

IBM TotalStorage LTO Ultrium 400GB Data Cartridge



LTO rewritable cartridge



LTO WORM cartridge



High-capacity media for data storage growth

IBM is delivering high-capacity media that helps provide clients the ability to address the demanding growth in data storage.

The increase in cartridge capacity helps reduce the amount of equipment, space and human intervention required for daily tape operations. In addition, it helps reduce the number of cartridges needed for backup and restore operations and thus lowers operational costs.

Highlights

- **High-capacity, high-reliability tape cartridge for LTO Generation 3 storage environments**
- **Provides 400GB storage physical capacity (800GB with 2:1 compression)**
- **Available in rewritable and write once read many cartridge (WORM) models**
- **Designed to help improve read/write reliability by storing IBM's statistical media read/write analysis on every use of the cartridge**
- **Designed to adhere to widely supported Linear Tape-Open™ (LTO) Ultrium™ 3 design specifications**

Features you need

With the IBM® TotalStorage® LTO Ultrium 400GB Data Cartridge, IBM continues to focus on providing high quality, high-reliability tape technology for your business. The cartridges are part of a long line of IBM data cartridges designed to improve data integrity for organizations around the world.

The cartridges have been optimized and tested extensively for use in IBM LTO tape drives and libraries to help maximize performance, minimize data loss and improve data longevity. They are designed to withstand rigors of normal use in stand-alone and automated environments. Each cartridge is embedded with an LTO Cartridge Memory (LTO-CM) chip which is designed to enable fast, simultaneous transfer of cartridge-dependent data with tape drives during media load and unload cycles. The gray cartridge color helps distinguish it from previous generations of IBM LTO Ultrium Media.

The IBM TotalStorage LTO Ultrium 400GB Data Cartridge can be used in products featuring LTO Gen3 tape technology. As your storage needs grow, your data cartridge can continue providing value to help maximize your investment.

Write Once Read Many (WORM) model

IBM LTO Gen3 tape drives and libraries are designed to work with WORM cartridges to store data in a non-erasable, non-rewritable format. This is intended to help support the long-term retention of reference data and meet the requirements of many regulatory bodies worldwide. The 400GB WORM cartridge is identified by its unique two-tone color and includes advanced security features that are designed to prevent the alteration or deletion of stored data.

Why IBM LTO?

LTO is an open tape architecture developed by a consortium of three world-class storage producers. Open means availability from multiple vendors. When you purchase your media from IBM, you are purchasing from a time-proven and innovative tape technology leader.

Sales and support

To locate your nearest source for ordering, support, warranty, or product-related questions regarding the IBM TotalStorage LTO Ultrium 400GB Data Cartridge, visit ibm.com/totalstorage/media. You can obtain custom labeling from the referenced suppliers, as well as a list of country-specific phone numbers.

IBM TotalStorage LTO Ultrium 400GB Data Cartridge at a glance

Characteristics	Linear serpentine recording half-inch cartridge
Media Type	Metal Particle (MP)
Cartridge physical capacity	400GB (800GB with 2:1 compression)
Rewritable cartridge	LTO Ultrium 400GB rewritable Data Cartridge (400/800GB*)
WORM cartridge	LTO Ultrium 400GB WORM Cartridge (400/800GB*)
Cartridge capacity	400 (800GB 2:1 compression)
Physical and magnetic characteristics	Substrate Polyethylene Naphthalate (PEN)
Substrate thickness	0.00024 in (6.0 microns)
Total tape thickness	0.00031 in (8.0 microns)
Tape length	2231 ft (680 m)
Magnetic coercivity	187,007 A/m or 2530 Oe
Physical dimensions	
Cartridge size	4.02 in L x 4.15 in W x 0.85 D (102.0mm x 105.4mm x 21.5mm)
Data cartridge weight	0.463 lbs (210 grams)
Cleaning cartridge weight	0.254 lbs (115 grams)
Safety characteristics	Toxicity: Nonhazardous to human health in anticipated use Flammability: Self-extinguishing per UL94
Environmental recommendations	
Operating conditions	50-104° F (10-40° C); 20-80% RH; 79° F (26° C) wet bulb max
Storage conditions	61-90° F (16-32° C); 20-80% RH; 79° F (26° C) wet bulb max
Shipping conditions	-9 to 120° F (-23 to 49° C); 20-80% RH; 79° F (26° C) wet bulb max
Cartridge disposal	Classified as nonhazardous waste per EPA regulation 40CFR261; can be disposed of as normal office trash
Part numbers	LTO Ultrium 400GB Data Cartridge 24R1922 LTO Ultrium 400GB WORM Cartridge 96P1203 LTO Ultrium Universal Cleaning Cartridge 35L2086
Limited lifetime warranty	Free from defects in workmanship and materials for 5 years

For more information

Contact your IBM representative or
IBM Business Partner or visit:

ibm.com/totalstorage/media



© Copyright IBM Corporation 2005

IBM Systems and Technology Group
Route 100
Somers, NY 10589

Produced in the United States
May 2005
All Rights Reserved

IBM, the IBM logo, the e-business logo, and TotalStorage are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries or both.

Linear Tape Open, LTO and Ultrium are trademarks of Hewlett Packard, IBM and Certance in the United States, other countries or both.

Other company, product and service names may be trademarks or service marks of others.

This document could include technical inaccuracies or typographical errors. IBM may make changes, improvements or alterations to the products, programs and services described in this document, including termination of such products, programs and services, at any time and without notice. Any statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only. The information contained in this document is current as of the initial date of publication only and is subject to change without notice. IBM shall have no responsibility to update such information.

IBM is not responsible for the performance or interoperability of any non-IBM products discussed herein. Performance data for IBM and non-IBM products and services contained in this document was derived under specific operating and environmental conditions. The actual results obtained by any party implementing such products or services will depend on a large number of factors specific to such party's operating environment and may vary significantly. IBM makes no representation that these results can be expected or obtained in any implementation of any such products or services.

THE INFORMATION IN THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT ANY WARRANTY, EITHER EXPRESSED OR IMPLIED. IBM EXPRESSLY DISCLAIMS ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NONINFRINGEMENT. IBM products are warranted according to the terms and conditions of the agreements (e.g., IBM Customer Agreement, Statement of Limited Warranty, International Program License Agreement, etc.) under which they are provided.

This publication contains non-IBM Internet addresses. IBM is not responsible for information found at these Web sites.

References in this document to IBM products, programs or services does not imply that IBM intends to make such products, programs or services available in all countries in which IBM operates or does business. Any reference to an IBM program or product in this document is not intended to state or imply that only that program may be used. Any functionally equivalent program or product that does not infringe IBM's intellectual property rights may be used instead. It is the user's responsibility to evaluate and verify the operation of any non-IBM product, program or service.