HP StorageWorks MSL2024
Tape Library

HP StorageWorks MSL4048
Tape Library

HP StorageWorks MSL8096
Tape Library

HP StorageWorks MSL2024, MSL4048 and MSL8096 Tape Library Family

Data sheet

Data is an organisation's lifeline to success, so protecting it is vital. The volume of business data, however, continues to increase rapidly, making it more difficult to obtain accurate, timely backups. In addition, data centres are under pressure to implement backup, archive and recovery solutions that can preserve business continuity even under catastrophic conditions.

HP StorageWorks MSL Tape Libraries can deliver all of the above while simplifying your infrastructure. HP MSL Tape Libraries manage multiple single-tape drives, consolidating them to a single hardware device that meets a broad range of demanding data storage needs, including unattended backup, archive, and disaster recovery.

Designed for medium-to large-sized businesses, workgroups, or remote offices, HP MSL Tape Libraries provide the high performance you need in a condensed physical size that conserves rack and desktop space inside crowded data centres. Their primary job is to automate your backups so that they occur right on schedule, without worries that someone will forget to do them or use the wrong tape. Monitoring and managing these devices is simple.

If you need to manage multiple remote sites, Web-based remote management lets you control HP MSL Tape Libraries from across the room, away from your desk, or outside the office. You can also manage your media both in and out of the library with a standard barcode reader and removable magazines. And when the time comes to add performance, you can protect your investment with tool-free, next-generation upgrades.

Key family benefits

To address your storage needs, the HP StorageWorks MSL Tape Library family offers reliable, cost-effective storage solutions.

Following are some of the key benefits provided by all members of the family – including MSL8096, MSL4048 and MSL2024:

- **Exceptionally dense storage capacity** – HP MSL Tape Libraries provide great value, featuring ample storage capacity in small footprints ideal for today's data centres.

- **Ability to manage from almost anywhere** – An easy-to-use, Web-based interface lets you remotely manage libraries, allowing you to support multiple sites centrally while reducing dependencies on local IT staff.
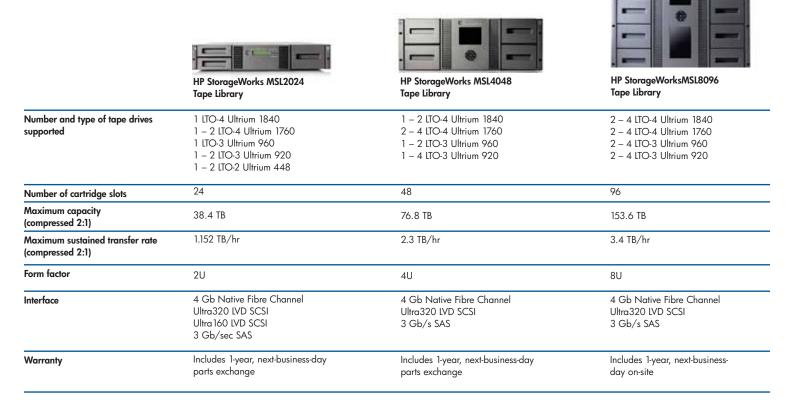
- **Equipment that fits your needs** – Choose from a range of libraries, LTO Ultrium tape drives, and interfaces that best suit your needs.
- **Reduced installation time** – All HP MSL Tape Libraries arrive ready for rack-mounting.
- **Expert diagnostic support** – HP StorageWorks Library and Tape Tools (L&TT) provide diagnostic and troubleshooting abilities. The intuitive interface decreases the need for training and deploys in less than five minutes. L&TT also offers extra product information and the ability to automatically check the Web for the latest firmware.
- **Enhanced compatibility** – All HP MSL Tape Libraries undergo extensive compatibility testing so that they can work seamlessly with leading servers, operating systems, and backup software.
- **Easy-to-enable AES 256-bit embedded hardware encryption with compression** – Obtain high levels of encryption security, with compression, for strong backup data privacy to secure confidential information and address compliance quickly; acquire encryption key management support through HP Data Protector Software and other ISV backup applications.
- **Investment protection** – As your data protection needs change or increase, you can boost capacity and performance easily with tool-free, next generation LTO Ultrium drive upgrade kits.
- **Ability to archive with enhanced security features using HP Ultrium WORM** – The LTO-4 Ultrium and LTO-3 Ultrium Tape Drives can archive and store data in a non-rewritable format that meets the most stringent regulatory guidelines. Using a combination of integrated fail-safe features in the drive firmware, cartridge memory, and tape formatting, these drives can archive large amounts of data for periods of up to 30 years in an untampered state. Since all LTO-4 Ultrium and LTO-3 Ultrium Tape Drives include support for both rewritable and WORM media, you can easily integrate a long-term archiving solution into your current data protection strategy.

