IBM TS4300 Tape Library

Supports secure, long-term data storage

Scalable Tape Library

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 16 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 7-module configuration, the TS4300 offers a capacity of up to 280 LTO cartridges. In a 16-module configuration, the TS4300 offers a capacity of up to 640 LTO cartridges. A wizard for installation and configuration enables users to install, expand and service the library without special training.

Get Automatic Control

Help meet security and compliance requirements and 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

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. 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

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 9, 8, and 7 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

TS4300 Tape Library configurations

	Minimum – TS4300 base module only (3U)	Intermediate - TS4300 base module with 6 expansion modules (21U)	Maximum – TS4300 base module with 15 expansion modules (48U)
LTO Ultrium cartridge capacity	40	280	640
Cartridges for I/O slots	Per module: 5	Per 7-module library: 35	Per 16-module library: 80
Tape drives	1 FH LTO, 3 HH LTO, or 1 FH and 1 HH LTO	7 FH LTO or 21 HH LTO HH/FH tape drive mix 19/1 up to 7/7	16 FH LTO or 48 HH LTO HH/FH tape drive mix 46/1 up to 16/16
Maximum capacity	LTO9: Up to 720TB LTO8: Up to 480TB LTO7 (M8): Up to 360TB LTO7: Up to 240TB	LTO9: Up to 5.04PB LTO8: Up to 3.36PB LTO7 (M8): Up to 2.52PB LTO7: Up to 1.68PB	LTO9: Up to 11.52PB LTO8: Up to 7.68PB LTO7 (M8): Up to 5.76PB LTO7: Up to 3.84PB
Logical libraries	1	21	21

Specifications - TS4300 Tape Library

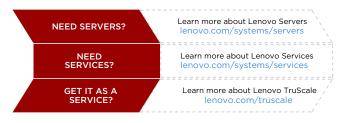|	
Form Factor	Base module: 3U rack-mount or stand-alone
Cartridge capacity	• 18TB native capacity/up to 45TB compressed capacity (LTO9) • 12TB native capacity/up to 30TB compressed capacity (LTO8) • 9TB LTO7 initialized LTO8 Type M (M8) • 6TB native capacity/up to 15TB compressed capacity (LTO7)
Network 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	Microsoft Windows Server, Red Hat Enterprise Linux (RHEL), SUSE Linux Enterprise Server (SLES)
Limited warranty	3-year customer-replaceable unit (CRU) limited warranty with 9x5 next business day parts delivered
Weight	Base module maximum 28kg (61.5 lb.) Expansion module maximum 22.6kg (49.6 lb.)
Dimensions (H x W x D)	114mm (4.48 in.) x 446mm (17.56 in.) x 873mm (34.37 in.)

About Lenovo

Lenovo (HKSE: 992) (ADR: LNVGY) is a US$62 billion revenue global technology powerhouse, ranked #171 in the Fortune Global 500, employing 77,000 people around the world, and serving millions of customers every day in 180 markets. Focused on a bold vision to deliver smarter technology for all, Lenovo is expanding into new growth areas of infrastructure, mobile, solutions and services. This transformation is building a more inclusive, trustworthy, and sustainable digital society for everyone, everywhere.

For More Information

To learn more about the IBM TS4300 Tape Library, contact your Lenovo representative or Business Partner, or visit: lenovo.com/storage.

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