HP StorageWorks MSL4048 Tape Library

Data sheet

The HP StorageWorks MSL4048 Tape Library provides 19.2 TB of unattended backup in a compact 4U form factor. With a native capacity of up to 19.2 TB using HP StorageWorks Ultrium 960 Tape Drive technology, the MSL4048 Tape Library handles backup and recovery jobs typically managed by larger tape libraries.

In only a 4U form factor, the MSL4048 Tape Library provides unmatched storage density without consuming a large amount of valuable rack space. Perfect for businesses with remote offices, the integrated web-based management features reduce the dependencies on local IT resources, allowing multiple sites to be supported centrally.

The MSL4048 Tape Library offers configuration choices with either one or two HP StorageWorks Ultrium 960 SCSI or FC Tape Drives, or up to four HP StorageWorks Ultrium 448 SCSI Tape Drives. If only one Ultrium 448 Tape Drive is selected, up to three additional Ultrium 448 Tape Drives may be added later for increased performance.

Each library includes four removable 12-slot magazines, and a user-configurable 3-slot mail slot dedicated for import/export of data cartridges. A bar code reader is part of the standard configuration for facilitating media management. All MSL4048 Tape Library units arrive rack-ready for installation in a standard HP rack. Additionally, all MSL4048 Tape Library systems and associated kits are RoHS compliant.

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The HP StorageWorks MSL4048 Tape Library offers:

- Value – high density in a compact 4U form factor

  a. Amazing capacity for backup and recovery in a small form factor without consuming valuable rack space

  b. Up to 19.2 TB of native storage capacity with Ultrium 960 Tape Drives

  c. Up to 9.6 TB of native storage capacity with Ultrium 448 Tape Drives

- Simplicity – easy to use

  a. Integrated, web-based remote management for control and troubleshooting the device, eliminating the need to have on-site IT resources in remote locations

  b. Standard bar code reader provides faster inventory times and facilitates tracking of media

- Agility – easy to manage

  a. Four 12-slot removable magazines offer bulk loading of media as well as providing for bulk storage of media off-site

  b. User-configurable mail slot

  c. Customer upgradeable drives

Features and benefits

- **Greater value** – HP StorageWorks MSL4048 Tape Library offers high capacity in a compact 4U form factor.

- **Manageability** – Integrated web-based remote management, offers an IT administrator remote control and troubleshooting capabilities, eliminating the need to have on-site IT resources in remote locations.

- **Simplifies IT** – Standard bar code reader provides faster inventory times and facilitates tracking of media.

- **Ease of use** – Four 12-slot removable magazines offer bulk loading of media as well as providing for bulk storage of media off-site.

- **Investment protection** – Choose library capacity with one or two Ultrium 960 Tape Drives, or one or two 448 Ultrium Tape Drives. Upgrade the performance of the tape library through the addition of a third or fourth Ultrium 448 Tape Drive.

- **Flexible interface** – SCSI and FC interfaces provide options for installing the tape library into a SCSI or SAN environment.

- **RoHS compliance** – Meets lead-free initiatives required for EU compliance.

- **Customer serviceable and replaceable components** – Designed for quick service and repair with customer serviceable components to minimise downtime and maximise efficiency.

- **Extensive compatibility testing** – Works with industry-leading services, operating systems and backup software. For more information, please visit: **www.hp.com/go/ebs**

HP StorageWorks MSL4048 Tape Library

Form factor	4U
Tape drives supported	Ultrium 448 Ultrium 960 Ultrium 960 Fibre Channel (FC)
Number of tape drives supported	One to four Ultrium 448 Tape Drives One or two Ultrium 960 SCSI LVD Tape Drives One or two Ultrium 960 FC Tape Drives
Number of cartridge slots	48
Maximum capacity (native)	9.6 – 19.2 TB (Note: depending on drive type)
Maximum sustained transfer rate (native)	86.4 GB/hr to 576 GB/hr (Note: depending on drive type and number of drives)
Interface options	Native Fibre Channel (4 Gb with AG324B, AG325B and AG328B) Ultra320 LVD/SE SCSI Ultra160 LVD/SE SCSI
Rack-mounting kits	Included with each library (1) rackmount installation kit (for use with HP's 10000 series, 9000 series, 5000 series or System/E racks)
Dimensions (WxHxD)	17.4 x 44.5 x 77.5 cm 34.4 x 59.6 x 99.4 cm (shipping)
Weight	65.91 lb/25.6 kg 83.5 lb/31.2 kg (shipping)
Recommended media	For information on recommended HP Storage Media, please visit: **www.hp.com/go/storagemedia**

