# STORAGETEK SL150 MODULAR TAPE LIBRARY

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Oracle's StorageTek SL150 modular tape library is the first scalable tape library designed for growing businesses. Built from Oracle software and StorageTek library technology, it delivers an industry-leading combination of ease of use and scalability. Ideal for backup and archival applications, the StorageTek SL150 modular tape library saves both time and money, setting the new standard for entry tape automation.



#### SIMPLE AND SCALABLE DATA Storage

#### **KEY FEATURES**

- Remote management capability and an installation wizard ensure swift installation and ease of use
- Scalability from 30 to 450 cartridge slots enables capacity to reach 13 PB, compressed
- Expansion modules offer seamless performance and capacity upgradeability
- Easy consolidation of multiple libraries with up to eight (8) partitions
- Maximize security through library managed encryption with Oracle Key Manager

## Simplify Tape Management

The StorageTek SL150 emphasizes simplicity and reduces costs through exceptional scalability, common storage management tools and do-it-yourself installation and upgrades. The easy-to-use remote browser GUI, built from Oracle software, helps streamline library management and allows you to perform library operations, manage library settings, and proactively monitor the library's health. Maximize security by enabling library managed encryption, which works with Oracle Key Manager to encrypt tapes and securely manage keys. The platform-independent Oracle Key Manager complies with Federal Information Processing Standards Publications (FIPS PUBS) 140-2 and runs without regard to application, operating platform, or primary storage device.

With the StorageTek SL150, simplicity begins with the library installation and continues throughout the life of the product, even as you expand for data growth. The library can initialize in a few steps via the local touchscreen operator panel, and upgrades are easy because they require no tools, complicated cabling, or technical support.



Figure 1. StorageTek SL150 modular tape library touchscreen operator panel



#### **KEY BENEFITS**

- Reduce complexity—the tape library is customer installable and upgradable
- Reduce costs with low-cost scalability, reliability, and entry-level pricing
- Enable consolidation of small tape libraries into one scalable tape library



Figure 2. Oracle's StorageTek Tape Analytics software simplifies tape storage management because it takes a proactive approach to eliminate library, drive, and media errors.

For intelligent monitoring of StorageTek tape libraries, StorageTek Tape Analytics software provides tape storage customers with access to leading-edge tape monitoring software that goes far beyond exposing a red, yellow, or green indicator. Rather, StorageTek Tape Analytics software provides insights into hundreds of drive, media, and library health attributes that empower tape storage administrators to make proactive decisions about their tape environments prior to device failures. A proactive approach to managing the health of a tape environment improves the performance and reliability of existing tape investments and helps executives make informed decisions about future expenditures.

## Scale Effortlessly

The StorageTek SL150 modular tape library scales up to *15x*, from 30 to 450 slots, without consuming significant time and resources. In addition, it is the only library in the world that autodiscovers new modules via USB. In the entry to midrange market segment, the StorageTek SL150 modular tape library offers higher density and lower-cost scaling than comparable products. Higher density saves rack space and enables you to store more data in the library. The StorageTek SL150 modular tape library's base module provides up to 360 TB (with StorageTek LTO 8 half-height tape drives) and each expansion module adds an additional 360 TB of capacity as your storage needs grow. With two additional tape drives per expansion module, the StorageTek SL150 also allows for increased performance as storage needs grow. The StorageTek SL150 supports a heterogeneous drive environment, so you can seamlessly use the drive types and generations that make sense for your access and storage needs – add new LTO generations or drive types as you scale your library. Choose the drive supplier, generation and interface to support your growing business. The StorageTek SL150 currently supports LTO 5, 6, 7 or 8 tape drives.

## Count Your Savings

The market-leading scalability of the StorageTek SL150 modular tape library offers an important cost-saving advantage. Competitive systems require you to transition among three separate and

distinct products in order to grow from an entry to a midrange library. Oracle launched the first library that can address the full breadth of scale from 30 to 450 slots with a single product.

