

# HP StorageWorks MSL Tape Libraries

Family data sheet

**Automate your backup with a tape library that provides a choice of Linear Tape-Open (LTO) Ultrium tape drives, remote management, data encryption, and investment protection with performance and capacity upgrades.**

The HP StorageWorks Midrange Storage Libraries (MSL) Tape Libraries meet the demanding data storage needs including unattended backup, archive, and disaster recovery for a wide range of businesses. The MSL Tape Libraries offer a choice of storage capacity including LTO-5, LTO-4, or LTO-3 Ultrium tape drives. With unique HP Web-based remote management, the MSL Tape Libraries are easily managed from across the room or across the globe with fewer IT staff. You can easily manage your media both in and out of the library with the standard bar code reader, a configurable mail slot, and multiple 12-slot removable magazines. Protect your data from unauthorized access with an MSL library-based encryption option so that your business data cannot be accessed if lost or stolen. Your MSL investment is protected with library expansion allowing you to increase capacity and performance quickly to meet your data demands.



## Key features and benefits

### Easy to manage and use

- Help you offer a wide range of capacity points from 9.6 TB to 288 TB of compressed capacity (2:1) in a variety of rack ready form factors
- Help you manage, configure, and use the library from across the room or across the globe with the HP Web-based remote management and diagnostics
- Help you monitor drive and media utilization, operational performance, life and health information of drive and media proactively with TapeAssure
- Help you manage your media both in and out of the tape library with a standard bar code reader and multiple 12-slot removable magazines

### Protection and flexibility

- Native encryption on LTO-5 and LTO-4 MSL Libraries deliver high level of security for data backup, protecting confidential information and addressing compliance regulations. The MSL Encryption Kit provides encryption keys to protect your backup independent of ISV support.
- MSL Tape Libraries can easily help increase capacity and performance with tool-free drive kits or slot license upgrades. Take advantage of the investment

in an MSL2024, MSL4048, MSL8048, or MSL8096 Tape Library by adding a second library to manage as a single, larger library using the MSL Library Extender.

- MSL Tape Libraries offer various interface options for installing the tape library into a SCSI, SAS, or FC SAN environment.

### Proven reliability

- MSL Tape Libraries work with industry-leading servers, operating systems, and backup software including HP Data Protector software.
- You can add the optional second power supply for increased system reliability and uptime on the MSL4048, MSL8048, or MSL8096 Tape Library.



