IBM TS4300 Tape Library

Supports secure, long-term data storage in a highly scalable tape library

Highlights

Get highly scalable solution with one 3U base module and up to six expansions

Provide secure, long-term data storage

Simplify tape storage deployment and management

Help reduce data center costs with a high-density solution

Requirements for secure, long-term data retention—especially in the financial services, healthcare and life sciences industries—are common and increasingly stringent, with data volumes growing massively as a result. And data stored on tape kept offline, or on write-once media, is nearly impervious to hacking. IBM® TS4300 Tape Library is a high-density, highly scalable, easy-to-manage tape library designed to keep data securely stored long-term, while helping reduce the costs associated with data center space and utilities.

The IBM TS4300 Tape Library modular design enables users to increase cartridge and drive capacity as needed. Built around a 3U-high modular base library, TS4300 can scale vertically with up to seven modules—including the base library—with expansion for Linear Tape-Open (LTO) Ultrium cartridges, drives and redundant power supplies. A single robot manages all modules in the stack. In a seven-module configuration, TS4300 offers a capacity of up to 280 LTO cartridges. A wizard for installation and configuration enables users to install, expand and service the library without special training.

To help meet security and compliance requirements, TS4300 supports write-once-read-many (WORM) cartridges to enhance data protection and provides library-managed encryption with IBM Security Key Lifecycle Manager. Additionally, you can improve business continuity with IBM TS4300 Tape Library-supported features like automatic control-path and data-path failover to provide automatic control in the event of a loss of a host adapter or control path.

TS4300 uses IBM Storage for direct, intuitive and graphical access to data stored in IBM tape drives and libraries by incorporating the IBM Linear Tape File System (LTFS) format standard. LTFS compatibility allows tape-stored data to be accessed as if it were on disk or flash storage.

Highly scalable solution with one 3U base module and up to six expansions
The TS4300 base library contains all the necessary robotics and intelligence to manage the base library system, with a maximum of 40 slots of LTO cartridge capacity per module, up to five input/output (I/O) slots, and support for three combinations of full- and/or half-height (FH or HH) LTO drives per module. The TS4300 base library is rack or tabletop mountable. Module expansions are rack mountable only.

IBM TS4300 Tape Library configurations	**Minimum configuration: Base module**	**Maximum configuration: TS4300 base module with 6 expansion modules**
Total physical capacity	720 TB	5.04 PB
LTO Ultrium cartridge capacity	40	280
Reduction in cartridges for I/O slots	0 or 5	0–35
Tape drives	1 FH LTO, 3 HH LTO, or 1 FH and 1 HH LTO	7 FH LTO or 21 HH LTO HH/FH drive mixture range 19/1 or 7/7
Logical libraries	Up to the number of drives	Up to the number of drives

Provide secure, long-term data storage

Management software options	
IBM Storage Archive	Enables users of LTO Ultrium 9, Ultrium 8, 7 and 6 tape library systems to inventory cartridges and read, write and search data on any cartridge Enables writing metadata and tagging of individual files for easy and fast access to files stored on cartridges
IBM Storage Protect	Enables users to create, manage and optimize archives Provides management of concurrent copies of content, plus active, inactive and off-site content
IBM Security Key Lifecycle Manager	Enhances data security while dramatically reducing the number of encryption keys to be managed Simplifies encryption key management with an intuitive user interface for configuration and management Helps minimize the risk of loss or breach of sensitive information

Simplify tape storage deployment and management
TS4300 is based on an embedded, open-source software architecture to help speed deployment and simplify management. Best-in-class error recovery and reporting, library health monitoring and alerting, and auto-recovery features help to speed diagnostics and resolution. An automation drive interface significantly increases drive communication speed for faster code updates and log downloads. IBM offers diverse management software solutions for TS4300 to enhance the use of multipath architecture, as well as the use of a single TS4300 library. The library software includes application programming interface (API) hooks that enable easy integration of IBM software.

Help reduce data center costs with a high-density solution

IBM TS4300 Tape Drive Specifications

Form factor	3U
Physical capacity	18 TB native capacity/up to 45 TB compressed capacity (LTO Ultrium 9) 12 TB native capacity/up to 30 TB compressed capacity (LTO Ultrium 8) 6 TB native capacity/up to 15 TB compressed capacity (LTO Ultrium 7)
Network interface	Ethernet
Power supply	1 standard power supply, optional 2nd redundant supply
Hot-swap components	Power supplies, tape drives
Systems management	Storage Management Initiative Specification (SMI-S) enabled
Operating systems supported	Selected IBM servers and other Linux® and Microsoft Windows open-system servers
Limited warranty	Three-year in-warranty coverage of select parts
Weight	Base module maximum 28 kg (61.5 lb) Expansion module maximum 22.6 kg (49.6 lb)
Dimensions (H x W x D)	133 mm (5.23 in.) x 480 mm (18.89 in.)* x 880 mm (34.6 in.)†

*Includes front covering of rack rails, allowing for magazine opening clearance.
†From the front of the bezel to the back of the fan on an inserted drive sled.

Conclusion

The IBM TS4300 Tape Library stands out as an excellent choice for small and midsize businesses where long-term data retention is common and increasingly stringent, and with data volumes growing massively. Tape storage offers a less costly long-term storage option than disk drives or flash drives. Its high-density, scalability, and easy-to-manage tape library makes IBM TS4300 Tape Library a secure option to keep data securely stored long-term, while helping reduce costs.

Why IBM?

With more than 60 years of experience in delivering tape-based storage technology, IBM Storage solutions deliver the scalability, security and ease-of-use that organizations need to manage the massive volumes of data that have become common today. TS4300 Tape Library delivers a highly scalable, modular option that can expand as data storage requirements grow, while helping to avoid the costs of additional data center space and related utilities required to manage other, more expensive storage options.

For more information

To learn more about IBM TS4300 Tape Library, please contact your IBM representative or IBM Business Partner, or visit ibm.com/products/ts4300.

Additionally, IBM Global Financing provides numerous payment options to help you acquire the technology you need to grow your business. We provide full lifecycle management of IT products and services, from acquisition to disposition. For more information, visit ibm.com/financing.

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