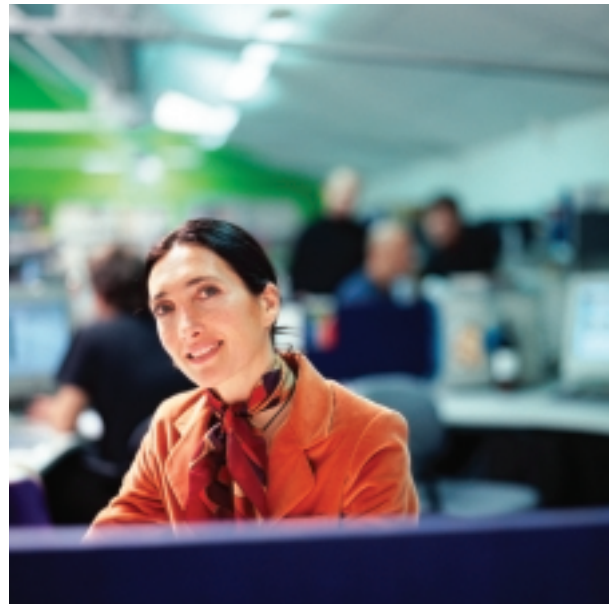


In an ideal world, data storage would have high capacity, bulletproof reliability, and an easy-to-use graphical user interface. HP has made that vision a reality. The HP StorageWorks MSL series of award-winning tape libraries offer your business a complete backup and restore solution for mid-range and departmental environments.



change
+ hp



Building a better backup

Now you can have a data storage system that is easy to use and can grow with your needs. The HP StorageWorks MSL series of tape libraries deliver it all. It offers unique features such as:

- The highest storage density in its class
- Hot-plug drives
- Multi-unit scalability for capacity expansion
- An easy-to-use graphical user interface
- Flexibility in choice for drive technology— supports both SDLT and LTO Ultrium drives
- HP-branded tape media that is tested beyond industry standards to optimize performance of the tape library

Simply put, the HP StorageWorks MSL series of tape libraries provide you with the ultimate in data protection, simplification, and investment protection.

Data protection when you need it

The HP StorageWorks MSL tape libraries are in use at thousand of locations worldwide, so their reliability is field-proven. The robotics are rated at 2 million load/unload cycles, and the drives are hot-pluggable. You can reduce downtime by permitting online

drive exchanges without interrupting backup and restore functions.

Dual redundant power supplies on the HP StorageWorks MSL6060, MSL5052 and MSL5060 tape libraries offer an even higher level of uptime.

Performance and flexibility

HP StorageWorks MSL tape libraries support Ultra3 SCSI interface on the MSL6030 and MSL6060 models with LTO Ultrium 460 drives. They support LTO Ultrium 460, SDLT 320 and Ultrium 230 drives and feature removable magazines and mail slot for easier media load/unload as well as off site storage.

HP StorageWorks MSL tape libraries are also capable of multi-unit scalability up to 48 TB of native capacity. For maximum flexibility, you can mix MSL5052 units with MSL5026, and MSL6060 units with MSL6030.

With the media partitioning support capabilities, MSL tape libraries create logical pools or partitions in a tape library. This capability allows MSL tape libraries to support multiple drives types within a single library or in a multi-unit stack. For current software supported, please consult the Enterprise Backup Solutions Compatibility Matrix at: www.hp.com/go/ebs.

Better together

HP StorageWorks MSL tape libraries are qualified with HP's Enterprise Backup Solutions (EBS) to work seamlessly with HP ProLiant, HP-UX and HP AlphaServer systems running HP-UX, HP Tru64 UNIX®, HP OpenVMS, Microsoft® Windows® NT, Linux or NetWare operating systems. They are also qualified with direct SCSI attach and Heterogeneous FC SAN environments.

HP StorageWorks MSL tape libraries support Ultra3 SCSI interface on the MSL6030 and MSL6060 models with LTO Ultrium 460 drives. They support LTO Ultrium 460, SDLT 320 and Ultrium 230 drives and feature removable magazines and mail slot for easier media load/unload as well as off site storage.

HP StorageWorks MSL5026 tape library with SDLT 320 drives



HP StorageWorks MSL5030 tape library with LTO Ultrium 230 drives



HP StorageWorks MSL5052 tape library with SDLT 320 drives



HP StorageWorks MSL5060 tape library with LTO Ultrium 230 drives



HP StorageWorks MSL6030 tape library with LTO Ultrium 460 drives



HP StorageWorks MSL6060 tape library with LTO Ultrium 460 drives



HP StorageWorks MSL5026 tape library with SDLT 320 drives

- 4.16 TB of native capacity with 26 slots and up to two hot-plug SDLT 320 drives for up to 115.2 GB/hour backup performance in a single unit
- A compact 5U form factor available in rackmount or tabletop versions

Simply put, the HP StorageWorks MSL series of tape libraries provide you with the ultimate in data protection, simplification, and investment protection.

