Biblioteki taśmowe

PowerVault TL4000 Tape Library

The PowerVault™ TL4000 tape library offers expandable and affordable tape automation for organizations whose data-protection needs have outgrown autoloader technology or capacity. It's the product of choice for small, medium and large businesses that require an affordable, versatile, easy-to-use, automated midrange tape backup solution.

- 4U solution that can be rack mounted or easily converted into a desktop solution

- Up to 4 LTO drives and up to 48 tape cartridge slots for support of up to 120TB of native storage capacity (with LTO-6 media)

- Web-based remote management: Perform diagnostics, check status, monitor operations and logs, and upgrade firmware

- Library-managed encryption (optional with LTO-4, LTO-5 and LTO-6)

Automated Data Protection

Regular, disciplined backup is a vital part of a complete disaster recovery strategy. The PowerVault™ TL4000 is a powerful tape library that helps organizations automate their backup processes to reduce the need for manual intervention and the risk of human error. The PowerVault TL4000 uses optical cartridge location technology for precision cartridge handling and inventory, which helps improve the overall reliability of backups.

Support for Your Dell iSCSI SAN

To supplement the growth in Internet SCSI (iSCSI) storage area networks (SANs), Dell employs an iSCSI-to-SAS bridge card for the TL-series tape libraries (Dell™ PowerVault TL2000 and TL4000). This solution enables users to add in a tape backup target into an iSCSI Ethernet SAN with a typical transfer rate of ~50MB/s in most cases. Additionally, the iSCSI-to-SAS bridge card is fully compatible with Dell PowerVault M3000i and Dell EqualLogic™ PS iSCSI array series.

Simplified Operations

Tapes can be imported and exported individually using a mail slot or twelve at a time using one of two magazines. The library utilizes barcode-scanning technology to record the location of tape media, so you can be assured that your critical data is properly stored and ready in case disaster strikes.

Intuitive Management
An on-board, user-friendly LCD interface allows you to easily monitor, control, configure and service the library. While you are away, the tape library enables you to remotely administer all functions, including system status and logs, diagnostics and drive operations, as well as configuration and inventory management features.

Tape Versatility
The comparative low cost for tape — combined with its long history of proven reliability — helps ensure its continued use for both backup and archiving. The portability of tape enables it to be taken off-site and stored in a vault. In addition, LTO-4, LTO-5 and LTO-6 tape technology supports write-once, read-many (WORM) capability, which enables permanent data storage that cannot be overwritten — a requirement of many compliance regulations.

Big Capacity, Small Space
With its compact form factor, the PowerVault TL4000 packs an impressive amount of information in a small amount of space. Occupying only four units (4U) of rack space, the library can hold up to 48 tapes providing up to 120TB (with Ultrium LTO-6 2.5TB1 tapes) of native capacity — ideal for small office environments managing explosive data growth.

Ultrium Linear Tape-Open Performance
The PowerVault TL4000 supports Linear Tape-Open Ultrium 6 (LTO-6) drives — a high-speed tape technology that can natively back up an impressive 576GB of data per hour. LTO technology is based on a tape industry standard that specifies backward read-and-write compatibility with LTO-6 and LTO-5 generation media (n,n-1) and read compatibility with LTO-4 (n-2) media.

Be Green With Tape
When factoring in the features and benefits of tape storage — such as reliability, portability, encryption LTO-4, LTO-5 and LTO-6 and the shelf life (over 20 years) of tape cartridges — it is the perfect solution for your long-term or short-term backup or archiving needs. In addition, when tape media is stored, it does not require energy until it needs to be accessed. By using zero energy when stored, tape is "naturally" Green.

Tape Backup Technology
- LTO-4, LTO-5 and LTO-6

Server Compatibility
- Dell and x86 IBM and x86 HP Servers

Library Configurations
- Up to four LTO-4 6Gb SAS Drives with 48 Slots
  Up to four LTO-4 8Gb FC Drives with 48 Slots
  Up to four LTO-5 6Gb SAS Drives with 48 Slots
  Up to four LTO-5 8 Gb FC Drives with 48 Slots
  Up to four LTO-6 6Gb SAS Drives with 48 Slots
  Up to four LTO-6 8Gb FC Drives with 48 Slots
  Up to four LTO-6 6Gb SAS Drives with 48 Slots
  Up to four LTO-6 FC 8Gb Drives with 48 Slots
  Library Managed Encryption Available with LTO-4,LTO-5 and LTO-6 drives only

Partitioning

Supported

Expansion capacity

Ships standard with 48 cartridge slots
Both left and right magazines available as customer kits

Encryption
- Library Managed Encryption option with LTO-4. LTO-5 and LTO-6 drives only

Barcode Reader

- Standard
  Management
- There are two user interfaces:

  Operator Control Panel: Located on the front of the PowerVault TL4000 tape library, the user can use an LCD panel to check system status, run diagnostics, view system logs, check and set configuration, verify drive operations, run an inventory and manage the system.

