

# The Ultimate Storage Solutions for Midrange to Enterprise



**TANDBERG DATA** 

# Tandberg

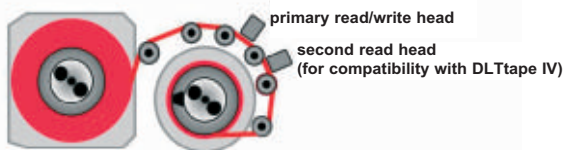
## Superior Reliability,

- High capacity storage from 40GB - 320GB per Cartridge
- Outstanding performance from 10GB - 115GB per hour
- up to 250,000 hour MTBF at 100% duty cycle
- Media reliability - 1,000,000 passes (17,850 uses)
- Fully backward compatible and scalable
- Added security with TapeAlert™
- 48-hour advanced replacement service
- 3-year-warranty

### Your Mission Critical Data Requires High Performance, Capacity and Reliability

The proven Tandberg DLTtape technology provides capacity, performance, reliability and scalability demanded by data intensive applications within midrange to high end networks. More than 1.7 million installed tape drives and 75 million cartridges rely on DLTtape technology for data backup and business protection.

DLTtape cartridges use a half inch wide magnetic tape and the length of the tape can be up to 560 meters (1850 feet). The DLTtape cartridge also has a cartridge design that has only one hub. The magnetic tape gets loaded through a thread mechanism into the drive, where it gets wound on the second hub which is installed inside the drive. The simple tape path and the precise guidance of the tape guarantees a gentle tape handling and a long life of the tapes. With DLTtape media, data archiving and retrieval is possible up to 30 years.



### TANDBERG DLT and SuperDLT Solutions

TANDBERG DATA offers the most complete DLTtape solutions in the world. Starting with the DLT VS80 offering up to 80\*GB capacity and 21.6\*GB per hour.

The DLT VS80 drive provides all of the high reliability of DLTtape but an extremely affordable price. DLT VS80 comes in a half height form factor and is backward read compatible to DLT4000 and DLT1 and is scalable to SDLT220/SDLT320 providing unmatched investment protection. The DLT8000 is the most widely accepted DLT tape drive in the midrange tape drive market. DLT8000 also offers 80\*GB capacity and a 43.2\*GB per hour transfer rate. DLT8000 is also fully backward compatible to DLT2000, DLT4000 and DLT7000 tape drives.

For higher capacity and performance needs, TANDBERG DATA offers the SDLT220. This is the first generation of

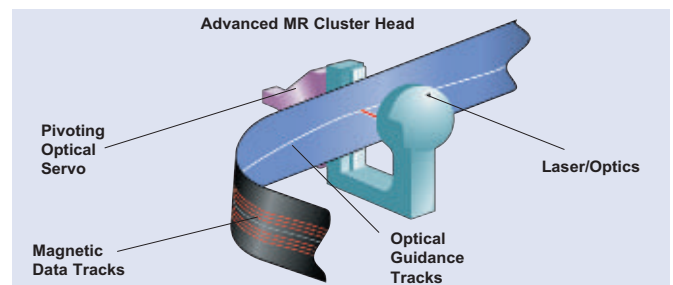
SuperDLT Technology with capacities up to 220\*GB on a single SDLTtape I cartridge and transfer rates up to 80\*GB per hour. The SDLT220 is also read compatible to DLTtape IV tapes written in DLT4000, 7000 and 8000 as well as DLT1 and DLT VS80.

The flagship Tandberg SDLT320 is the highest capacity and fastest midrange tape drive in the world with a capacity of 320\*GB on a single SDLT1 tape cartridge and a transfer rate up to 115\*GB per hour.

The Tandberg SDLT320 provides the lowest cost per gigabyte of any midrange tape drive in the market. In addition, the SDLT320 offers the industries best investment protect by offering full backward read compatibility to DLTtape IV media as well as full read and write compatibility to SDLT220.

### SDLTtape Technology

The Super DLT-Technology platform is based on a combination of optical and magnetic technologies. One of the key components of the Laser Guided Magnetic Recording is the Pivoting Optical Servo (POS), which is an optically assisted servo system designed for high-duty-cycle applications. This servo system eliminates the need for tape to be preformatted, increasing convenience and reducing costs. SuperDLT-tape technology also features Magneto Resistive Cluster heads, a small cluster of magneto resistive heads providing higher data-transfer rates and capacity.



