# STORAGETEK LTO TAPE DRIVES

#### **KEY FEATURES**

VALUE WHERE IT COUNTS

- Cost-effective capacity. Store up to 1.5 TB of native data on a single cartridge, reducing media costs while accommodating data growth.
- Reduced backup windows. Accelerate backups by processing more information in less time. The StorageTek LTO 5 tape drive moves data at rates as high as 140 megabytes per second, uncompressed.
- Energy Efficient Design. LTO 5 tape drives reduce energy consumption by up to 48% over LTO4 in idle mode.
- Enhanced data protection. Protect data integrity and help prevent data loss with powerful correction and verification capabilities.
- WORM-capable media integration. Secure, manage, and archive critical data records using WORM-capable media and StorageTek LTO 4 and StorageTek LTO 5 tape drives.
- Encryption capability. Encrypt data on the tape cartridge via the drive's built-in data encryption capability and, in the event of tape cartridge loss, data is still protected.
- Supports media Partitioning. The LTO 5 specification supports 2 media partitions to allow for faster data access.

Today's continuous business environment requires that you back up more data in less time. Oracle's StorageTek LTO tape drives offer an economical, high-performance option for midrange tape automation environments.



#### StorageTek LTO drives help you store, manage, and protect your data.

StorageTek LTO drives feature fast data transfer rates and large capacity so you can process more data in less time. The high-speed Fibre Channel interface further improves data movement, shortens backup windows, reduces downtime, and speeds recovery. Combined with StorageTek tape libraries, you can easily and affordably store, manage, and protect your growing data.

Oracle offers StorageTek LTO 5 tape drives in SAS or FC interfaces, full- and halfheight platforms, and as single drives or within an automation environment. You choose the model that makes the most sense for your operating environment, application, capacity, and performance. The Fibre Channel interface available in automation products allows connections to new or existing SANs. Oracle's scalable tape automation solutions were designed to accommodate whatever drive and interface you choose.

### Protect Your Investment with a Solid Upgrade Path

StorageTek LTO drives support two-generation backward compatibility so you can make the most of your technology investment. Their open format supports a wide variety of media suppliers and automation systems. And the LTO Compliance Verification Entity, an independent company, verifies interchange across LTO vendors and product generations.



# **Simplify Storage Management**

Oracle's StorageTek LTO drives are compatible with leading backup and management software and hardware platforms, helping you to stretch your infrastructure investment. Choose StorageTek LTO Ultrium media to accompany your tape purchase. All of our media is thoroughly tested for intercompatibility between applicable drives and StorageTek libraries.

#### **Engage the Storage Experts**

Oracle service professionals help you address storage challenges by delivering integrated services and solutions that optimize and manage storage performance over the life of your data. Our recognized, world-class service and customer care give you confidence that your technology investment is protected and that your business will be responsive to change. Oracle's storage service professionals can help you gain and sustain measurable results with the reliability and flexibility that you require. In addition, you can make your storage solution decisions even stronger with one of the largest selections of high-performance tape media in the industry.

StorageTek LTO Tape Drive Specifications						
Performance	StorageTek LTO 4 Half-Height	StorageTek LTO 4	StorageTek LTO 5 Half-Height	StorageTek LTO 5		
Tape load and thread to ready	19 sec	19 sec	19 sec	19 sec		
Average file access time (first file)	80 sec	62 sec	52 sec	52 sec		
Maximum/average rewind time	155/78 sec	124/62 sec	96/48 sec	96/48 sec		
Unload time	19 sec	19 sec	19 sec	19 sec		
Data transfer rate, native (uncompressed)	80 MB/sec	120 MB/sec	140 MB/sec	140 MB/sec		
Capacity						
Capacity, native (uncompressed)	800 GB	800 GB	1.5 TB	1.5 TB		
Availability	-		·			
Mean time between failures (MTBF) Power on	250,000 hrs @ 100% duty cycle					
Head life	60,000 hrs	60,000 hrs	60,000 hrs	60,000 hrs		
Uncorrected bit error rate	1x10 <sup>-17</sup>	1x10 <sup>-17</sup>	1x10 <sup>-17</sup>	1x10 <sup>-17</sup>		
Undetected bit error rate	1x10 <sup>-27</sup>	1x10 <sup>-27</sup>	1x10 <sup>-27</sup>	1x10 <sup>-27</sup>		
Compatibility						
Interface (SCSI/SAS)	Ultra 320 SCSI, 3 Gb SAS	Ultra 320 SCSI	6 Gb SAS	6 Gb SAS		
Burst transfer rate	300 MB/sec	320 MB/sec	600 MB/sec	600 MB/sec		
Interface (Fibre Channel - automation only)	N/A	8 Gb FC	N/A	8 Gb FC		
Read/write compatibility interface	LTO 4, LTO 3 read/write, LTO 2 (read only)	LTO 4, LTO 3 read/write, LTO 2 (read only)	LTO 5, LTO 4 read/write, LTO 3 (read only)	LTO 5, LTO 4 read/write, LTO 3 (read only)		
Emulation modes	LTO 4	LTO 4	LTO5	LTO5		

