IBM TS4300 Tape Library

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

Highlights

- Scale tape storage capacity as needed, with one 3U base module and up to six expansion modules, all in the same rack

- Help meet compliance requirements with secure, long-term data storage

- Deploy a storage solution that offers ease of installation and management

- Rapidly remediate data storage issues with error recovery and reporting, library health monitoring and auto-recovery

- Help reduce the costs of data center space for storage and related utilities 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. Tape storage offers a less costly long-term storage option than disk drives or flash. And data stored on tape kept offline, or on write-once media, is nearly invulnerable 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.

Its 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 more than 270 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.

Also, 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.

Start with a base library

The TS4300 base library contains all of 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.

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Quickly locate stored data

TS4300 leverages IBM Spectrum Archive™ 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.

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.

Management software options

IBM Spectrum Archive	• Enables users of LTO 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 Spectrum 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

IBM TS4300 Tape Library configurations

	Minimum configuration - Base module	Maximum configuration - TS4300 base module with 6 expansion modules
LTO Ultrium cartridge capacity	32	272
Reduction in cartridges for I/O slots	0 or 4	0 - 34
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
Total physical capacity	384 TB	3.264 PB
Logical libraries	Up to the number of drives	Up to the number of drives

TS4300 Tape Library at a glance

Form factor	3U
Physical capacity	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) 2.5 TB native capacity/up to 6.25 TB compressed capacity (LTO Ultrium 6)
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)	114 mm (4.48 in.) x 446 mm (17.56 in.) x 873 mm (34.37 in.)

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**/us-en/marketplace/ts4300

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