- **Automated backup and recovery** – HP Data Protector software automates high-performance backup and recovery, from disk or tape, over very long distances to deliver business continuity and improve IT resource utilisation. No other software can integrate better with the HP StorageWorks family of disk and tape products, as well as with other heterogeneous storage infrastructures. HP Data Protector Software also fully integrates with HP Software management solutions, letting you add data protection management as an element of your overall IT service

HP StorageWorks MSL2024 Tape Library

The HP StorageWorks MSL2024 Tape Library is the ideal entry-level tape library that provides tape library capacity and extensive features in the compact form of a tape autoloader. With compressed capacity (2:1) of up to 38.4 TB, using the MSL2024 can easily tackle backup and recovery jobs typically handled by mid-range tape libraries. Utilising a 2U form factor, the MSL2024 provides a large amount of data storage without consuming a large amount of valuable rack space. The unique HP Web-based management feature reduces the dependencies on local IT resources, allowing multiple sites to be supported centrally. The MSL2024 offers customers the choice of purchasing a library equipped with LTO Ultrium tape drives and either a SCSI, SAS, or Fibre Channel interface. Each library includes two removable 12-slot magazines and one user-configurable mail slot dedicated for import/export of data cartridges. A barcode reader is part of the standard configuration for facilitating media management.

Technical specifications

	HP StorageWorks MSL2024 Tape Library	HP StorageWorks MSL4048 Tape Library	HP StorageWorks MSL8096 Tape Library
Number and type of tape drives supported	1 LTO-4 Ultrium 1840 1 – 2 LTO-4 Ultrium 1760 1 LTO-3 Ultrium 960 1 – 2 LTO-3 Ultrium 920 1 – 2 LTO-2 Ultrium 448	1 – 2 LTO-4 Ultrium 1840 2 – 4 LTO-4 Ultrium 1760 1 – 2 LTO-3 Ultrium 960 1 – 4 LTO-3 Ultrium 920	2 – 4 LTO-4 Ultrium 1840 2 – 4 LTO-4 Ultrium 1760 2 – 4 LTO-3 Ultrium 960 2 – 4 LTO-3 Ultrium 920
Number of cartridge slots	24	48	96
Maximum capacity (compressed 2:1)	38.4 TB	76.8 TB	153.6 TB
Maximum sustained transfer rate (compressed 2:1)	1.152 TB/hr	2.3 TB/hr	3.4 TB/hr
Form factor	2U	4U	8U
Interface	4 Gb Native Fibre Channel Ultra320 LVD SCSI Ultra160 LVD SCSI 3 Gb/sec SAS	4 Gb Native Fibre Channel Ultra320 LVD SCSI 3 Gb/s SAS	4 Gb Native Fibre Channel Ultra320 LVD SCSI 3 Gb/s SAS
Warranty	Includes 1-year, next-business-day parts exchange	Includes 1-year, next-business-day parts exchange	Includes 1-year, next-business-day on-site

For ordering information, please see QuickSpecs at **www.hp.com/go/QuickSpecs**

To quickly find the HP storage products that fit your specific needs, visit **www.hp.com/go/product-selector**

