customers in the planning and implementation of storage management software.
- IBM Managed Storage Services offer scalable, cost-effective storage capacity, management and backup/restore services on a usage basis.

More information about IBM storage services can be found at **ibm.com**/services/storage.

Recyclable, please recycle

IBM Global Financing

Financing that supports throughout the technology life cycle

IBM Global Financing can help you accelerate your acquisitions of the latest technology and services, and help make your IT and information infrastructure projects more affordable by providing competitive, customized financing of your storage, server, PC, software and services investments. In addition, IBM Global Financing can also enable you to reduce technology obsolescence risk and handle planning for disposal and replacement of your IT hardware assets. With single-source, customized, competitive financing of the entire life cycle of your IT equipment, it is easier to manage both the up-front investment and the ongoing operating costs.

From acquisition through daily use, buyback and disposal, our end-to-end offerings form the foundation of a cohesive technology management strategy, improve asset management and increase your flexibility in small and large IT projects.

Offerings, rates, terms and availability may vary by country. Contact your local IBM representative or visit the Web at **ibm.com**/financing