Enhanced Partial Response (EPR) Channel – an advanced Partial Response Maximum Likelihood (PRML) channel, provides new levels of performance and capacity to Super DLT-tapes and subsequent linear tape products.

\* 2:1 hardware data compression

# DLTtape™

## Performance and Capacity



TANDBERG DLT-SERIES					
Product	Capacity		Transferrate (GB/hr)		File Access Time
	native	compressed*	native	compressed*	
<b>DLT VS80</b>	40GB	80GB	10.8	21.6	68 sec.
<b>DLT8000</b>	40GB	80GB	21.6	43.2	70 sec.
<b>SDLT220</b>	110GB	220GB	39.6	79.2	70 sec.
<b>SDLT320</b>	160GB	320GB	57.6	115.2	70 sec.

\* 2:1 hardware data compression

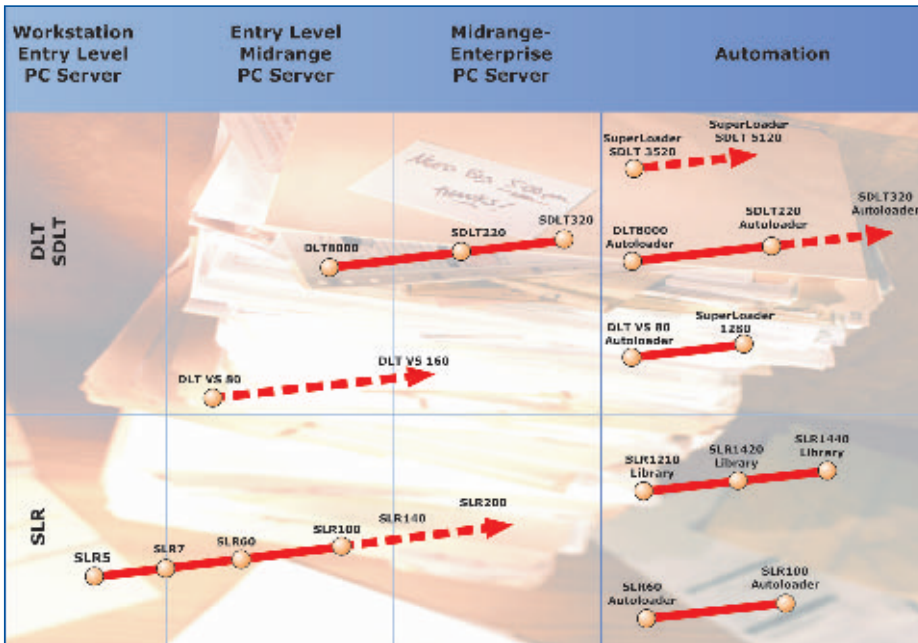
TECHNICAL SPECIFICATIONS										
Model	DLT VS80		DLT8000		SDLT220		SDLT320			
<b>Capacity</b>										
	Native/Compressed <sup>1</sup> :		40GB / 80GB		40GB / 80GB		110GB / 220GB		160GB / 320GB	
	Buffer-Size (with Parity):		2MB		8MB		32MB		64MB	
Native Transfer Rate	Burst <sup>2</sup> :		20MB/s <sup>3</sup>		12MB/s <sup>2</sup> / 20MB/s <sup>3</sup>		40MB/s <sup>2</sup> / 80MB/s <sup>3</sup>		40MB/s <sup>2</sup> / 80MB/s <sup>3</sup>	
	Sustained:		3MB/s		6MB/s		11MB/s		16MB/s	
Compressed Transfer Rate <sup>1</sup>	Sustained:		6MB/s		12MB/s		22MB/s		32MB/s	
<b>SCSI Interface</b>										
	SCSI Wide, LVD/SE			SCSI Wide, LVD/SE or HVD			SCSI Wide, LVD/SE			
<b>Recording Format</b>										
Number of Tracks:	168		208		448		448			
BPI:	133,000		98,000		133,000		193,000			
Encoding Method:	RLL 1,7		RLL 2,7 (MFM with 2,6/6,0GB formats)			PRML		PRML		
Data Compression:	DLZ									
Backward Compatibility	Read/Write:		DLT4000 (read only)			All previous DLT-Formats (excl. DLT1)			SDLT220 (Read/Write)	
						DLT1 / DLT VS80 & DLT4/7/8000 (read only)				
<b>Data Cartridges</b>										
Media Data Retention (Archival Life):	DLTtape™ IV								SDLTtape™ I	
Media Durability:	> 30 years								1,000,000 passes	
<b>Reliability and Error Correction</b>										
Hard Read Error Rate:	< 1 error in 10 Mio. GB									
Mean Time Between Failure (MTBF):	> 200.000 hr		250.000 hr @ 100% Duty Cycle			30.000 hr				
Head Life:	> 30.000 hr		50.000 hr			30.000 hr				
Drive Warranty:	3 years									
<b>Tape Motion</b>										
	Read/Write:		130 ips		168 ips		116 ips		122 ips	
	Wind/Rewind:		160 ips		175 ips		160 ips		160 ips	
<b>Dimensions</b>										
	Form-factor:		Half Height (HH)			5,25 inch Full Height (FH)				
Internal (Height/Width/Depth - Weight):	44/148/221 mm - 1.45 kg			86/149/244 mm - 2.9 kg			86/148/212 mm - 2.38 kg			
External (Height/Width/Depth - Weight):	66/212/272 mm - 3.48 kg			165/175/325 mm - 6.35 kg			160/175/325 mm - 6.27 kg			
<b>Power Requirements (Typical)</b>										
+ 5 VDC excluding bus terminator:	Intern		Intern		Intern		Intern			
	1.3 A (1.6 A max.)		2.8 A (4.3 A max.)		3.5 A (4.3 A max.)		2.8 A (4.3 A max.)			
+ 12 VDC:	0.4 A (1.1 A max.)		1.2 A (4.5 A max.)		0.7 A (3.1 A max.)		0.7 A (3.1 A max.)			
Power Consumption:	11.5 W (20 W max.)		28 W (75 W max.)		17 W (43 W max.)		17 W (43 W max.)			
Power Consumption:	Extern		Extern		Extern		Extern			
	24 W, 100 – 250 V		47 W; 100 – 240 V, 1.0 – 0.4 A		26 W, 0.7 – 0.4 A		26 W, 0.7 – 0.4 A			
<b>Environmental Specifications</b>										
Temperature Operating (Storage/Transport):	+10°C to +40°C (-40°C to +66°C) excluding media									
Relative Humidity Operating (Transport):	20% to 80% (10% to 95%)									