# StorageTek LTO Tape Drive Specifications



Mechanical				
Desktop dimensions (W x H x D)	8.8 x 3.0 x 11.7 (in.), 22.35 x 7.62 x 29.71 (cm)	N/A	8.8 x 3.0 x 11.7 (in.), 22.35 x 7.62 x 29.71 (cm)	N/A
Desktop weight	N/A	N/A	10.3 lb.	N/A
Rackmount dimensions (W x H x D)	19.0 x 1.75 x 25.25 (in.), 48.3 x 4.44 x 64.1 (cm)	N/A	19.0 x 1.75 x 25.25 (in.), 48.3 x 4.44 x 64.1 (cm)	N/A
Rackmount weight	21 lb., 9.52 kg	N/A	21 lb., 9.52 kg	N/A
Automation dimensions (W x H x D)	5.7 x 1.6 x 8.1 (in.), 14.47 x 4.06 x 20.57(cm)	5.7 x 3.3 x 8.2 (in.), 14.47 x 8.38 x 20.82 (cm)	5.7 x 1.6 x 8.1 (in.) 14.47 x 4.1 x 20.82 (cm)	5.7 x 3.3 x 8.2 (in.), 14.47 x 8.38 x 20.82 (cm)
Automation weight	3.2 lb., 1.45 kg	4.94 lb., 2.24 kg	3.2 lb., 1.45 kg	4.94 lb., 2.24 kg
Environmental			•	
Temperature: operating	+50°F to +100°F (+10°C to +38°C)	+50°F to +100°F (+10°C to +38°C)	+50°F to +100°F (+10°C to +38°C)	+50°F to +100°F (+10°C to +38°C)
Temperature: nonoperating	-40°F to +140°F (-40°C to +66°C)	-40°F to +140°F (-40°C to +66°C)	-40°F to +140°F (-40°C to +66°C)	-40°F to +140°F (-40°C to 66°C)
Relative humidity: operating	20% to 80%	20% to 80%	20% to 80%	20% to 80%
Relative humidity: nonoperating	10% to 95%	10% to 95%	10% to 95%	10% to 95%
Power				
Desktop	100–240 V AC	N/A	100–240 V AC	N/A
	50/60 Hz 0.7A max.		50/60 Hz 0.7A max.	
	Autoranging Power connection IEC 320		Autoranging Power connection IEC 320	
Rackmount	+5 V @ 3.5 A typical	N/A	+5 V @ 3.5 A typical	N/A
	+12 V @ 1.0 A typical		+12 V @ 1.0 A typical	
	+5 V @ 4.5 A (max.)		+5 V @ 4.5 A (max.)	
	+12 V @ 2.0 A (max.)		+12 V @ 2.0 A (max.)	
Automation	Varies depending on library configuration	Varies depending on library configuration	Varies depending on library configuration	Varies depending on library configuration



# Warranty

Visit oracle.com/sun/warranty for Oracle's global warranty support information on Sun products.

# **Services**

Visit oracle.com/sun/services for information on Oracle's service program offerings for Sun products.

# **Contact Us**

For more information about Oracle's StorageTek LTO tape drives, please visit oracle.com/storage or call +1.800.786.0404 to speak to an Oracle representative.

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