Ordering information

Product number/SKU	Product name	Description
AG320A	HP StorageWorks MSL4048 one Ultrium 448 Drive Library	48 slots, one Ultrium 448 Drive
AG321A	HP StorageWorks MSL4048 two Ultrium 448 Drive Libraries	48 slots, two Ultrium 448 Drives
AG322A	HP StorageWorks MSL4048 one Ultrium 960 Drive Library	48 slots, one Ultrium 960 Drive
AG323A	HP StorageWorks MSL4048 two Ultrium 960 Drive Libraries	48 slots, two Ultrium 960 Drives
AG324A (AG324B)	HP StorageWorks MSL4048 one Ultrium 960 FC Drive Library	48 slots, one Ultrium 960 FC Drive (4 Gb FC drives with AG324B)
AG325A (AG325B)	HP StorageWorks MSL4048 two Ultrium 960 FC Drive Libraries	48 slots, two Ultrium 960 FC Drives (4 Gb FC drives with AG325B)

Options

AG118A	HP StorageWorks MSL2024/4048 Ultrium 448 Drive Upgrade Kit	HP MSL2024/4048 Ultrium 448 Drive Upgrade Kit
AG120A	HP StorageWorks MSL2024/4048 Ultrium Right Magazine Kit	HP MSL2024/4048 Ultrium Right Magazine Kit
AG327A	HP StorageWorks MSL2024/4048 Ultrium 960 Drive Upgrade Kit	HP MSL2024/4048 Ultrium 960 Drive Upgrade Kit
AG328A (AG328B)	HP StorageWorks MSL2024/4048 Ultrium 960 FC Drive Upgrade Kit	HP MSL2024/4048 Ultrium 960 FC Drive Upgrade Kit (4 Gb FC drives with AG328B)
AG329A	HP StorageWorks MSL4048 Rackmount to Table Top Conversion Kit	HP MSL4048 Rackmount to Table Top Conversion Kit
AG330A	HP StorageWorks MSL4048 Ultrium Left Magazine	HP MSL4048 Ultrium Left Magazine

What's included	Library unit; 2.5M VHDCI to HDTS68 SCSI cable (one per tape drive); RJ-45 Ethernet cable; HDTS68 SCSI terminator (one per tape drive); rackmount hardware; documentation kit including User and Service Guide (CD) and Getting Started Poster

HP StorageWorks MSL4048 Tape Library

Warranty and services	The HP StorageWorks MSL4048 Tape Library includes 1-year, next-business-day, parts exchange.
	For more information about HP's Global Limited Warranty and Technical Support, visit **ftp://ftp.compaq.com/pub/products/storageworks/ warranty/EN_321708-008.pdf**
HP Care Pack Services	HP Care Pack Services offer upgraded service levels to extend and expand your standard product warranty with easy-to-buy, easy-to-use support packages that help you make the most of your hardware and software investments. They let you choose the support levels that meet your business requirements, from basic to mission-critical, and help you contain total cost of ownership. For many products, post-warranty HP Care Pack Services are available when your original warranty has expired. Why purchase an HP Care Pack service? Your standard warranty protects against product defects. HP Care Pack Services helps you guard against unplanned downtime, which can reduce your productivity and profitability. These convenient service packages will: • Protect your investment in HP products • Reduce time to implementation and time to revenue return through installation and integration into your existing IT environment • Provide consistent, predictable levels of support across your entire department or business • Ease budget planning and reduce management costs with fixed-cost support that includes parts and labour • Give you direct access to HP-certified storage support teams, complemented by solution partnerships with leading storage suppliers for technical and problem-solving expertise • Offer a choice of response-time and repair-time commitments for SAN and NAS environments to improve performance and reduce downtime risks HP Care Packs are only available in electronic version. Availability may vary by country and product. For additional information on HP Care Packs, as well as orderable part numbers, please visit: **www.hp.com/hps/carepack/storage/cp_networked.html** If you have specific questions about availability or how to obtain services contact your local HP representative. Contact information for your local area can be found at: **www.hp.com/services**
Recommended HP Care Pack Services	• Installation & Startup • 4-Hour Response, 24x7 Hardware Support
Additional services information	For more information about Deployment, Per Event, Consulting and Education services for HP Storage, visit: **www.hp.com/hps/storage** For more information about HP Storage Software, services and updates, visit: **www.hp.com/hps/software**
Financial services	HP Financial Services provides innovative financing and financial asset management programmes to help you cost-effectively acquire, manage and ultimately retire your HP solutions. For more information on these services, please contact your HP sales representative, or visit: **www.hp.com/go/hpfinancialservices**
Customer support	HP Customer Support provides a broad spectrum of services to commercial and enterprise customers, including performance and availability services such as proactive mission-critical services and support management services for deployment of the entire IT infrastructure, including HP and multi-vendor environments. For more information on these services, contact your HP sales representative or visit **www.hp.com/hps/support**
For more information	For more information about the HP StorageWorks MSL4048 Tape Library and other tape-based HP storage solutions, contact your local HP representative, or visit **www.hp.com/go/tape**

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