As a result, the StorageTek SL150 negates the need to rip and replace smaller, individual products as your storage needs grow. In addition, single-product scalability saves media, drives, servicing, power, cooling, and other management costs. Scalability also allows you to do more with less by consolidating multiple libraries into a single product that is far less expensive than replacing libraries over time. For those who want to consolidate multiple libraries or manage distinct sections of the library, the StorageTek SL150 supports one to eight partitions. Native physical partitioning requires no extra hardware or software and provides great flexibility for users.

For more than 40 years, customers have trusted StorageTek reliability and quality. Oracle's StorageTek SL150 leverages technology and design from the award-winning StorageTek SL500 modular library system, and it provides StorageTek reliability at an entry-level price point. Furthermore, by working with an end-to-end solution provider like Oracle, you can reduce management and service costs.

## Maximize Availability

The StorageTek SL150 has a CRU serviceability model—meaning it is customer installable and has customer replaceable spares. However, if you do need installation or service assistance, the following offerings are available from Oracle:

- Oracle Premier Support provides the complete system support you need to proactively manage your Oracle storage systems. With swift resolution and rapid-response hardware service when problems do arise, you can keep your business information available 24/7.
- Oracle Advanced Customer Support provides mission-critical support from a focused support team, proactive guidance to tailor storage systems for optimal performance and increased competitiveness, and preventative monitoring to help you achieve high availability and optimized system performance.

For more information about Oracle Premier Support and Oracle Advanced Customer Support, please speak with your Oracle representative or Oracle authorized partner, or visit http://www.oracle.com/support or http://www.oracle.com/acs.

## StorageTek SL150 Modular Tape Library Specifications

|  | StorageTek SL150<br>Modular Tape Library<br>(Base Module Only –<br>30 slots)   | StorageTek SL150<br>Modular Tape Library<br>(Medium Configuration –<br>60 slots) | StorageTek SL150<br>Modular Tape Library<br>(Large Configuration –<br>120 slots) |
|--|--|--|--|
| Performance <sup>1</sup>                         |  |  |  |
| Throughput per hour,<br>native<br>(uncompressed) | LTO 8 (2 drives, 300<br>MB/sec) — 2.1 TB/hr  | LTO 8 (4 drives, 300<br>MB/sec) — 4.1 TB/hr                                      | LTO 8 (8 drives, 300<br>MB/sec) — 8.2 TB/hr                                      |
|  | LTO 7 (2 drives, 300<br>MB/sec) — 2.1 TB/hr  | LTO 7 (4 drives, 300<br>MB/sec) — 4.1 TB/hr                                      | LTO 7 (8 drives, 300<br>MB/sec) — 8.2 TB/hr                                      |
| Capacity <sup>2</sup>                            |  |  |  |
| Capacity, native<br>(uncompressed)               | LTO 8 (12 TB/cartridge) —<br>360 TB (30 cartridges)  | LTO 8 (12 TB/cartridge) —<br>720 TB (60 cartridges)                              | LTO 8 (12 TB/cartridge) —<br>1,440 TB (120 cartridges)                           |
|  | LTO 7 (6 TB/cartridge) —<br>180 TB (30 cartridges)   | LTO 7 (6 TB/cartridge) —<br>360 TB (60 cartridges)                               | LTO 7 (6 TB/cartridge) —<br>720 TB (120 cartridges)                              |
| Number of cartridge slots                        | <ul> <li>30–450 cartridge slots</li> <li>Base module: 30 slots</li> <li>Up to 14 expansion modules: 30 slots each module</li> </ul>  |  |  |
| Number of expansion modules                      | N/A  | 1 expansion module   | 3 expansion modules  |
| Number of tape<br>drives/types/suppliers         | <ul> <li>1 to 30 half-height drives (each module holds up to 2 drives) in any combination of supported drives, including:</li> <li>StorageTek LTO 5, 6, 7, or 8 half-height tape drives (FC or SAS)</li> </ul> |  |  |
| Mail slot  | Base module: 4-cartridge capacity<br>Optional expanded mail slot configuration: 19-cartridge capacity  |  |  |
| Availability                                     | •  |  |  |
| Non-disruptive serviceability                    | Hot-swappable drives; redundant hot-swappable power supplies with redundant fans   |  |  |
| Mean swaps between<br>failures (MSBF)            | 2 million robot load/unload cycles   |  |  |
| Management                                       |  |  |  |
| Operator panel                                   | User-friendly configuration and diagnostic controls, status display, and viewing window  |  |  |
| Library management                               | Remote browser (10/100 Ethernet) or support for Oracle's StorageTek Automated Cartridge<br>System Library Software (StorageTek ACSLS) management software  |  |  |
| Encryption                                       | Library managed encryption works with Oracle Key Manager and IBM LTO7 and LTO8 tape drives   |  |  |
| Auto cleaning support                            | Configurable auto cleaning support, with no host application or operator action required to clean tape drives  |  |  |
| Automatic self-<br>discovery via USB             | Self-configuring for cells, drives, and cartridge access ports; hot-swappable drives; redundant hot-swappable power supplies with redundant fans   |  |  |