**MSL2024 Tape Library**



**MSL4048 Tape Library**



**MSL8048/8096 Tape Libraries**



	<b>MSL2024 Tape Library</b>	<b>MSL4048 Tape Library</b>	<b>MSL8048/8096 Tape Libraries</b>
<b>Maximum drives per library</b>	<ul style="list-style-type: none"> <li>1- LTO-5 Ultrium 3280</li> <li>2- LTO-5 Ultrium 3000</li> <li>1- LTO-4 Ultrium 1840</li> <li>2- LTO-4 Ultrium 1760</li> <li>1- LTO-3 Ultrium 960</li> <li>2- LTO-3 Ultrium 920</li> </ul>	<ul style="list-style-type: none"> <li>2- LTO-5 Ultrium 3280</li> <li>4- LTO-5 Ultrium 3000</li> <li>2- LTO-4 Ultrium 1840</li> <li>4- LTO-4 Ultrium 1760</li> <li>2- LTO-3 Ultrium 960</li> <li>4- LTO-3 Ultrium 920</li> </ul>	<ul style="list-style-type: none"> <li>4- LTO-5 Ultrium 3280</li> <li>4- LTO-5 Ultrium 3000</li> <li>4- LTO-4 Ultrium 1840</li> <li>4- LTO-4 Ultrium 1760</li> <li>4- LTO-3 Ultrium 960</li> </ul>
<b>Number of cartridge slots</b>	24	48	48 (MSL8048)—upgradeable to 96 slots with license upgrade 96 (MSL8096)
<b>Maximum capacity</b> (2:1 compression)	<ul style="list-style-type: none"> <li>72 TB (LTO-5)</li> <li>38.4 TB (LTO-4)</li> <li>19.2 TB (LTO-3)</li> </ul>	<ul style="list-style-type: none"> <li>144 TB (LTO-5)</li> <li>76.8 TB (LTO-4)</li> <li>38.4 TB (LTO-3)</li> </ul>	<ul style="list-style-type: none"> <li>288 TB (LTO-5/MSL8096)</li> <li>153.6 TB ( LTO-4/MSL8096)</li> <li>76.8 TB (LTO-3/MSL8096)</li> <li>144 TB (LTO-5/MSL8048)</li> <li>76.8 TB (LTO-4, 48 slots)</li> <li>38.4 TB (LTO-3, 48 slots)</li> </ul>
<b>Host interface</b>	<ul style="list-style-type: none"> <li>8 Gb Fibre Channel</li> <li>4 Gb Fibre Channel</li> <li>6 Gb/sec SAS</li> <li>3 Gb/sec SAS</li> <li>Ultra320 LVD SCSI</li> </ul>	<ul style="list-style-type: none"> <li>8 Gb Fibre Channel</li> <li>4 Gb Fibre Channel</li> <li>6 Gb/sec SAS</li> <li>3 Gb/sec SAS</li> <li>Ultra320 LVD SCSI</li> </ul>	<ul style="list-style-type: none"> <li>8 Gb Fibre Channel</li> <li>4 Gb Fibre Channel</li> <li>6 Gb/sec SAS</li> <li>3 Gb/sec SAS</li> <li>Ultra320 LVD SCSI</li> </ul>
<b>Encryption capability</b>	<p>AES 256-bit</p> <p>Note: For Ultrium 3280, 3000, 1840, and 1760 drives only</p>	<p>AES 256-bit</p> <p>Note: For Ultrium 3280, 3000, 1840, and 1760 drives only</p>	<p>AES 256-bit</p> <p>Note: For Ultrium 3280, 3000, 1840, and 1760 drives only</p>
<b>Form factor</b>	2U	4U	8U
<b>Warranty and services included</b>	MSL2024: The warranty for this product consists of 1-year parts exchange, next business day	MSL4048: The warranty for this product consists of 1-year parts exchange, next business day	MSL8048: The warranty for this product consists of 1-year onsite, next business day MSL8096: The warranty for this product consists of 1-year onsite, next business day
<b>QuickSpec URL</b>	<a href="http://h18000.www1.hp.com/products/quickspecs/13258_div/13258_div.pdf">http://h18000.www1.hp.com/products/quickspecs/13258_div/13258_div.pdf</a>	<a href="http://h18000.www1.hp.com/products/quickspecs/13258_div/13258_div.pdf">http://h18000.www1.hp.com/products/quickspecs/13258_div/13258_div.pdf</a>	<a href="http://h18000.www1.hp.com/products/quickspecs/13258_div/13258_div.pdf">http://h18000.www1.hp.com/products/quickspecs/13258_div/13258_div.pdf</a>

## Factory Express

HP Factory Express is designed to help you get a better return from your IT investment by providing customization, 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 customize hardware to your exact specifications in the factory—helping to speed up deployment and free up internal resources. To learn more, visit: [www.hp.com/go/factoryexpress](http://www.hp.com/go/factoryexpress)

## Customer technical training

Consider education as an integral part of your strategy to get better return on investment from 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 centers worldwide to onsite training customized to your needs or online at [www.hp.com/learn/storage](http://www.hp.com/learn/storage)

## Financial Services

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

## HP Services

HP Technology Services—consultants and support experts to solve your most complex infrastructure problems. We help keep your business running, no matter what. Boost availability and avoid downtime; trust our expertise to enhance your HP solution.

### Recommended services

**3-Year HP Support Plus 24 Service:** For a higher return on your storage technology, this three-year combined reactive support option delivers integrated onsite hardware/software support services available 24x7.

**HP StorageWorks ESL, MSL, EML Tape Libraries Installation and Startup:** To get your Fibre Channel-based HP Tape Library up-and-running fast, this service provides initial hardware installation of your product into your technology environment (system configuration is not included).

### Related services

**HP Backup and Recovery Solution Service:** To help you to design an architecture that meets your requirements, this service deploys backup software, validates configuration, and integrates the backup software solution into your infrastructure.

Trust the services professionals at HP to collaborate with you to make technology the difference in your business. For more information, contact your HP-authorized Channel Partner or visit [www.hp.com/hps/storage](http://www.hp.com/hps/storage)

To understand how HP StorageWorks MSL Tape Libraries can automate your backup and help meet your increasing data storage needs, visit [www.hp.com/go/msl](http://www.hp.com/go/msl)

For more details on HP StorageWorks Enterprise Backup Solutions (EBS), visit [www.hp.com/go/ebs](http://www.hp.com/go/ebs)

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