

# IBM TS1170 Tape Drive

Ultra-high capacity for  
cyber-resilient data archiving



## Highlights

Provides ultra-high data storage—up to 150TB per cartridge with 3:1 compression

Enhances security with high-performance AES-256 encryption

Safeguards data with future-proof cyber resilience and air-gapped isolation

Massive data growth has led to many ways of handling and securing all that information. Modern use cases such as big data, cloud or analytics sometimes require a hyperscale approach to cost-effectively meet business goals. The IBM® TS1170 Tape Drive is designed for environments that achieve massive scale in data storage, and it helps lower total cost of ownership. The TS1170 Tape Drive gives organizations an easy way to maximize capacity and gain security-rich long-term retention for less than the cost of disk or flash solutions.

In addition to data storage, organizations need backup and recovery systems for everyday data protection tasks. But even those systems aren't sufficient to counter the risk posed by floods, wildfires or other natural disasters—along with the increasingly prevalent threat of cyberattacks.

The TS1170 Tape Drive was designed to provide sustainable, cost-effective data storage to address the problems of increasing data volumes, rising energy costs, frequent cyberattacks and shrinking IT staffs.

The TS1170 Tape Drive effectively tackles critical client pain points with its cutting-edge features. Its ultra-high capacity—up to 50TB in a single cartridge and 3:1 compression—provides exceptional storage solutions. NIST-approved AES-256 encryption safeguards against cyberthreats. The “air gap” isolation enhances data preservation and cyber-resilience. Seamless integration with the IBM TS4500 Tape Library optimizes storage management, while field upgradability and Recommended Access Order (RAO) streamline operations. With the TS1170, clients experience security-rich, scalable and efficient data storage, addressing their most pressing needs with confidence.



**Provides ultra-high data storage—up to 150TB per cartridge with 3:1 compression**

The TS1170 Tape Drive sets new standards for ultra-high capacity, offering an impressive native data storage of up to 50TB in a single JF cartridge. But it doesn't stop there. Using standard 3:1 compression, each tape drive can efficiently store up to a staggering 150TB per JF cartridge. This exceptional capacity empowers organizations to tackle the challenges posed by the exponential growth of data, providing the robust and scalable solution they need to retain and protect their critical information.

The TS1170 enables businesses to confidently address the demands of modern data-intensive environments, helping them effectively manage, back up and preserve vast amounts of data for the long term.

**Enhances security with high-performance AES-256 encryption**

The TS1170 Tape Drive stands at the forefront of high-performance data storage, incorporating cutting-edge features to help ensure both efficiency and security. With NIST-approved AES-256 encryption, it provides robust data protection, protecting sensitive information from potential threats and unauthorized access. The solution's support for path-failover further fortifies its reliability, minimizing the risk of operational interruptions in a cyber-secure infrastructure.

With the tape drive's combination of top-tier performance and advanced security measures, businesses can trust that their critical data is not only stored efficiently but also shielded from potential vulnerabilities. With the TS1170 Tape Drive, organizations can experience seamless and high-performance data management, establishing a solid foundation for data-driven operations in today's rapidly evolving digital landscape.

### **Safeguards data with future-proof cyber resilience and air-gapped isolation**

The TS1170 Tape Drive offers a future-proof cyber resilience solution with air-gapped isolation, setting the standard for data protection in the digital age. By creating a physical separation from an organization's primary storage systems, the TS1170 establishes a robust air gap that acts as a powerful defense against cyberthreats. This air-gapped isolation helps ensure that archived data remains shielded from potential attacks targeting the primary storage environment.

As cyberthreats continue to evolve, the tape drive's forward-looking approach provides a security-rich barrier that helps organizations stay ahead of potential risks, protecting their critical data from unauthorized access and manipulation. With the TS1170 Tape Drive, businesses can embrace the digital transformation knowing that their data is safeguarded against emerging threats. By using air-gapped isolation, the TS1170 reinforces its position as a reliable and advanced solution for data integrity, continuity and cyber-resilience.

### **Conclusion**

The enhanced TS1170 Tape Drive boosts native capacity using next-gen JF media, safeguarding tape automation investments with compatibility. Features include:

- Support for standardized Fibre Channel connectivity
- Support for standardized Serial Attached SCSI (SAS) connectivity
- Integration into the IBM TS4500 Tape Library
- Field upgradable ordering for existing clients
- Support for RAO, which improves recall and time to first byte
- Air gap, which improves cyber resilience by isolating tape media from primary storage

## IBM TS1170 Tape drive – Specifications

Recording technique	Linear Serpentine		
Native capacity (uncompressed)	50 TB (using JF media)		
Native sustained data rate (uncompressed)	400MBps (Type F media)		
Burst rate	1600MBps		
High-speed search (max)	12.4mps end-end search rate		
Host interface	3592-70F: Fibre Channel 16 Gbps 3592-70S: SAS 12 Gbps		
Warranty	One year		
Dimensions	70F/70S Model: 93 mm H x 186 mm W x 467 mm D (3.7 in x 7.3 in x 18.4 in)		
Weight	70F/70S Model: 5.57 kg (12.25 lbs)		
Operating environment	Recommended	Allowable	Power off
Temperature	16° to 25° C (60° to 77° F)	16° to 32° C (60° to 90° F)	5° to 45° C (40° F to 113° F) Dry-bulb
Relative humidity	20% to 50% non-condensing	20% to 80% non-condensing	8% to 80% non-condensing
Maximum dew point temperature	22° C (72° F)		
Power dissipation (drive and integrated blower)	57 Watts		

### Why IBM?

The performance and availability of your storage environment can either enhance or hamper your business processes. That is where IBM comes in. With more than 70 years of experience in delivering tape-based storage technology, IBM Storage solutions deliver the scalability, security, and reliability that organizations need to manage the massive volumes of data that have become common today.

Innovative technology; excellent performance; and a broad portfolio of proven storage hardware, software and solutions offerings are just a few of the reasons why you should consider storage solutions from IBM, including IBM TS1170 Tape Drives.

### For more information

To learn more about IBM TS1170 Tape drive, please contact your IBM representative or IBM Business Partner, or or visit [ibm.com/products/enterprise-tape-drive](http://ibm.com/products/enterprise-tape-drive)

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