



Dell LTO Ultrium Generation 5 Full-High Tape Drives

Fifth-generation LTO tape drive providing outstanding capacity, performance and durability for the Dell ML Family of Tape Libraries

Durable & integrated — Built for environments requiring the performance of LTO 5 along with the ability to support Dell's ML Family of Tape Libraries.

High speed — Provides data transfer rates of up to 280 MBps data speeds¹ with either a 6 Gbps capable SAS, or an 8 Gbps capable Fibre Channel interface.

Energy efficient — 87% greater capacity and 16% faster than previous generations without increased power consumption for 'green' storage environments!*

Greater usability — Media partitioning and Dell Long Term File System technology can significantly improve user experience⁴!

Designed for the Dell ML Family of Tape Libraries, Dell's 5th generation of LTO tape drives offers up to twice the capacity and significantly faster throughput than the preceding Ultrium LTO 4 generation of drives. With a storage capacity of up to 3.0 TB¹, the Dell LTO 5 Full-high Tape Drive is an excellent tape storage solution for businesses requiring backup or low-cost archiving of their data within a small window of time.

Greater data protection with reliability and serviceability

With increasing regulatory and compliance requirements, the need to secure data for audit and compliance purposes has become critical. The Dell LTO 5 Full-high Tape Drive utilizes AES256 encryption and supports write once, read many (WORM) cartridges to help protect your data.

Designed for overall reliability, the Dell LTO 5 Full-high Tape Drive can stand up to the rigors of data centers requiring 24x7x365 support. For enhanced serviceability, this Dell tape drive captures error information and stores it in the its flash memory so that it can be recalled to minimize troubleshooting for IT staff and technicians.

"Green" storage with lower total cost of ownership

Despite the increases in performance and capacity, the Dell LTO 5 Full-High Tape Drive continues to be highly efficient. Consuming no more power than previous generations of LTO tape drives combined with the increased capacity makes the cost per gigabyte value proposition almost unbeatable. Tape drives are environmentally and economically more friendly than any other storage medium making them ideal for 'green' storage environments.

Partitioning and Long Term File System

The Dell LTO Ultrium Generation 5 Full-High Tape Drives with LTO Ultrium 5 Tape Media provides partitioning support, which, in conjunction with Dell's Long Term File System technology, provides customers the ability to have file-level access to tape data. This unique support helps quickly locate and update information on the tape media. It also provides customers with the knowledge of what is stored on the tape in a user friendly directory tree format, reduces tape file management and opens new use cases in entertainment, medical and manufacturing industries⁴.

Feature	Benefits
Adaptive Data Compression with a 256 MB buffer	<ul style="list-style-type: none"> Helps you achieve optimal performance and storage capacity Helps improve data throughput and tape repositions to optimize performance Supports data integrity via synchronous dynamic swapping of compression schemes
Skip sync	<ul style="list-style-type: none"> Reduces backhitching when writing to tape Helps increase the speed when reading and writing to tape and improves the reliability of tape cartridges
LED encryption indicator	<ul style="list-style-type: none"> The LED indicates when data is being encrypted or an encrypted tape is mounted This provides the operator a visual confirmation for additional security
Data safe mode	<ul style="list-style-type: none"> Provides read/write protection by preventing the accidental overwrite of data already on the cartridge This technology is managed at the drive and can be enabled or disabled³
Constant capacity	<ul style="list-style-type: none"> Ensures that the data on the media is limited to a maximum of 3.0TB¹ Makes it easier to copy tape to tape and for dual backups
Graceful dynamic braking	<ul style="list-style-type: none"> Helps enable the reel motors to gradually decelerate instead of stopping abruptly in the event of a power failure to help prevent tape stretching and loose tape wraps Helps reduce tape damage and breakage during unexpected stops
Partitioning and long term file system ⁴	<ul style="list-style-type: none"> Can eliminate middleware and reduce the tape management and costs Improves usability by displaying the data stored on the tape in a file tree structure Opens new opportunities for customers to leverage LTO technology in entertainment, manufacturing and medical environments
Dell LTO 5 Full High Ultrium Tape Drives at a glance	
Tape drive type	Dell LTO Ultrium 5
Physical capacity per cartridge	3.0 TB compressed ¹ ; 1.5 TB native
Data transfer rate	Up to 280 MBps compressed ¹ ; 140 MBps native
Media types	LTO Ultrium 5, 4 and 3
Data cartridge	LTO Ultrium 5 (rewritable) LTO Ultrium 5 (WORM)
Cleaning cartridge	LTO Universal Cleaning Cartridge (UCC)
Interface	FC-8 or 6 Gbps SAS
Data compression	SLDC (LTO data compression per ECMA-321) ²
Encryption	AES256
Buffer	512 MB
Data rate matching	Digital Speed Matching 40 – 140 MBps
Dimensions (internal drive)	8.5 cm H x 14.9 cm W x 21.1 cm D (3.33 in x 5.83 in x 8.33 in)
Weight	3.0 kg (6.6 lb)
Operating temperature	10° to 45° C (50° to 100° F)
Relative humidity	20% to 80% (non-condensing)
Electrical power	SAS: 5 V at 3.4 A, 12 V at 1.1 A (steady state) FC: 5V at 2.4 A, 12 V at 1.1 A (steady state)
Power dissipation	LTO 5 (FC & SAS): 7.5 W (idle, with cartridge), 26.5 W (read/write)
Operating systems support:	Windows, SLES & RHEL for further details please check the Dell support matrix at http://support.dell.com/support/edocs/stor-sys/matrix/PVMatrix/index.htm

* Visit the LTO Ultrium consortium Web site at <http://www.ultrium.com/technology/generations.html> for further details.

¹ Assuming 2:1 compressible data.

² Prior to the release of ECMA-321, SLDC (streaming lossless data compression) was known as "LTO-DC." SLDC uses ALDC as its primary data compression scheme, but also has a pass-thru scheme to avoid the expansion of incompressible data—a problem ALDC and most other compression algorithms encounter.

³ May not meet regulatory requirements in some industries, states or countries.

⁴ For product availability, contact your Dell sales representative.

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