# IBM

## Highlights

- Provides a modular, scalable tape library designed to grow with your needs
- Features desktop, desk-side and rack-mount configurations
- Delivers optimal data storage efficiency with high cartridge density, using standard or write-once-read-many (WORM) Linear Tape-Open (LTO) Ultrium data cartridges
- Can simplify user access to data stored on LTO Ultrium 7, 6 and 5 cartridges through the use of IBM® Spectrum Archive™ featuring IBM Linear Tape File System™ technology

# **IBM TS3310 Tape Library**

Supporting business continuity and long-term data retention

The IBM TS3310 Tape Library is a modular, scalable tape library designed to address the tape storage needs of rapidly growing companies that find themselves space- and resource-constrained with tape backup and other tape applications.

Built around a 5U-high modular base library unit, the TS3310 can scale vertically with expansion for LTO Ultrium cartridges, drives and redundant power supplies.

The base library module, model L5B, is the entry point for the product family. It contains all of the necessary robotics and intelligence to manage the 5U-high library system, which houses up to 41 cartridges—35 storage slots and six input/output (I/O) slots—and two LTO Ultrium 7, 6, or 5 tape drives.

The TS3310 model L5B can be expanded with the addition of model E9U expansion units.

Each model E9U contains 92 physical LTO Ultrium cartridge storage cells and space for up to four LTO Ultrium 7, 6, and 5 tape drives. Additionally, the E9U has space for up to two power supply modules, one of which is redundant. At least one power supply module must be installed if a drive is present in the E9U.

The TS3310 supports either standard or WORM LTO Ultrium data cartridges and has continued support for encryption of data with LTO Ultrium 7, 6 and 5 tape drives. IBM Security Key Lifecycle Manager is required for encryption key management.



#### IBM Systems Data Sheet



For organizations unsure of their short- or long-term tape capacity needs, the TS3310 Tape Library capacity-on-demand (CoD) capability allows the system to scale as needs grow. In the initially shipped configuration, an E9U has half of its storage cells enabled. The purchase of a CoD key enables the business to scale with the second half of the model E9U storage cells.

Building on the success of the patented IBM multipath architecture, the TS3310 can be divided into one logical library per installed tape drive. These logical libraries can be simultaneously connected to a wide variety of different servers, running different operating systems and tape applications.

IBM offers diverse management software solutions for the TS3310 Tape Library to enhance the use of multipath architecture, as well as the use of a single TS3310 Tape Library. In addition, a key path diagnostic function is also available to assist administrative users in the setup, configuration or troubleshooting of encryption-enabled libraries.

Management software options		
IBM Spectrum Archive	Enables users of LTO Ultrium 7, 6 and 5 tape library systems to inventory cartridges in the library and read, write and search data on any cartridge     Enables writing metadata or "tagging" of individual files for easy and fast access to any file stored on any cartridge in the library	
IBM Spectrum Control	Enables users to create, manage and optimize archives     Provides management of concurrent copies of content, plus active, inactive and offsite content	
Security Key Lifecycle Manager	<ul> <li>Enhances data security while dramatically reducing the number of encryption keys to be managed</li> <li>Simplifies encryption key management with an intuitive user interface for configuration and management</li> <li>Helps minimize the risk of loss or breach of sensitive information</li> </ul>	
Advanced reporting	<ul> <li>Provides graphical displays for diagnostic and trend analysis data to help evaluate tape drive and media performance and drive utilization parameters</li> <li>Enables the Drive Resource Utilization Reporting and Media Integrity Analysis Reporting functions</li> <li>Drive Resource Utilization Report can identify drives or groups of drives that are nearing 100 percent utilization</li> <li>Media Integrity Report can measure and evaluate media and drive performance in the library</li> </ul>	

TS3310 Tape Library configurations			
	3576 model L5B	3576 model L5B and four E9U models	
Configuration	Base library	Base library and 4 expansion units	
Maximum LTO Ultrium storage slots	41	409	
Maximum LTO Ultrium I/O slots	6	54	
Maximum tape drives	2	18	
Total physical capacity	Up to 246 TB (615 TB with 2.5:1 compression)	Up to 2.45 PB (6.13 PB with 2.5:1 compression)	
Capacity-on-demand increments	N/A	46 cartridges	
Maximum logical libraries	2	18	

TS3310 Tape Library at a glance		
Form factor/height (H x W x D)	L5B: 219.7 mm (8.65 in.) × 443.2 mm (17.45 in.) × 801.4 mm (31.55 in.) L5B + E9U: 620.8 mm (24.4 in.) × 443.2 mm (17.45 in.) × 801.4 mm (31.55 in.)	
Tape drive interface options	8 Gbps dual-port Fibre Channel (LTO Ultrium 7, 6 and 5)	
Network interface	Ethernet	
Power supply	L5B: 1 standard (2 maximum) L5B + E9U: 2 standard (4 maximum); L5B + E9U + E9U: 3 standard (6 maximum); L5B + 3 E9U: 4 standard (8 maximum); L5B + 4 E9U: 5 standard (10 maximum)	
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.  Latest support information: ibm.com/systems/support/storage/config/ssic	
Limited warranty	One year, 9 to 5, next business day	
Weight	L5B: 38.6 kg (85 lb) maximum L5B + E9U: 88.5 kg (195 lb) maximum	

### Why IBM?

The performance and availability of your storage environment can either enhance or hamper your business processes. That's where IBM comes in. As a market leader in the storage industry, we can help you handle the challenges that your network or company as a whole encounters.

Innovative technology, open standards, excellent performance and a broad portfolio of storage-proven software, hardware and solution offerings—all backed by IBM with its recognized leadership—are just a few of the reasons why you should consider IBM storage offerings.

#### For more information

To learn more about the IBM TS3310 Tape Library, please contact your IBM representative or IBM Business Partner, or visit: ibm.com/systems/storage/tape/ts3310/

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Actual available storage capacity may be reported for both uncompressed and compressed data and will vary and may be less than stated.



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