- Scalability of up to eight units in a rackmount configuration for a maximum of 33.28 TB of native backup capacity and up to 921.6 GB/hour of native backup performance

HP StorageWorks MSL5030 tape library with LTO Ultrium 230 drives

- 3.0 TB of native capacity with 30 slots and up to two hot-plug LTO Ultrium 230 drives for up to 108 GB/hour backup performance in a single unit
- A compact 5U form factor and is available in rackmount or tabletop versions
- Scalability of up to eight units in a rackmount configuration for a maximum of 24 TB of native backup capacity and up to 864 GB/hour of native backup performance

HP StorageWorks MSL5052 tape library with SDLT 320 drives

- 8.32 TB of native capacity with 52 slots and up to four hot-plug SDLT 320 drives for up to 230.4 GB/hour backup performance in a single unit
- A compact 10U form factor available in rackmount or tabletop versions
- Scalability of up to four units in a rackmount configuration for a maximum of 33.28 TB of native backup capacity and up to 921.6 GB/hour of native backup performance

HP StorageWorks MSL5060 tape library with LTO Ultrium 230 drives

- 6.0 TB of native capacity with 60 slots and up to four hot-plug LTO Ultrium 230 drives for 216 GB/hour backup performance in a single unit
- A compact 10U form factor available in rackmount or tabletop versions
- Scalability of up to four units in a rackmount configuration for a maximum of 24 TB of native backup capacity and up to 864 GB/hour of native backup performance

HP StorageWorks MSL6030 tape library with LTO Ultrium 460 drives

- 6.0 TB of native capacity with 30 slots and up to two hot-plug LTO Ultrium 460 drives, for up to 216 GB/hour backup performance in a single unit
- A compact 5U form factor available in rackmount or tabletop versions
- Scalability of up to eight units in a rackmount configuration for a maximum of 48 TB of native backup capacity and up to 1728 GB/hour of native backup performance
- Ultra3 SCSI interface for enhanced connectivity

HP StorageWorks MSL6060 tape library with LTO Ultrium 460 drives

- 12.0 TB of native capacity with 60 slots and up to four hot-plug LTO Ultrium 460 drives for up to 432 GB/hour backup performance in a single unit
- A compact 10U form factor available in rackmount or tabletop versions
- Scalability of up to four units in a rackmount configuration for a maximum of 48 TB of native backup capacity and up to 1728 GB/hour of native backup performance
- Ultra3 SCSI interface for enhanced connectivity



Backup/restoration applications software packages

HP StorageWorks MSL tape libraries support the following backup/restoration applications software packages:

- HP StorageWorks Data Protector
- Atempo Time Navigator
- BakBone NetVault
- CA BrightStor ARCserve
- CA BrightStor EB
- CommVault Galaxy
- Legato NetWorker
- Syncsort Backup Express
- Tivoli Storage Manager
- VERITAS Backup Exec
- VERITAS Netbackup

(Note: not all backup application are supported on all models, see HP StorageWorks EBS Matrix for more details, go to www.hp.com/go/ebs)

Operating systems

HP StorageWorks MSL tape libraries are qualified with the following operating systems on HP ProLiant servers, HP-UX servers, HP AlphaServer systems and other product lines:

- HP-UX
- HP Tru64 UNIX
- HP OpenVMS
- Microsoft Windows NT/Windows 2000
- Linux Red Hat and SUSE
- Novell NetWare

- SUN Solaris
- IBM AIX

(Note: not all backup application and operating systems are supported on all hardware listed above. See the EBS Matrix for more details, go to: www.hp.com/go/ebs)

Simple is good

The graphical touch-screen user interface panel on HP StorageWorks MSL tape libraries are unique in this class of libraries. Intuitive and easy to use, this web-based remote management interface enables you to manage the library from a remote location. To increase efficiency and lower total cost of ownership, management and diagnostic tools are included with the libraries.

Ready now, ready later

By easily scaling capacity and performance with the HP StorageWorks MSL tape libraries help you keep pace with changing data protection needs. The MSL tape libraries are multi-unit scalable for capacity expansion, and it is possible to have any combination of models scaled together, e.g. it is possible to mix LTO and/or SDLT drive based modules in a multi-unit stack.

These libraries are upgradeable to the next generation of drive technology. cPCI slots enable you to configure embedded cards such as a FC controller to enhance functionality.

MSL tape libraries provide an innovative answer to your backup and restore requirements. Combine this functionality with the industry's highest density, and you've got the right storage solution now and in the future.

