

STORAGETEK T9840D TAPE DRIVE

KEY FEATURES AND BENEFITS

THE FAST-ACCESS ALTERNATIVE TO DISK

FEATURES

- Access-centric drives for faster access and increased capacity
- Choice of interface: FICON or Fibre Channel
- Backward compatibility with three prior generations of StorageTek T9840 tape drives
- Crypto-ready tape drive
- StorageTek VolSafe secure media technology
- Sixteen-channel tape head, internal tape path, and robust motors and cartridge-loading mechanism

BENEFITS

- **Improved efficiency.** Choice of interfaces provides cost-effective alternative to disk for applications such as check imaging and hierarchical storage management.
- **Protected investments.** Mix and match tape drives from the StorageTek libraries to achieve an optimum balance of access and capacity.
- **More secure data.** Encrypted data and write-once, read-many (WORM) protection.
- **Around-the-clock data availability.** Designed to support 24/7 operations with enterprise-class, high duty cycles and high reliability.

In transaction-intensive IT environments, speed, reliability, security, and predictability are core data protection requirements. The newest member of Oracle's access-centric tape drive family, Oracle's industry-leading, crypto-ready StorageTek T9840D tape drive provides fast data access, fast recall, and high throughput. As a result, you can improve response times, shrink backup windows, accelerate batch processing, reduce data recovery times, and improve system and application availability.



Safeguard your data—but make sure you can access it quickly, reliably, and efficiently—by taking advantage of the StorageTek T9840D tape drive.

Fast Access and Exceptional Protection for Your Data

The StorageTek T9840D tape drive, with its access-centric two-reel design, supports fast access to data and offers exceptional data protection advantages. It enables you to

- Reduce total cost of ownership, with four generations of StorageTek T9840 tape drives able to utilize the same media cartridge
- Store 75 GB native capacity on a single cartridge—nearly two times as much as the StorageTek T9840C
- Use encryption technology to secure data onsite, offsite, and in transit

The StorageTek T9840D tape drive uses the same StorageTek 9840 data cartridge as the StorageTek T9840A, StorageTek T9840B, and StorageTek T9840C tape drives. If you currently use StorageTek T9840 drives, you can leverage your existing media assets with the StorageTek T9840D to meet changing storage requirements. For example, simply reuse existing cartridges to store higher volumes of data and apply

your media budget to the purchase of capital assets.

Improve Efficiency in Mainframe Environments

The StorageTek T9840D tape drive provides direct-attach FICON, which helps enable remote storage applications and increases business continuance options. Achieve distances of up to 100 kilometers with FICON without channel extensions or significant throughput reduction. With direct connection, you decrease cost, complexity, and points of failure.

In mainframe environments, you can use StorageTek T9840D tape drives with the StorageTek Virtual Storage Manager (VSM) system for speedy retrieval of active data or with Hierarchical Storage Management (HSM) software to centralize storage management.

Enable High-Performing SANs in Open Systems Environments

The StorageTek T9840D tape drive offers a native 2 GB, fabric-aware Fibre Channel interface, enabling high-powered connectivity. Implement a high-speed storage-area network (SAN) with confidence. With a 200 MB/sec burst data rate and a 30 MB/sec sustained data transfer rate, the StorageTek T9840D helps reduce network congestion and gives you the performance you need to place more and more data on cost-effective tape. You gain the speed you need for backup/recovery or disaster recovery.

In open systems environments, you can use StorageTek T9840D tape drives with StorageTek ACSLS Manager software to implement a centralized library management solution that enables you to dynamically allocate library resources without hard-partitioning tape slots.

Take Advantage of Ultrareliability to Boost Availability

The industry-leading StorageTek T9840D's enterprise-class engineering and performance minimize the risk of downtime and help you maintain 24/7 operations. With the ultrareliable StorageTek T9840D in your infrastructure, you can improve efficiency and worry less, thanks to these unique features:

- Heated tape heads contribute to consistent operational temperature and reduce condensation to extend head life.
- Sixteen-channel heads reduce the required number of tape passes and increase data reliability.
- The tape path remains inside the media cartridge, which improves data integrity and reduces access times.
- Removal of tape from heads during high-speed operations, such as search and rewind, extends the life of the head and reduces the need for head cleaning
- Data buffer management enables drive back-hitching to be accomplished more quickly than the data buffer can be filled, resolving the issue of data interruption from the server at slow throughput speeds.

The robust cartridge loader mechanism is designed to operate in the industry's leading library, the StorageTek SL8500 modular library system, and other StorageTek libraries.

Protect Sensitive Data with Encryption and WORM

Choose one or both—encryption and/or write-once, read-many (WORM) technology—to help manage and protect growing amounts of sensitive data on or off premises and to reduce financial and legal risk associated with data loss.