  Remote Web Management: The web based administration can be accessed via a 10/100 BaseT connection through any standard web browser. The user can check system status, run diagnostics, view system logs, check and set configuration, verify drive operations, run an inventory and manage the system. In addition, the user can upgrade the drive and library firmware via the RMU.
  Drive Controllers
- SAS, FC, iSCSI
  Software
- **Code Updates:**

  Web and either host bus or RMU for drives
  Web and RMU only for library code updates
  Chassis
- 4U form factor

  Height: Rack Mount 7.3" (185.2 mm)
  Width: Rack Mount 17.6" (447.5 mm)
  Depth: Rack Mount 31.9" (810 mm)
  Weight: 47 lbs. with one drive and no media
  Orientation: Horizontal only

  Rack mount standard (desktop conversion kit included)
  Environmental Operating Conditions
- **Temperature:** 50 to 95 degrees F, 10 to 35 degrees C.
  Relative Humidity: 20% RH to 80% RH (non-condensing)
  Electrical Power: 1.3 amps at 100V ac, .7 amps at 240V ac
  Regulatory

Support Services
Dell™ ProSupport™ — Faster, more reliable support services designed to address the technology challenges you face today. This new support portfolio is focused on your needs, time demands and budgets.

Need professional support services that take care of both you and your employees' IT needs 24x7? Choose Dell ProSupport to get access to a certified technician in two minutes or less.

Got an IT staff? Choose Dell ProSupport for IT and get tech-to-tech support with Fast-Track Dispatch, along with 24x7 access to Dell-certified technicians.

Dell ProSupport Service Model

Dell ProSupport	Dell ProSupport for IT
Designed for organizations with limited or no dedicated IT staff.	Designed to provide tech-to-tech support for IT professionals, database administrators and internal service desks or helpdesks.
Includes:	Includes:
• 24x7 direct break-fix hardware support for your employees	• 24x7 direct access to Dell Expert Centers
• "How-to" support on popular software applications such as Norton AntiVirus™, Microsoft® Office, Microsoft Small Business Server, Intuit® QuickBooks®, Adobe® Photoshop® and Adobe Acrobat®.	• Fast-Track Dispatch for Dell-certified technicians
	• Escalation management through Dell's

- Access to a certified technician in two minutes or less   Global Command Centers

Next, Dell ProSupport options align to the way you use technology — rapidly responding to your needs, protecting your investment, your productivity and your sensitive data, and providing enhanced proactive support services to reduce the risk and complexity of managing your infrastructure.

SPEED OF RESPONSE

Mission Critical — Perfect for server and storage environments where avoiding unplanned downtime and reducing recovery time through priority response are a must. The package includes priority 4-hour on-site service or optional 2-hour response with 6-hour hardware repair, Dell's proven Critical Situation process and emergency dispatch.

PROTECTION

Data Management and Protection

- **Keep Your Hard Drive** helps you retain control of sensitive data
- **Hard Drive Data Recovery** provides unlimited attempts to recover data from a failed hard drive
- **Certified Data Destruction** wipes your hard drive clean and destroys data

PROACTIVE

Proactive Maintenance — Maximizes the availability and stability of your infrastructure proactively. The package includes a detailed system assessment and implementation of driver or firmware updates and upgrades for your server or storage systems.

Remote Advisory Options — Provides telephone and internet access to technical expertise for specialized applications and solutions such as Microsoft Exchange, Virtualization, virus remediation and more.

Customization and Setup
EDT Installation
Enhanced installation and configuration with Dell professional project management and documentation. A project manager will be acting as the single-point-of-contact for the entire installation project from presite audit to coordination of the installation and delivery of post-project documentation.

Training
Comprehensive Training
Get the skills you need to keep pace in today's competitive IT environment with comprehensive training and certification courses. Dell offers a vast array of instructor-led classes and online training courses in a range of topics from server maintenance to in-depth technical overview of specific systems.

Power your business today.^
Get no interest if paid in full within 90 days on PowerVault $2999 or more.^ Limited-time for qualified customers.

HP StoreEver MSL Tape Libraries

Business Class Libraries

HP StoreEver MSL Tape Libraries
Select a model
Special Offer: Special Offers:

The HP StoreEver MSL Tape Libraries meet demanding storage requirement of businesses needing unattended tape backup, disaster recovery, or low cost long-term archive capability. The MSL Libraries offer a broad choice of storage capacities and technology including LTO-6, LTO-5 or LTO-4 Ultrium tape drives.

Web-based remote management makes the MSL Libraries easily managed from across the room or across the globe. Quickly manage the tape media both in and out of the library with the standard bar code reader, configurable mail slots, and multiple 12-slot removable magazines.

Protect important business data from unauthorized access with several data encryption options. MSL library investment protection and uncertain data growth are easily managed within the MSL library portfolio.

Quickly increase capacity and/or performance with tool-free drive upgrades in the MSL2024 or 4048, or move tape drive kits to the MSL6480 for library scalability and additional enterprise class features.
Share encryption keys across an enterprise with KMIP 1.2 encryption key management license for MSL tape libraries.

Features

HP StoreEver MSL Tape Libraries easily manage your media both in or out of the tape library with a standard bar code reader and multiple 12-slot removable magazines.

LTFS provides a self-describing file system on a HP LTO-6 or LTO-5 cartridge, which enables the combined archiving benefits of application independence, transportability and protection from obsolescence.

HP StoreEver MSL Tape Libraries easily manage your media both in or out of the tape library with a standard bar code reader and multiple 12-slot removable magazines.

HP StoreEver MSL Tape Libraries offer various interface options for maximum flexibility when installing the tape library into a SAS or fibre channel SAN environment.

Protect critical business data with MSL encryption options that span from small business to the datacenter. Encryption is available on LTO-6, LTO-5 or LTO-4 tape drives and provides the highest level of security to protect confidential information and address compliance regulations.

Increase capacity and/or performance with tool-free drive upgrade kits. For even greater scalability, leverage MSL tape drives into the new MSL6480 for best in class investment protection

MSL Tape Libraries work with industry-leading servers, operating systems and backup software including HP Data Protector software. For more information, see HP Enterprise Backup Solutions.