

## STORAGETEK T10000 FAMILY TAPE CARTRIDGE

### KEY BENEFITS

- **Save valuable floor space.** Store up to 5 TB of uncompressed data per standard cartridge and 1 TB per Sport cartridge with the StorageTek T10000C tape drive.
- **Extend media durability.** Enhance data protection with a unique hub lock design.
- **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 StorageTek T10000 tape 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.

*Oracle's StorageTek T10000 and T10000 T2 tape cartridges work in tandem with Oracle's StorageTek T10000A, T10000B or T10000C tape drive to address issues related to data growth, security, manageability, and cost.*



StorageTek T10000 T2 tape cartridges

### Store Far More in the Same Footprint

With 5 TB native capacity, the StorageTek T10000 T2 tape cartridge, for the StorageTek T10000C tape drive, stores more data in the same footprint as previous generation cartridges. For the StorageTek T10000A and T10000B tape drives, the StorageTek T10000 tape cartridge can store up to 1 TB data to help you meet rapidly growing data storage requirements. Ultra-high capacity makes the StorageTek T10000 and T10000 T2 tape cartridges ideal for all high-volume backup, archiving, and disaster recovery applications.

### Increase the Security of Your Data

The StorageTek T10000/T10000 T2 tape cartridges' unique hub lock design 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 within the tape drive – 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 backside and do not contact the recording surface. The rollers also enhance stability by minimizing lateral tape motion.

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

### Simplify Tape Operations

Simpler tape operations can improve access to data. With the same physical size as the StorageTek 9840 and StorageTek 9940 tape cartridges, the StorageTek T10000/T10000 T2 tape cartridges integrate simply and easily with your current StorageTek automated tape

systems. The cartridges are system tested for use with the StorageTek full lineup of T10000 tape drives, as well as Oracle's tape automation systems and software from Oracle and many third-party providers.

The StorageTek T10000/T10000 T2 tape cartridges also can help you use staff resources more efficiently. StorageTek 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 StorageTek T10000/T10000 T2 tape cartridges include an 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 StorageTek T10000/T10000 T2 tape cartridges lower TCO through media reusability, higher cartridge capacity, and cartridge durability.

Each StorageTek T10000 T2 tape cartridge can store five times as much data as the previous-generation tape cartridge, enabling massive scalability to match any expected future growth requirements. Accordingly, you might be able to buy fewer cartridges and conserve valuable floor space compared to your current tape technologies, all while maintaining the ability to scale your storage environment.

The StorageTek T10000 tape cartridge can be used in the StorageTek T10000A, T10000B and T10000C tape drives. The tapes written in the StorageTek T10000A tape drive can be rewritten in the StorageTek T10000B tape drive at double the capacity, enabling media reuse across two generations of tape drives. T10000 tapes can be read back in the T10000C tape drive, enabling customers to support existing tapes and promoting ease of migration to the next generation of T10000 tape drive. As a result, you can extend initial media investment across three generations of drives.

Tape Cartridge	T10000 Cartridge	T10000 T2 Cartridge
StorageTek T10000A tape drive	Read/Write	NA
StorageTek T10000B tape drive	Read/Write	NA
StorageTek T10000C tape drive	Read Only	Read/Write

Cartridge replacement due to damage or wear-and-tear can be an unexpected cost. The StorageTek T10000/T10000 T2 tape cartridges are built for long-term, cost-effective use. The heavy-duty casing of the StorageTek T10000 tape cartridge family, along with a lockable cartridge hub, reduces the risk of damage to data and ensures the maximum level of protection for media.

### Engage the Storage Experts

Oracle offers tailored mission-critical services and support for your storage environment. Oracle Advanced Customer Services helps you address storage challenges by delivering installation, configuration, optimization and on-going monitoring and tailored support. Oracle service professionals help you achieve the highest levels of system performance and availability with diagnostic and monitoring tools that help anticipate, identify and remediate any potential issues. From tape library installation services to the design and implementation of key management encryption systems, Oracle service experts help you realize more value from your storage infrastructure - with less disruption to your business. For more information contact your Oracle representative, email [acsdirect\\_us@oracle.com](mailto:acsdirect_us@oracle.com) or visit [oracle.com/acs](http://oracle.com/acs).