The crypto-ready StorageTek T9840D tape drive provides device-level security. It works in conjunction with the StorageTek Crypto Key Management System, an appliance that provides a simple, centralized, scalable solution for managing the keys used to encrypt and decrypt data written by the StorageTek T9840D tape drive.

The StorageTek VolSafe secure media technology for the StorageTek T9840D tape drive helps you meet stringent electronic storage regulatory and legal requirements with WORM capability. Securely archive data on nonerasable, nonrewritable tape and recall data within seconds when you need it.

Protect Your Investments Today and Tomorrow

The StorageTek T9840D tape drive is compatible with most StorageTek automated tape libraries. Through advanced functionality, such as Any Cartridge Any Slot technology, you can easily adopt and mix new technologies, drives, and media types, thereby protecting the value of your StorageTek library investment. Use the StorageTek T9840D in combination with other drives, such as the capacity-centric StorageTek T10000 tape drive, to achieve specific access and capacity objectives, with an attractive total cost of ownership. Media reusability, which dates back to 1998 for the StorageTek T9840 family, paves the way for affordable tape drive upgrades. Supported by VSM, the StorageTek T9840D offers even greater optimization of your existing storage management solution.

Performance. Reliability. Investment protection. With the StorageTek T9840D, you can bolster business continuance, disaster recovery, or “business as usual.”

Engage the Storage Experts

Oracle's 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. Oracle's implementation services address utilization, availability, capability planning, and management efficiency, helping you quickly realize the benefits from your investment so you can continue to access the information you need, when you need it. Oracle's consulting and managed services offer clear and simple choices in solutions that address your regulatory concerns, complex storage growth, resource management, and scalability. With Oracle's storage service professionals, you can gain and sustain measurable results with the reliability and flexibility you require.

StorageTek T9840D Tape Drive Specifications

Performance	
<ul style="list-style-type: none"> • Tape load and thread to ready: 8.5 sec • Average file access time (first file): 8 sec • Average access time: 16.5 sec • Maximum/average rewind time: 16/8 sec • Unload time: 12.5 sec • Data transfer rate, native (uncompressed): 30 MB/sec • Data transfer rate, native (compressed): 70 MB/sec • Burst transfer rate (Fibre Channel): 200 MB/sec (maximum instantaneous) 	
Capacity	
Capacity, Native (Uncompressed)	
StorageTek T9840D: 75 GB	
Availability	
Mean Time Between Failures (MTBF)	
<ul style="list-style-type: none"> • Power on: 290,000 hr. @ 100 percent duty cycle • Tape load: 240,000 hr. @ 10 loads/day (100,000 loads) • Tape path motion: 216,000 hr. @ 70 percent TPM duty cycle • Head life: 8.5 years @ 70 percent TPM duty cycle • Uncorrected bit error rate: 1×10^{-18} • Undetected bit error rate: 1×10^{-33} 	
Compatibility	
Interface	
<ul style="list-style-type: none"> • 2 Gb Fibre Channel (check with sales representative for availability) 	<ul style="list-style-type: none"> • 2 Gb FICON for VSM • FICON express channels
Interface (Fibre Channel)	
N and NL port, FC-PLDA (hard and soft AL-PA capability), FC-AL-2 FCP-2, FC-TAPE	
Read/Write Compatibility Interface	
Proprietary format	
Emulation Modes	
<ul style="list-style-type: none"> • Native • 3490E • 3590H 	
Mechanical	
<ul style="list-style-type: none"> • Height: 5.25 in. (13.3 cm) • Depth: 15.0 in. (38.1 cm) 	

Environmental	
Temperature	<ul style="list-style-type: none"> • Operating: +59° to +90° F (+15°C to +32° C) • Nonoperating: +50° to +104° F (+10°C to +40° C)
Relative Humidity	<ul style="list-style-type: none"> • Operating: 20% – 80% • Nonoperating: 10% – 95%
Voltage	
	<ul style="list-style-type: none"> • Voltage: 100 VAC – 240 VAC @ 50 Hz – 60 Hz • Consumption/dissipation (operating maximum continuous—not peak): 82 VA/280 BTU/hr.
Encryption	
<p>The crypto-ready StorageTek T9840D tape drive works in conjunction with the Crypto Key Management System (KMS). The KMS delivers a simple, secure, centralized solution for managing the keys used to encrypt and decrypt data written by the StorageTek T9840D tape drive. Developed on open security standards, the KMS consists of the Key Management Appliance, a security-hardened Sun Fire rackmounted server, and the KMS Manager graphical user interface (GUI) that is executed on a workstation. The KMS runs without regard to application, operating platform, or primary storage device. It complies with Federal Information Processing Standard (FIPS) 140-2 certification. Requirements and specifications may change, so check with your Oracle representative.</p>	

Warranty

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

Services

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

Contact Us

For more information about Oracle's StorageTek T9840 tape drive family, please visit oracle.com/storage or call +1.800.786.0404 to speak to an Oracle representative.



Oracle is committed to developing practices and products that help protect the environment

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