<sup>1</sup> 2:1 hardware data compression; <sup>2</sup> asynchronous; <sup>3</sup> synchronous.

All rights reserved.

# Tandberg Data

## Selecting the Correct Solution



### Major Operating System and Software Connectivity

Operating system and platform software support is assured for Tandberg tape drives and automation solutions by certified compatibility with all leading software packages for Sun Solaris, Novell NetWare, Win NT, Win 2000, IBM AIX, SCO OpenServer, UnixWare, HP-UX, Linux, Mac OS and more. Tandberg SLR5 -100 and DLT tape drives support TapeAlert™ which provides the user important information regarding status for the tape drive, media and cleaning requirements.

The complete product range of TANDBERG DATA offers the appropriate storage solution for your company now and well into the future.

As a global acting and leading company of data storage we set a high value on service, quality, backward compatibility and scalability of our products. Our portfolio is dedicated to the needs of the market, from lower capacity up to 4\* TByte in automation solutions.

TANDBERG DATA's large investment in research and development ensures that our position as a market leader of experience and knowledge in providing business-critical storage solutions is still growing.

Your Dealer:

Tandberg Data GmbH, Feldstraße 81, D-44141 Dortmund, Germany. Tel: +49 231 5436 0. Fax: +49 231 5436 111.

Tandberg Data ASA, Kjelsåsveien 161, P.O. Box 134 Kjelsås, N-0411 Oslo, Norway. Tel: +47 22 18 90 90. Fax: +47 22 18 95 50.

InoStor Inc., 13000 Gregg Street, Poway, CA 92064, U.S.A. Tel: +1 858 726 0277. Fax: +1 858 726 0278.

Tandberg Data S.A., 16/18 Ave. Morane-Saulnier, F-78941 Vélizy Cedex, France. Tel: +33 1 39 26 01 01. Fax: +33 1 34 65 02 89.

Tandberg Data (Asia) Pte. Ltd., 801 Lorong 7, Toa Payoh #02-00, Singapore 319319. Tel: +65 259 9330. Fax: +65 258 1702.

Tandberg Data (Japan) Inc., Shinkawa-nittei Annex Bldg., 7th floor, 22-4 Shinkawa 1-chome, Chuo-ku, Tokyo 104, Japan. Tel: +81 3 5566 2871. Fax: +81 3 5566 2875.

**TANDBERG DATA** 