## Media Conversion Services

When you want to organize and optimize media to reduce downtime, risk, and maintenance, turn to Oracle for expert assistance. Customized media conversion services can help you move data in optical, tape, and disk formats to new or different technology that offers higher capacity, lower cost, and lower risk. Sample service activities may include assistance converting WORM optical to WORM VolSafe tape. And when optimizing data center facilities, tailored tape relocation services can expedite data center relocation and rack relocation activities.

## StorageTek T10000 and T10000 T2 Tape Cartridge Specifications

Specifications	
Formulation	T10000: Advanced metal particle T10000 T2: Barium Ferrite
Tape length and thickness	T10000: 3008.5 ft. (917 m) and 6.5 $\mu\text{m}$ T10000 T2: 3763.1 ft. (1147 m) and 5.2 $\mu\text{m}$
Substrate	T10000: Polyethylene naphthalate (PEN) T10000 T2: Aramid
Track-following servo	Factory prerecorded
Capacity	
Capacity, native (uncompressed)	<ul style="list-style-type: none"> <li>• T10000 data cartridge: 500 GB (StorageTek T10000) / 1 TB (StorageTek T10000B)</li> <li>• T10000 sport cartridge: 120 GB (StorageTek T10000) / 240 GB (StorageTek T10000B)</li> <li>• T10000 T2 data cartridge: 5 TB (StorageTek T10000C)</li> <li>• T10000 T2 sport cartridge: 1 TB (StorageTek T10000C)</li> </ul>
Availability	
Archival life	30 years
Uncorrected bit error rate	1x10 <sup>-19</sup>
Loads/unloads	15,000 (T10000); 25,000 (T10000 T2)
Compatibility	
Supported tape drives	<ul style="list-style-type: none"> <li>• T10000 tape cartridge: StorageTek T10000A, StorageTek T10000B, StorageTek T10000C (read only)</li> <li>• T10000 T2 tape cartridge: StorageTek T10000C</li> </ul>
Number of tracks	768 (T10000A), 1152 (T10000B), 3584 (T10000C)
Form factor	Half-inch, 3480/3490E

Cleaning Cartridge	
StorageTek T10000	Compatibility: StorageTek T10000A, StorageTek T10000B
StorageTek T10000 T2	Compatibility: StorageTek T10000A, StorageTek T10000B, StorageTek T10000C
Mechanical	
Height	1.0 in. (2.54 cm)
Depth	4.92 in. (12.50 cm)
Width	4.29 in. (10.90 cm)
Weight	T10000: 9.31 oz. (263.9 g) T10000 T2: 9.52 oz (270 g )

Environmental	
<b>Relative Humidity</b>	
Operating	20%–80%
Storage up to four weeks	5%–80%
Storage, archive	15%–50%
Shipping	5%–80%
<b>Temperature (Non-condensing)</b>	
Operating	T10000: +50°F to +90°F (+10°C to +32°C) T10000 T2: +50°F to +90°F (+10°C to +32°C)
Storage up to four weeks	+50°F to +90°F (+10°C to +32°C)
Storage, archive	+59°F to +79°F (+15°C to +26°C)
Shipping	– 9°F to +120°F (– 23°C to +49°C)
<b>Wet Bulb Maximum</b>	
Operating	+79°F (+26°C)
Storage up to four weeks	+79°F (+26°C)
Storage, archive	+79°F (+26°C)
Shipping	+79°F (+26°C)

## Contact Us

For more information about Oracle's StorageTek T10000 or StorageTek T10000 T2 tape cartridge, please visit [oracle.com](http://oracle.com) or call +1.800.ORACLE1 to speak to an Oracle representative.



Copyright © 2011, Oracle and/or its affiliates. All rights reserved.

This document is provided for information purposes only and the contents hereof are subject to change without notice. This document is not warranted to be error-free, nor subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document and no contractual obligations are formed either directly or indirectly by this document. This document may not be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without our prior written permission.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. UNIX is a registered trademark licensed through X/Open Company, Ltd. 0111

**Hardware and Software, Engineered to Work Together**