

IBM LTO Ultrium 7 data cartridge

High-capacity tape media designed for reliability and longevity

Highlights

- Achieve increased capacity
 - Ensure optimal data security
 - BaFe (Barium Ferrite) technology offers a longer archival life
 - Support IBM Spectrum Archive
 - Meet stringent Linear Tape-Open (LTO) Ultrium Generation 7 specifications
 - Choose between rewritable and write-once-read-many (WORM) models
 - Use custom, blank and RFID-embedded cartridge labels
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Overview

With volumes of data growing exponentially—and no end in sight—the IBM LTO Ultrium 7 data cartridge is designed to help organizations protect and preserve more data for longer periods of time. This latest generation of the IBM solution offers more than double the storage capacity of previous generations for long-term data preservation that provides security as it sustains rapid, reliable access to data and helps ensure business resilience.

Increased capacity

Rapid data growth compounds the need for increased storage capacity. The seventh generation of LTO Ultrium tape media delivers 6 TB native capacity and up to 15 TB of compressed capacity for significantly greater efficiency and performance. This exceptional capacity helps reduce the number of cartridges and the amount of equipment, space and labor associated with tape-based data storage.

Optimal data security

To comply with regulatory requirements and preserve stakeholder trust, organizations must protect data from unauthorized access and unintentional loss. Tape cartridge portability facilitates remote, offline data storage for superior protection from natural or manmade threats that can impact online or on-site data storage. IBM LTO Ultrium 7 data

cartridges are compatible with LTO Ultrium 7 tape drives, which offer device-level data encryption to ensure data privacy and reduce the risk of data corruption due to virus or sabotage. The WORM cartridge model stores data in a non-erasable, non-rewritable format to prevent overwriting of stored data and reduce the risk of data loss due to human error.

BaFe (Barium Ferrite) technology offers a longer archival life

Barium Ferrite (BaFe) is a type of magnetic particle with can be greatly reduced in size to improve recording density without magnetic signal loss. In accelerated life tests, BaFe shows no loss of magnetic signal. Based on its chemical stability, archivability of BaFe proves to be over 30 years. Metal particles show a slight degradation in magnetic signal over 30 years although not detrimental to read/write performance.

IBM's LTO 6 and future generations of LTO use Barium Ferrite particles with NANOCUBIC technology for a thin and uniformly coated magnetic layer. Barium Ferrite will extend the life of your drive - High signal-to-noise ratio of BaFe ensures maximum performance even when natural head wear occurs. Users can expect longer head life when using BaFe tape.

Accelerated life test measures the change of tape's magnetic property under temperatures of 60 degrees celsius, and humidity of 90%, where one day under such an environment corresponds to one year in ambient conditions.

IBM Spectrum Archive support

LTO Ultrium 7 supports tape partitioning and IBM Spectrum Archive, which features IBM Linear Tape File System technology, making tape storage an even more compelling solution for the long-term preservation of data. With IBM Spectrum Archive, the data files are indexed to facilitate search and retrieval using disk-like directory tree structures and drag-and-drop techniques to improve the usability of tape solutions. IBM Spectrum Archive allows users and applications to directly retrieve files from tape rather than rely on proprietary, third-party applications, thereby significantly enhancing data access and potentially reducing software licensing costs and dependencies.

IBM LTO 7 tape cartridge at a glance

Media Type	Linear serpentine recording half-inch cartridge
Magnetic Material	Barium Ferrite from LTO 6 generations, Metal Particle previous generations
Media Characteristics	6 TB native
	15 TB with 2.5:1 data compression
Cartridge Models	LTO Ultrium 7 6 TB rewritable data cartridge
	LTO Ultrium 7 6 TB non-erasable, non-rewritable
	WORM cartridge

<i>Tape Characteristics</i>	
Tape thickness	5.6 μ (0.00022 in.)
Tape length	960 m (3,149 ft)
<i>Cartridge characteristics</i>	
Cartridge size (L x W x D)	102.0 mm x 105.0 mm x 21.0 mm (4.0 in. x 4.1 in. x 0.8 in.)
Data cartridge weight	200 g (0.441 lb)
Cleaning cartridge weight	115 g (0.254 lb)
Safety characteristics	Toxicity: nonhazardous to human health in anticipated use Flammability: self-extinguishing per UL94
<i>Environmental recommendations</i>	
Operating conditions	10°C - 45°C (50°F - 113°F); 10% - 80% RH; 26°C (79°F) wet bulb maximum
Short-term storage conditions	16°C - 35°C (61°F - 95°F); 20% - 80% RH; 26°C (79°F) wet bulb maximum
Long-term storage conditions	16°C - 25°C (61°F - 77°F); 20% - 50% RH; 26°C (79°F) wet bulb maximum
Shipping conditions	-23°C - 49°C (-9°F - 120°F); 20% - 80% RH; 26°C (79°F) wet bulb max
Cartridge disposal	Classified as nonhazardous waste per EPA regulation 40CFR261; Can be disposed of as normal office trash
<i>Machine type, Model (Part numbers)</i>	
LTO Ultrium 7 data cartridge	3589-651 (p/n 38L7302)
LTO Ultrium 7 WORM cartridge	3589-671 (p/n 38L7303)
LTO Ultrium universal cleaning cartridge	3589-004 (p/n 35L2086)
Limited lifetime warranty	Free from defects in manufacturing and materials defects for the useful life of the product, or until end of support of the product.

Why IBM?

LTO is an open tape architecture developed by a consortium of world-class storage producers. Compatible LTO tape drives and media are available from multiple vendors. Purchasing LTO Ultrium 7 data cartridges from IBM provides peace of mind in sourcing media from a trusted, time-proven tape technology leader.

For more information

To learn more about the IBM LTO Ultrium 7 data cartridge, please contact your IBM representative, authorized IBM media distributor or IBM Business Partner, or visit: ibm.com/products/lto-7.

Additionally, IBM Global Financing provides numerous payment options to help you acquire the technology you need to grow your business. We provide full lifecycle management of IT products and services, from acquisition to disposition. For more information, visit: ibm.com/financing



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