

HPE TFinity ExaScale Edition Tape Library



Are your data storage requirements outstripping your backup, disaster recovery and archive requirements? Proven by the largest data users in the world, the HPE TFinity® ExaScale Edition Tape Library delivers simplified management and scalability to create the ultimate solution for data preservation. With unsurpassed storage density packaged in the smallest footprint of any enterprise library on the market, the HPE TFinity ExaScale Edition Tape Library offers industry leading scalability with the speeds necessary to meet requirements of the most demanding environments.

Once data expands beyond the limits of the initial configuration, you have the ability to scale from 45 to 40,680 TS11x0 Technology slots, to store over 1 EB of compressed enterprise data. Alternatively, using LTO Technology you can scale from 50 to 53,460 LTO slots, to store over 801 PB of compressed enterprise data.

With up to 144 drives, you can transfer data at a rate of up to 186.6 TB/hr. (362.9 TB/hr. compressed) using TS11x0 Technology or 155.5 TB/hr. (388.8 TB/hr. compressed) using LTO-7 tape technology.

The HPE TFinity ExaScale Edition Tape Library provides maximum flexibility by supporting either LTO tape technology, TS11x0 Enterprise Tape Technology or Oracle T10000X¹ drives and media—enabling you to select the tape technology that is the perfect for your business.

Key features and benefits

High performance

- The HPE TFinity ExaScale Edition library is built with the highest performance achievable in automated tape technology. From robotics, to drives, to software, to media, all performance innovations are included in these libraries.
- The transporter has been designed with goals of performance and reliability. These are accomplished by reduced cycle time or tape mount time (better performance) and increased mean time between failures (better reliability).
- The HPE TFinity ExaScale Edition has the ability to support three different types of tape media, to provide superior flexibility and release organizations from vendor lock-in.

High capacity

- When data center real-estate counts, HPE TFinity ExaScale Edition offers unsurpassed storage density and the smallest footprint through a unique and highly efficient library design, providing more storage capacity in less floor space.
- Using innovative “shelves” instead of slots, and TeraPack® containers in place of individual cartridges; HPE TFinity ExaScale Edition’s industry-best density delivers up to a 50% reduction in data center floor space required versus competing offerings.
- The highly compact library design is also built to fit into a standard rack-row layout, fitting co-located and standardized data center designs that do not easily accommodate non-standard equipment. These significant space-saving benefits allow you to use floor space for operations other than storage.
- Only buy what you need today and add storage capacity as you need it. Upgrade capacity in intervals of 10 LTO or 9 Enterprise tape slots at a time. Tape consolidation is made easy through capacity performance, partitioning and reporting, resulting in a lower total cost of ownership.

¹ Oracle T10000x support is enabled via a field migration service (delivered by Spectra Logic). Please contact your HPE sales representative for more information.

Unique flexibility

- HPE TFinity ExaScale Edition Tape Libraries are capable of operating three types of tape technology—LTO tape technology, IBM TS11x0 tape technology and via a field migration service, Oracle T10000x drives and media. Paired with extensive software and hardware partners, organizations can develop customized workflows for every situation.

High reliability

- The HPE TFinity ExaScale Edition Tape Library includes a redundant dual robotic infrastructure that not only provides for a failover solution, but also twice the working ability. All of the parts and pieces have been carefully crafted and integrated for maximum reliability.
- HPE TFinity ExaScale Edition offers a sophisticated suite of standard features allowing you to actively check data already written to tape. Data integrity verification (DIV) examines media health before and after data writes, when enabled. Integrated BlueScale® Encryption provides automatic data protection.
- PreScan checks each imported tape and verifies that the tape can be safely written to. QuickScan scans a tape uni-directionally to provide a rapid indicator of integrity of data written. FullScan confirms that there are no media errors on the tape by reading the entire length of the tape.
- A high level of encryption security, with compression, for strong backup data privacy to secure confidential information and address compliance quickly. Supports WORM media (using LTO-7, LTO-6), providing a fail-safe method for permanently storing data records.

HPE Certified TeraPack Media

HPE Certified TeraPack Media is designed to ensure that customers have the most reliable and automated tape storage available. No other supplier places as much emphasis on continual enhancements and features that simplify all aspects of the media management process. From manufacturer selection to testing and customer shipment, every step of the certified media process is designed to ensure you have the most reliable and automated tape storage available.

