

# Sun StorageTek™ T10000

## Tape Cartridge



### Highlights

- Save valuable floor space**  
 Store up to 500 gigabytes of uncompressed data per standard cartridge and 120 gigabytes per Sport cartridge.
- Extend media durability**  
 Enhance data protection with a unique hub-lock design and the StorageTek T10000 SafeGuide system.
- Reduce costs**  
 Minimize tape mounts and improve automation efficiency with a low-cost-per-gigabyte, high-end, half-inch storage medium.
- Protect storage investments**  
 Reformat and reuse T10000 cartridges with the next-generation tape drive to take advantage of capacity and throughput improvements.
- Boost confidence in business-critical applications**  
 Enhance data backup and restore, archiving, and disaster recovery operations with performance-tested tape cartridge durability and longevity.



The Sun StorageTek™ T10000 tape cartridge works in tandem with the Sun StorageTek T10000 tape drive to address issues related to data growth, security, manageability, and cost.

### Store far more in the same footprint

With 500-gigabyte capacity, the T10000 tape cartridge stores more data in the same footprint. With 2:1 compression, a T10000 tape cartridge can store up to 1 terabyte of data to help you meet growing data storage requirements. Ultra-high capacity makes the T10000 tape cartridge ideal for high-volume backup, archiving, and disaster recovery applications.

### Increase the security of your data

The T10000 tape cartridge increases data security with the Sun StorageTek T10000 SafeGuide™ system, which includes features that can increase reliability and extend media life. A unique hub lock stabilizes media within the cartridge shell. A redesigned buckler mechanism securely attaches the cartridge leader to the drive leader. A long tape path guides the media more accurately and reduces tension on the tape. Tension can reduce the life of heads and media. Data integrity is enhanced because the tape guides and rollers guide the media on its back side and do not contact the recording surface. The

rollers also enhance stability by minimizing lateral tape motion.

Data security is further enhanced by Sun StorageTek VolSafe® secure media technology, which provides write once, read many (WORM) protection. VolSafe technology provides physical, visual, and electronic features to differentiate it from non-VolSafe technology.

### Simplify tape operations

Simpler tape operations can improve access to data. With the same physical size as the StorageTek 9840 and 9940 media, the StorageTek T10000 tape cartridge integrates simply and easily with your current Sun StorageTek automated tape systems. The cartridges are system-tested for use with T10000 tape drives, as well as with supported tape automation systems and software from Sun and many third-party providers.

The T10000 tape cartridge can also help you utilize staff resources more efficiently. T10000 tape cartridges can be labeled prior to delivery with volume serial number (VOLSER) labels, then initialized

and verified with a triple quality check. Pre-labeling typically reduces the occurrence of operational intervention caused by poorly applied labels. The T10000 tape cartridge includes a radio frequency identification (RFID) tag that provides cartridge redundancy data such as VOLSER, file directories, and other data for improved data recovery and faster data access.

### Protect your investment and reduce total cost of ownership

The T10000 tape cartridge lowers total cost of ownership through media reusability, higher cartridge capacity, and cartridge durability.

After you install the next-generation T10000 tape drive, you can reformat and reuse T10000 tape cartridges to take advantage of higher capacity and faster throughput. As a result, you can leverage your initial media investment and spend less money on new media.

Each T10000 tape cartridge to date can store more than twice as much data than the previous generation tape cartridge. Accordingly, you may be able to buy fewer cartridges and conserve valuable floor space compared to current tape technologies.

Cartridge replacement due to damage or wear and tear can be an unexpected cost. The T10000 tape cartridge is built for long-term, cost-effective use. The heavy-duty shell of the T10000 tape cartridge reduces the risk of damage, and each cartridge is designed to perform up to 10,000 tape mounts. This allows Sun to deliver a limited 10 year warranty, even for high production environments.

### Engage the storage experts

Sun StorageTek service professionals can 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. To help you pinpoint opportunities to reduce costs, mitigate business risk, and better leverage information assets, our consulting and managed services offerings deliver clarity, simplicity, and choice in solutions that address regulatory concerns, complex storage growth, resource management, and scalability challenges. Covering over 125 countries, more than 2100 dedicated storage service professionals can help you gain and sustain measurable results with the reliability and flexibility that you require.

### Learn more

To learn more about Sun's tape cartridge technology and how it can help you address issues of data growth, security, manageability, and cost, talk to your Sun representative or visit [sun.com/storagetek](http://sun.com/storagetek)

### Media conversion services

Tape, optical and disk conversions:

- Digital data conversion services. Convert existing data to more accessible, less costly platforms.
- Media conversion — old to new technology.

Convert older, lower-capacity tapes to higher capacity tapes.

- Tape consolidation services.

Consolidate large amounts of offsite data to reduce risk, increase accessibility and support compliance.

- Optical conversion services. Convert WORM optical to WORM tape using VolSafe technology.
- Tape and optical copy and conversion services includes tape volume and dataset stacking.

Convert tape and optical media to help reduce cost and risk of data loss with a lower number of tapes.

## T10000 Tape Cartridge Specifications

### Performance

Tape speed	
Read and write	79 in./sec to 195.5 in./sec (2.0 to 4.95 m/sec)
Search and rewind	375.25 in./sec (9.5 m/sec)
Formulation	
Advanced metal particle	
Tape length and thickness	3008.5 ft (917 m) and 6.5 microns
Substrate	
Polyethylene naphthalate (PEN)	
Track-following servo	
Factory pre-recorded	

### Capacity

Capacity, native (uncompressed)	500 GB standard cartridge 120 GB Sport cartridge
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### Availability

Archival life	30 years
Uncorrected bit error rate	1x10 <sup>-19</sup>
Loads/unloads	15,000

### Compatibility

Supported tape drives	T10000
Number of tracks	768
Form factor	Half-inch, 3480/3490E

### Mechanical

Height	1.0 in. (2.54 cm)
Depth	4.92 in. (12.50 cm)
Width	4.29 in. (10.90 cm)
Weight	9.31 oz (263.9 g)
Drop strength	39.4 in. (1 m)

### Environmental

Relative humidity	
Operating	20%–80%
Storage up to four weeks	5%–80%
Storage, archive	15%–50%
Shipping	5%–80%
Temperature (non-condensing)	
Operating	+59° to +113.0°F (+15° to +45°C)
Storage up to four weeks	+50° to +90°F (+10° to +32°C)
Storage, archive	+59° to +79°F (+15° to +26°C)
Shipping	-9° to +120°F (-23° to +49°C)
Wet bulb maximum	
Operating	+78.8°F (+26°C)
Storage up to four weeks	+78.8°F (+26°C)
Storage, archive	+78.8°F (+26°C)
Shipping	+78.8°F (+26°C)

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