| Mechanical   |   |  |  |
|--|---|--|--|
|  | Base Module (Minimum Configuration)   | Expansion Module (Each Module, Modules 2–<br>14) |  |
| Height   | 5.15 in. (130.8 mm), 3U rack space  | 3.5 in. (88.9 mm), 2U rack space                 |  |
| Depth  | 36.42 in. (925 mm)  | 36.42 in. (925 mm)                               |  |
| Width  | 18.94 in. (481 mm)  | 18.94 in. (481 mm)                               |  |
| Weight   | 47 lb. (21.5 kg)*   | 23.1 lb. (10.5 kg)**                             |  |
| Environmental                                      | •   |  |  |
| Temperature  | <ul> <li>Operating: +50°F to +104°F (+10°C to +40°C), 20%–80% relative humidity, noncondensing</li> <li>Nonoperating: -40°F to +140°F (-40°C to +60°C), 10%–95% relative humidity, noncondensing</li> </ul> |  |  |
| Power  |   |  |  |
| Voltage  | 100 VAC–240 VAC at<br>50 Hz–60 Hz single phase (auto-ranging)   |  |  |
| Library (operating<br>max. continuous—not<br>peak) | 1.42 A at 120 V or 0.75 A at 240 V, 614 BTU/hr  |  |  |
| Drives   | Drive power consumption varies (refer to individual drive specifications)   |  |  |
| Regulatory Complianc                               | e   |  |  |
| Electromagnetic compatibility                      | FCC (47CFR15 Subpart B) Class A; EN55022 Class A; EN55024; EN61000-3-2; EN61000-<br>3-3; ICES-003 Class A; AS/NZS CISPR22 Class A; VCCI V-3 Class A; KN22 Class A;<br>KN24; CNS13438 Class A                |  |  |
| Safety   | UL 60950-1, CAN/CSA 22.2 No. 60950-1-07, EN 60950-1, IEC 60950-1, 60825-1, Class 1<br>Laser Product   |  |  |

<sup>1</sup> Maximum performance, native: LTO 6–17.25 TB/hr, LTO7– 32.4 TB/hr, LTO8 – 37.1 TB/hr (30 drives)

<sup>2</sup> Maximum capacity, native: LTO 6-1.1 PB, LTO7 - 2.7 PB, LTO8 - 5.4 PB (450 cartridges)

\*Weight includes library with one drive installed and one power supply

\*\*Weight is expansion only, no drives or power supplies



CONTACT US

For more information about Oracle's StorageTek SL150 modular tape library, visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.

#### Hardware and Software, Engineered to Work Together

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