1. **Quality:** Only the highest quality media available on the market becomes HPE Certified TeraPack Media. This ensures you have the most reliable and worry-free data protection possible.
2. **Clean:** The CarbideClean® process is a unique enhancement that extends the life of your tape drives and enhances the performance and capacity of your tapes. HPE Certified TeraPack Media with CarbideClean ensures your media is debris-free, allowing your system to run at peak performance.
3. **Intelligence:** Media lifecycle management (MLM) reduces the most common media-related failures. MLM allows you to proactively manage your tape inventory through simple monitoring of over 40 health statistics and automatically identifies at-risk tapes ready for retirement.
4. **Verification:** Certified Media assures data integrity using an integrated, intelligent and comprehensive set of data integrity verification tools when integrated with your tape library. PreScan verifies your tapes are safe prior to usage and QuickScan and FullScan verify your data has been properly written to tape.
5. **Protect:** When combining HPE Certified TeraPack Media and our tape library families integrated BlueScale Encryption Key Management, your data is protected with a straightforward, easily installed solution.
6. **Management:** Media arrives on customer's doorsteps, individual tapes unwrapped with pre-applied barcode labels bundled in TeraPack containers and ready for bulk-loading into your tape library.
7. **Warranty:** Lifetime Guarantee warrants our tapes to be free from defects in materials and workmanship for the life of the media. We'll exchange any defective tape free of charge.

HPE TFinity ExaScale Edition technical specifications

Drive type	LTO-6 Ultrium 6650 LTO-7 Ultrium 15000 TS1150 144 drives supported (maximum)
Number of cartridge slots	53,460 Maximum supported LTO Ultrium 40,680 Maximum supported TS1150 Tape Technology
Capacity	801 PB (compressed 2.5:1) Maximum LTO-7 1 EB (compressed 2.5:1) Maximum TS1150
Transfer rate	388.8 TB/hr Maximum LTO-7 362.9 TB/hr Maximum TS11x0
Host interface	8 Gb Fibre Channel Depending on drive type
Encryption capability	Hardware-based Encryption through HPE ESKM (LTO only)
Form factor	29-in 42U free-standing frame (maximum of 44)
Dual robotics	Standard

HPE TFinity ExaScale Edition LTO configuration specifications

	HPE TFinity ExaScale Edition 3 Drive Bay assembly Maximum 12 LTO Drives, 920 Slots	HPE TFinity ExaScale Edition 6 Drive Bay assembly Maximum 24 LTO Drives, 800 Slots
Model differentiator	Main Frame with 3 Drive Bay Assembly. Maximum 12 LTO Drives, 920 Slots in base frame. Minimum configuration includes Base Frame and 2 service frames, total 1920 Slots.	Main Frame with 6 Drive Bay Assembly. Maximum 24 LTO Drives, 800 Slots in base frame. Minimum configuration includes Base Frame and 2 service frames, total 1800 Slots.
Drive type	0 included 4 maximum drives per DBA	0 included 4 maximum drives per DBA
Number of cartridge slots	1920 Maximum (including 2 Service Bays)	1800 Maximum (including 2 Service Bays)
Capacity	28.88 PB (compressed 2.5:1) Maximum with LTO-7 Drives	27 PB (compressed 2.5:1) Maximum with LTO-7 Drives
Transfer rate	32.4 TB/hr Maximum with LTO-7 Drives	64.8 TB/hr Maximum with LTO-7 Drives
Host interface	8 Gb Fibre Channel	8 Gb Fibre Channel
Encryption capability	Hardware-based Encryption through HPE ESKM	Hardware-based Encryption through HPE ESKM

HPE TFinity ExaScale Edition TS Technology configuration specifications

	HPE TFinity ExaScale Edition 6 Drive Bay assembly Maximum 24 TS Technology Drives, 594 Slots
Model differentiator	Main Frame with 6 Drive Bay Assembly, Maximum 24 TS11x0 Technology Drives, 594 slots in base frame. Minimum configuration includes Base Frame and 2 service frames, total 1350 slots.
Drive type	0 Included 4 maximum drives per DBA
Number of cartridge slots	1350 Maximum (including 2 Service Bays)
Capacity	33.75 PB (compressed 2.5:1) Maximum with TS Technology
Transfer rate	60.4 TB/hr Maximum with TS11x0 Technology Drives
Host interface	8 Gb Fibre Channel

Additional resources

QuickSpecs:

hpe.com/h20195/v2/GetDocument.aspx?docname=c05269708

Warranty, service and support

Warranty

The HPE TFinity ExaScale Edition has a standard warranty that extends one year from the date of shipment from the factory. This warranty includes a Next Business Day service contract. Additional years of warranty service can be purchased.

Service and support

HPE offers a wide range of support options and professional services options. Support options include ongoing telephone and web support, an assisted self-maintenance (ASM) option that stores customer-replaceable spare parts onsite, a global spare drive option, and built-in “phone home” support through the library’s AutoSupport feature. Professional Services further extends options through site visits and preventive maintenance options. Customers automatically receive complete installation and integration services. For more information about services and support please visit: support.spectralogic.com/

Learn more at
hpe.com/storage/tfinity



Sign up for updates
