FUJIFILM

LTO Ultrium
DATA CARTRIDGE

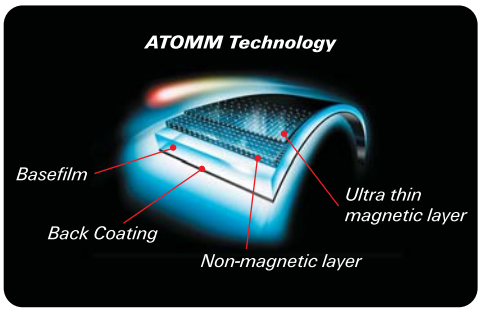
Fujifilm's Linear Tape-Open (LTO) Ultrium 3 is the latest generation of tape technology based on Fujifilm's proprietary ATOMM Technology. Fujifilm's LTO Ultrium 3 tape format has been optimized for high-capacity and performance with outstanding reliability—with up to 800GB (2:1 compression; 400GB native) storage on a single cartridge. LTO Ultrium 3 data cartridges also deliver impressive transfer speed rates of 80-160 MB/second (2:1 compressed mode; 40-80MB native), which can save time when accessing critical data.

ATOMM TECHNOLOGY

ULTRIUM LTO

LTO Ultrium
— DATA CARTRIDGE —

TECHNOLOGY



ATOMM Simultaneous Dual-Coating Technology

ATOMM (Advanced super Thin-layer and high-Output Metal Media) is a proprietary Fujifilm technology that has changed the history of the magnetic recording industry. Fujifilm began manufacturing dual-coated magnetic media in 1989 and ATOMM dual-coated media in 1992. For ATOMM, Fujifilm's special die coating head simultaneously applies two separate unique layers, one magnetic and one nonmagnetic. ATOMM incorporates the nonmagnetic lower layer and an ultra-thin upper layer of high-energy metal particles applied simultaneously to base film, resulting in media with extremely low self-demagnetization, dramatically increased high-frequency output, and significantly higher recording density.

WORM Technology

LTO Ultrium 3 is the first generation in the LTO Ultrium Roadmap to support WORM (Write Once Read Many) functionality. The LTO 3 specifications include the ability for WORM enabled and non-WORM enabled drives to co-exist and provides users with very cost effective means of storing data in a non-erasable, non-rewriteable format.

Fujifilm Servo Technology

LTO Ultrium technology relies heavily on timing-based, high-precision servo control to achieve its remarkable performance levels. Fujifilm's history as a pioneer in innovative servo-writing technologies makes it a natural choice in this field.

LTO Cartridge Memory (LTO CM)
Radio Frequency Transponder
Serial 4,096 Byte EEPROM
Non-volatile Memory

Stores usage history and other information on a non-contact Passive Radio Frequency Interface memory Chip.

SPECIFICATIONS

LTO Ultrium Specifications		Ultrium 1	Ultrium 2	Ultrium 3	Ultrium 3 WORM	Ultrium Universal Cleaning Tape
BASIC SPECIFICATIONS	Material Number	600003188	600003229	15539393	600004303	600004292
	Capacity (Native / Compressed)	100/200GB*	200/400GB*	400/800GB*		N/A
	Transfer Rate (Native / Compressed)	20/40MB*/sec	40/80MB*/sec	80/160MB*/sec		N/A
	Number of Tracks	384	512	704		N/A
	Durability	Average 1,000,000+ head passes in office / computer environment				Max. 50 cleanings - drive dependent
PHYSICAL CHARACTERISTICS	Tape Width	12.65mm (0.50")				
	Tape Thickness	8.9µm		8.0µm		N/A
	Tape Length	609m (1,998')		680m (2,331')		319m (1,046.59')
	Cartridge Dimensions	21.5 x 105.4 x 102.0mm (0.85" x 4.15" x 4.02") [W x H x L]				
OPERATING ENVIRONMENTAL CONDITIONS	Temperature	10-45°C (50-113°F)				
	Humidity	10-80% RH.				
	Max. Wet Bulb Temp.	26°C (78°F)				
STORAGE ENVIRONMENTAL CONDITIONS	Temperature	16-32°C (60-90°F)				N/A
	Humidity	20-80% RH.				N/A
	Max. Wet Bulb Temp.	26°C (78°F)				N/A

*Assumes 2:1 data compression. Transfer rate is drive dependent. Specifications subject to change.

LTO Ultrium Tape Drive Compatibility Chart

Cartridge	Drive		
	Ultrium 1	Ultrium 2	Ultrium 3
Ultrium 1	Read/Write	Read/Write	Read Only
Ultrium 2	Not Compatible	Read/Write	Read/Write
Ultrium 3	Not Compatible	Not Compatible	Read/Write
Ultrium 3 WORM	Not Compatible	Not Compatible	Read/Write Once
Ultrium Universal Cleaning Cartridge	Compatible	Compatible	Compatible

Fujifilm's Ultrium Universal Cleaning Cartridge is designed for use with all Ultrium 1, 2, 3, 4 & 5 tape drives.

To learn more about Fujifilm's Value-Added Services, such as custom barcode labeling for Fujifilm data media products visit ***www.fujifilmusa.com/tapestorage***

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CODE: LTO-10-1 Printed on Recycled Paper

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