For more information

For more information, visit:
www.hp.com/products/tapestorage

HP StorageWorks MSL series of
tape libraries matrix



HP StorageWorks MSL5026S2 HP StorageWorks MSL5030 HP StorageWorks MSL5052S2 HP StorageWorks MSL5060 HP StorageWorks MSL6030 HP StorageWorks MSL6060

Drive type	SDLT 320	LTO Ultrium 230	SDLT 320	LTO Ultrium 230	LTO Ultrium 460	LTO Ultrium 460
Unit dimensions (HxWxD)	8.75x17x30 in/ 22.2x43.2x76.2 cm	8.75x17x30 in/ 22.2x43.2x76.2 cm	17.5x17x30 in/ 44.5x43.2x76.2 cm	17.5x17x30 in/ 44.5x43.2x76.2 cm	8.75x17x30 in/ 22.2x43.2x76.2 cm	17.5x17x30 in/ 44.5x43.2x76.2 cm
Shipping dimensions (HxWxD)	15.25x23x38.25 in/ 38.7x58.4x97.2 cm	15.25x23x38.25 in/ 38.7x58.4x97.2 cm	33x47x31 in/ 83.8x119.4x78.7 cm	33x47x31 in/ 83.8x119.4x78.7 cm	15.25x23x38.25 in/ 38.7x58.4x97.2 cm	33x47x31 in/ 83.8x119.4x78.7 cm
Unit weight	43 lbs/19.5 kg	43 lbs/19.5 kg	95 lbs/43.1 kg	95 lbs/43.1 kg	43 lbs/19.5 kg	95 lbs/43.1 kg
Shipping weight	75 lbs/34 kg	75 lbs/34 kg	147 lbs/66.7 kg	147 lbs/66.7 kg	75 lbs/34 kg	147 lbs/66.7 kg
Native drive throughput (MB/s)	16	15	16	15	30	30
Recording method	Linear Serpentine	Linear Serpentine	Linear Serpentine	Linear Serpentine	Linear Serpentine	Linear Serpentine
Maximum number of drives supported in a single unit	2	2	4	4	2	4
Single unit maximum native backup performance (GB/hr)	115.2	108	230.4	216	216	432
Single unit number of slots	26	30	52	60	30	60
Single unit native backup capacity (TB)	4.16	3	8.32	6	6	12
Robotics reliability (mean swap between failure (MSBF))	2 Million	2 Million	2 Million	2 Million	2 Million	2 Million
Multi-unit scalability	Yes, up to 8 units	Yes, up to 8 units	Yes, up to 4 units	Yes, up to 4 units	Yes, up to 8 units	Yes, up to 4 units
Maximum native scaled capacity (TB)	33.28	24	33.28	24	48	48
Maximum native scaled performance (GB/hr)	921.6	864	921.6	864	1728	1728
Interface	Ultra2 SCSI (LVD)	Ultra2 SCSI (LVD)	Ultra2 SCSI (LVD)	Ultra2 SCSI (LVD)	Ultra3 SCSI (LVD)	Ultra3 SCSI (LVD)
High availability features	Hot-plug drives	Hot-plug drives	Hot-plug drives Dual Redundant Power Supply	Hot-plug drives Dual Redundant Power Supply	Hot-plug drives	Hot-plug drives Dual Redundant Power Supply
Control panel	GUI touch screen	GUI touch screen	GUI touch screen	GUI touch screen	GUI touch screen	GUI touch screen
Power requirements	90-132V AC @ 47-63Hz, 180-264V AC @ 47-63Hz	90-132V AC @ 47-63Hz, 180-264V AC @ 47-63Hz	90-132V AC @ 47-63Hz, 180-264V AC @ 47-63Hz	90-132V AC @ 47-63Hz, 180-264V AC @ 47-63Hz	90-132V AC @ 47-63Hz, 180-264V AC @ 47-63Hz	90-132V AC @ 47-63Hz, 180-264V AC @ 47-63Hz
Power consumption (typical/max)	180 W/200 W	180 W/200 W	300 W/360 W	300 W/360 W	180 W/200 W	300 W/360 W
Warranty	One year, next business day on-site	One year, next business day on-site	One year, next business day on-site	One year, next business day on-site	One year, next business day on-site	One year, next business day on-site
Mission Critical Support services	Optional	Optional	Optional	Optional	Optional	Optional
Servers supported*	HP ProLiant servers HP-UX servers HP AlphaServer systems	HP ProLiant servers HP-UX servers	HP ProLiant servers HP-UX servers HP AlphaServer systems	HP ProLiant servers HP-UX servers	HP ProLiant servers HP-UX servers HP AlphaServer systems	HP ProLiant servers HP-UX servers HP NetServers

* For specific servers supported by individual libraries refer to products Quick Specs www.hp.com/products/tapestorage
For software, servers, HBA, OS compatibility information go to <http://h18006.www1.hp.com/products/storageworks/tapecompatibility.html>