

## Tandberg LTO Full Height Drive

*Leading Performance and Capacity*

# LTO

**LTO Ultrium is the industry standard mid-range tape drive technology on the market today. The Ultrium LTO format has quickly become the market leader overtaking other proprietary technologies such as DLT and AIT.**

The availability of four generations of LTO tape drives simplifies the decision—it is the only affordable option available for requirements where capacity growth potential matches the escalating data growth rates that businesses are facing today.

Increasing attention is being paid to the need to protect company data against theft or accidental loss, particularly data that contains personal or sensitive information of a company's customers. The Tandberg LTO-4 SAS and Fibre Channel drives include data encryption capabilities within the drive, helping to avoid the need for host-based encryption of data or the use of specialized encryption appliances. This will provide customers with great ability to protect information if cartridges are lost or stolen.

The fourth generation of Tandberg LTO drives are designed to meet the storage challenges faced by organizations today. Exponential data growth, couple with business continuity requirements, regulatory compliance and resource constraints make the need for reliable, cost effective data production solution more necessary than ever before. The Tandberg LTO drives address these requirements by offering capacities up to 1.6TB\*, high-throughput and enterprise class features.



### Key Benefits

- Performance**  
 LTO drives are the fastest midrange drive in the industry with transfer speeds up to 240MB/s\*
- Low Total Cost of Ownership (TCO)**  
 Compatibility with previous generations of LTO media for investment protection and high capacity results in lower TCO
- High Capacity**  
 With capacities up to 800GB native today, the LTO roadmap offers a six-generation roadmap with capacities up to 3.2TB\*
- Reliability**  
 Rock-solid reliability and data integrity with MTBF of 250,000 hrs at 100% duty cycle
- Digital Speed Matching (DSM)**  
 DSM is designed to improve throughput in environments where the host data rates vary
- Write Once, Read Many (WORM)**  
 WORM allows you to store data in a non-erasable, non-amendable format
- Minimize Downtime**  
 3-year warranty and 3 years of Advanced Replacement Service\*\*



Choose between LTO-3 and LTO-4 technology, with native capacities of 800 and 1600GB, high performance and backward read and write compatibility

**TANDBERG DATA**   
Securing your Information

## Specifications

	Tandberg LTO-3 FH	Tandberg LTO-4 FH
Capacity (native/compr.)	400GB / 800GB	800GB / 1600GB*
Transfer Rate (native/compr.)	80MB/s / 160MB/s	120MB/s / 240MB/s
Interface	HD LVD Ultra 160 SCSI	4GB FC, 3GB SAS, HD LVD Ultra 160 SCSI
Number of Tracks	704	824
Buffer Size	128MB	256MB
Data Cartridge	LTO-3	LTO-4
Write	LTO-3, LTO-2	LTO-4, LTO-3
Read	LTO-3, LTO-2, LTO-1	LTO-4, LTO-3, LTO-2
Data Rate Matching	Digital speed matching (DSM) from 40MB/s to 80MB/s	DSM from 30MB/s to 120MB/s
Average Rewind Time	55s	54s
Encoding/Decoding	PRML	PRML
<b>Reliability</b>		
MTBF	250,000 hrs @ 100% duty cycle	250,000 hrs @ 100% duty cycle
Error Rate (calculated)	1x10 <sup>17</sup> Bytes per permanent read error	1x10 <sup>17</sup> Bytes per permanent read error
Error Rate (validated)	1x10 <sup>14</sup> Bytes per permanent read error	1x10 <sup>14</sup> Bytes per permanent read error
Error Rate (validated)	1x10 <sup>13</sup> Bytes per permanent write error	1x10 <sup>13</sup> Bytes per permanent write error
<b>Environmental Specifications</b>		
Temperature	50F to 100F (10C to 45C) Operating	50F to 100F (10C to 45C) Operating
Relative Humidity	20 to 80% (non-condensing)	10 to 80% (non-condensing)
<b>Power Requirements</b>		
Electrical Power	5V at 3.3 A, 12 V at 1.1 A (steady state)	5V at 3.3 A, 12 V at 1.1 A (steady state)
Power Specification	100-240 VAC	100-240 VAC
Supported Systems	Microsoft® Windows 2004; Microsoft Windows Server 2003; Sun Solaris 8,9; HP-UX 11.0, 11i; Linux® (Red Hat Enterprise Server 3, SUSE LINUX Enterprise Server 8; AIX® Version 5L 5.1, 5.2, 5.3; and Novell NetWare)	OS400, AIX 5.1 or above, Solaris, HPUX, Netware, Windows 2000, Windows 2003, Linux (Generic and Redhat)
Warranty (Internal/External)	3 years and 3 years Advanced Replacement Service**	3 years and 3 years Advanced Replacement Service**

\* Assumes a 2:1 compression ratio  
\*\* Availability dependent on location

Form Factor	(internal)		(external)	
	(internal)	(external)	(internal)	(external)
Height:	8.5cm (3.33 in)	14.6cm (5.75 in)	8.5cm (3.33 in)	14.6cm (5.75 in)
Width:	14.9cm (5.83 in)	17.1cm (6.74 in)	14.9cm (5.83 in)	17.1cm (6.74 in)
Length:	21.1cm (8.33 in)	33.3cm (13.11 in)	21.1cm (8.33 in)	33.3cm (13.11 in)
Weight:	3.0kg (6.6 lbs)	6.6kg (4.3 lbs)	3.0kg (6.6 lbs)	6.6kg (4.3 lbs)

### About Tandberg Data

Tandberg Data is a leading global supplier of backup and archiving technologies. Tandberg Data offers a complete range of tape libraries, tape autoloaders and tape drives (based on the LTO™, SLR™, VXA® tape technology platforms), storage software, data media and disk-based storage such as the RDX™ QuikStor. These solutions are marketed exclusively through a channel of qualified resellers and distributors. These solutions are underpinned by OEM agreements with major server manufacturers including IBM, Hitachi, Fujitsu, Fujitsu-Siemens, Apple and Dell and supported by all major operating systems and storage software applications to operate in heterogeneous network environments. All solutions are designed to meet the growing storage requirements of small and medium-sized organisations with scalability, reliability and backward compatibility features that ensure cost effective operation and long-term investment protection.

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