HP StorageWorks MSL4048 Tape Library

The HP StorageWorks MSL4048 Tape Library will meet a broad range of demanding data storage needs including unattended backup, archive and disaster recovery for small to medium businesses, workgroups, or remote offices. The MSL4048 offers up to 76.8 TB of compressed (2:1) storage capacity in only a 4U form factor and your choice of LTO-4 or LTO-3 Ultrium tape drives. The library is also available with a wide choice of interfaces including Fibre Channel, SCSI and SAS to allow installation of the library into any IT environment. The MSL4048 enables you to easily manage your media both in and out of the library with a standard bar code reader, a configurable three-slot mail slot and four 12-slot removable magazines. With unique HP web-based remote management, the MSL4048 is easily managed from across the room, or across the globe. The enhanced HP operator control panel is a full quarter VGA screen with an easy-to-navigate interface for easy on-site operator interaction.

HP StorageWorks MSL8096 Tape Library

The HP StorageWorks MSL8096 Tape Library will meet a broad range of demanding data storage needs including unattended backup, archive and disaster recovery for medium to large businesses, workgroups, or remote offices. The MSL8096 offers up to 153.6 TB of compressed (2:1) storage capacity in an 8U form factor with your choice of LTO-4 or LTO-3 Ultrium Tape Drives. The library is also available with a wide choice of interfaces including Fibre Channel, SCSI and SAS. A second power supply can be added for enhanced system up-time. The MSL8096 enables you to easily manage your media both in and out of the library with a standard bar code reader and eight 12-slot removable magazines. A quarter VGA operator control panel, up to 15 configurable mail slots and a viewing window with interior illumination enable easy operator interaction with the library. With a unique web-based remote management from HP, the MSL8096 is easily operated, configured and managed from across the room, or across the globe.

Service and Support

Factory Express

HP Factory Express is designed to help you get a better return from your IT investment by providing customisation, integration and deployment services along with your storage and server purchases. It provides predictable, trusted and tested IT solutions tailored to your business needs. We allow you to customise hardware to your exact specifications in the factory – helping to speed up deployment and free up internal resources. For more information please visit **www.hp.com/go/factoryexpress**

Customer Technical Training

Consider education as an integral part of your strategy to get the best return on investment for your HP storage solution. HP offers a variety of training courses on storage software, networking, archiving and disk storage systems. Our classes are available in many delivery modalities from traditional instructor-led courses at one of our 80 training centres worldwide to on-site training customised to your needs or online **www.hp.com/learn/storage**

Financial services

HP Financial Services provides innovative financing and financial asset management programs to help customers cost-effectively acquire, manage and ultimately retire their HP solutions. For more information on these services, please contact your HP representative or visit
www.hp.com/go/hpfinancialservices

HP Services

When you buy a HP StorageWorks MSL Tape Library storage solution, it is also a good time to think about what level of service and support you may need. To help take the worry out of deploying and managing your environment, we have designed a portfolio of service options that are as flexible, scalable and affordable as your storage.

Recommended Services

• 3-Year Support Plus 24 Service – Provides integrated hardware and software support services designed specifically for your technology. HP Services engineers deliver reactive on-site hardware support and over-the-phone software support around-the-clock.

• Autoloader and MSL SCSI/SAS Hardware Installation – Provides initial hardware installation of your product into your technology environment (system configuration is not included).

• HP Installation and Startup service for HP StorageWorks MSL Fibre Channel Tape Library Hardware Installation – Provides deployment activities necessary to get your Fibre Channel-based HP Tape Library up-and-running fast.

Related Services

• HP Backup and Recovery Solution Service for Data Protector: helping you to design an architecture that meets your requirements, HP will deploy Data Protector, validate your configuration, and integrate the backup software solution into your existing or new storage infrastructure.

For more information about HP services and support, contact your HP sales representative or HP-authorized Channel Partner or, visit **www.hp.com/hps/storage**

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