



LTO Ultrium 1, 2, 3 and LTO Universal Cleaning Cartridge

ATOMM* Technology Provides Safety, Security for High-Capacity Storage



Fujifilm's LTO 1, 2 and 3 cartridges are another generation of tape technology made possible by Fujifilm's ATOMM technology. Our Ultrium 1 and Ultrium 2 tape formats have been optimized for high capacity and performance with outstanding reliability in either stand-alone or automated environments. With LTO Ultrium 3, the Fujifilm LTO 1-3 product line ranges from 200GB (compressed) to 800GB (compressed) storage capacity per cartridge, making these products ideal for capacity specific backup and archive applications.

Large Storage Capacity and Fast Transfer Speeds

High-recording density is a crucial factor in tape capacity. Fujifilm draws on its long experience in precision manufacturing and has developed tapes that meet the needs of the most demanding applications. Performance is also measured in the time saved accessing critical data. LTO Ultrium 1 tapes deliver data transfer rates of 20-40MB/sec (2:1 compressed mode, 10-20MB native); Ultrium 2 (40-80MB/sec) transfer rates are twice that and the transfer rates for Ultrium 3 (80-160MB/sec) are four times that number.

*ATOMM: Advanced Super Thin Layer and High Output Metal Media 38

Enhanced Reliability and Durability

Our exclusive ATOMM technology incorporates a unique ultra-thin dual-coating system that allows for remarkable durability and stability. Fujifilm LTO tapes also include an improved PEN (Polyethylene Naphthalate) substrate that is very stable under changing environmental conditions — an important consideration in a medium that has been designed to withstand years of heavy daily use and extended archival storage.

Precision Servo-Writing Technology

The LTO format relies heavily on timing-based, high precision servo control to achieve its remarkable performance levels. Fujifilm LTO cartridges are prerecorded with a magnetic servo signal at the factory. This signal is required in order to use the cartridge with the Ultrium LTO drive. Fujifilm's history as a pioneer in innovative servo-writing technologies makes us a natural leader in this field.

LTO Universal Cleaning Cartridge

Fujifilm LTO Universal Cleaning Cartridges have a computer memory chip (just like the data tape) and can be used on all LTO Ultrium drives. The chip stores various information and it has an embedded code that is recognized by the compatible drive's firmware. When used to capacity (15 - 50 uses, drive dependent), the drive will refuse the cleaning tape and eject the tape, barring further use.

LTO Ultrium 1, 2, and 3 Technical Data			
	LTO Ultrium 1	LTO Ultrium 2	LTO Ultrium 3
Recording Capacity	100/200GB*	200/400GB*	400/800GB*
Transfer Rate	20/40MB*/sec	40/80MB*/sec	80/160MB*/sec
Number of Tracks	384	512	704
Tape Width	12.65mm		12.65mm
Tape Thickness	8.9µm		8,0µm
Tape Length	609m		680m
Cartridge Dimensions	21.5 x 105.4 x 102.0 mm		
Operating Environment	10-45°C, 10-80% RH, Wet Bulb Max. Temp. 26°C		
Storage Environment	16-32°C, 20-80% RH, Wet Bulb Max, Temp, 26°C		

^{*} Assumes 2:1 data compression.

Note: Figures are typical values based on Fujifilm's standard measurement procedures