# QuickSpecs

#### Overview

# **HPE Storage LTO Ultrium Cartridges**

Traditional applications and new workloads powered by Artificial Intelligence and Machine Learning (AI & ML) are creating astonishing amounts of information that organisations are either reluctant to erase or prevented from so doing by compliance requirements. A recent study estimates that by 2030, organisations will need to manage 35 zettabytes of installed storage capacity, the overwhelming majority of which will be cold or frozen data (source: Further Research, 2023). This represents a sixfold increase over the volume of data being managed in 2023.

HPE believes the value of tape can be summarised through four key pillars: scalability, security, savings and sustainability.

- **Scalability** Against the background of relentless data growth detailed by analysts, the 14 generation LTO roadmap is projecting tape media capacities will scale to 1.4 PB per cartridge over the coming decade, which makes HPE Storage tape technology the ideal, ultra-dense, cold data storage platform of the future.
- Security The most compelling reason for the continued strategic value of HPE StoreEver tape is the rising threat of ransomware. A recent study revealed that the most significant factor in compromised backups was "insufficient air gap" (39%), followed by "backups were not encrypted" (28%), and "backups were not immutable" (22%) (source: IDC, 2025). For companies concerned about building stronger cybersecurity defences, HPE LTO tape technology allows them to follow the best practice advice of government agencies, such as the US FBI, UK National Cyber Security Centre, German Bundesamt für Sicherheit in der Informations technik, to keep backup and archive data offline. Tape is the only storage technology that is offline by design, enabling businesses to keep copies of their data behind a physical air gap that ransomware cannot breach.
- Savings Although utilising the cloud for some of this cold and frozen data will certainly be an option, with global data creation and replication expected to experience a compound annual growth rate of between 30-40% out to 2030 (source: Further Research, 2023), the cost of retrieving even a fraction of that data regularly from a cloud provider could be prohibitive. Recognizing the inevitability of data recall and retrieval from deep archives, LTO tape technology has a measurable Return on Investment of up to 1856% when compared to cloud storage (source: Solutions North, 2023). And now that LTO technology supports S3 access via RESTful APIs, tape can be directly integrated with on-prem and off-prem storage environments to expand the data available to any capacity intensive workload.
- **Sustainability** HPE Storage Tape offers ultra low carbon footprint per terabyte of data stored, per day, which gives organizations a powerful reason for including it in future data centre architectures. Tape, once out of the system, consumes no power to store the data. This is important not just to IT groups, but also to the whole organisation as sustainability goals are increasingly being written into corporate and executive objectives.

Backed by an uncompromising media qualification process, HPE Storage LTO Ultrium data cartridges support all HPE Storage and non-HPE Storage LTO Ultrium tape devices. The latest tenth generation products minimize interruption to network and SAN backup by being capable of protecting 1.44 TB /hour (full height drives only) of data at native speeds and storing up to 30 TB native (75 TB assuming 2.5:1 compression) on one piece of media (1100% greater capacity than HPE Storage LTO-6 Ultrium tapes).

# Overview



**HPE Storage LTO Ultrium Cartridges** 

### **Key Features & Benefits**

- Up to 75 TB compressed capacity on LTO tape drives and libraries.
- Supports transfer speeds of up to 300 MB/s (native, half height), 400 MB/s (native, full height), 700 MB/s (assuming 2.5:1 compression, half height), 1,000 MB/s (assuming 2.5:1 compression, full height) with LTO-9 and LTO-10.
- Tested to extremes to a performance level specific to HPE. Many of the test procedures required for successful HPE Storage LTO Media Brand qualification (e.g. Green Tape Test, load/unload, shoeshine, drop testing and environmental stress testing) are not required for the Ultrium logo.
- Both Rewritable and WORM formats available.
- Unique HPE Storage LTO Ultrium colored cartridges to assist with identification in mixed media environments. Very low cost per GB compared to alternative storage technologies that could be used for long term archival and retention. Recognizing the inevitability of data recall and retrieval from deep archives and applying the values in to the LTO TCO tool, LTO-9 tape has a measurable Return on Investment of up to 1856% when compared to cloud storage, and 501% compared to HDD.

Notes: <sup>1</sup> Data Economics: LTO-9 Technology Optimizing Data Value (Solutions North, 2023)

- LTO cartridge memory in media to improve access time and provide enhanced media monitoring.
- Durable cartridge designed to minimize wear and debris (important in automation).
- HPE Storage LTO-5 through LTO-10 media supports native tape device data encryption for enhanced data security granted FIPS140-2 Level 1 certification
- HPE offers Custom Labeled and Non-Custom Labeled Tri Optic data cartridges. All labeled solutions are shipped in 20 packs.
  - HPE Storage **Custom** Labeled LTO media offerings allow automation customers to customize cartridges with a
    unique bar code sequence. Custom labels are pre-attached to the tapes before shipment. Available worldwide with a
    leadtime of up to 15 working days. Please note Europe requires a Minimum Order Quantity of 5 units or 100 total
    data cartridges (1 SKU unit 20 cartridges).
  - HPE Storage Non-Custom Labeled LTO tapes allow automation customers to receive labeled media without the lead times associated with a custom labeled solution. Barcode sequences are pre-determined by Hewlett Packard Enterprise and are guaranteed to be unique.

Read/Write Compatibility						
	LTO-6 Drive	LTO-7 Drive	LTO-8 Drive	LTO-9 Drive	LTO-10 Drive	
LTO-5 Media	Read/Write	Read Only	Not Compatible	Not Compatible	Not Compatible	
LTO-6 Media	Read/Write	Read/Write	Not Compatible	Not Compatible	Not Compatible	
LTO-7 Media	Not Compatible	Read/Write	Read/Write	Not Compatible	Not Compatible	
LTO-7 Type M	Not Compatible	Not Compatible	Read/Write	Not Compatible	Not Compatible	
LTO-8 Media	Not Compatible	Not Compatible	Read/Write	Read/Write	Not Compatible	
LTO-9 Media	Not Compatible	Not Compatible	Not Compatible	Read/Write	Not Compatible	
LTO-10 Media	Not Compatible	Not Compatible	Not Compatible	Not Compatible	Read/Write	

## Why Buy LTO Tape Technology?

The decision about which tape technology you should buy next should be based on your future, not your past, investment. Choose the LTO Ultrium format when you need the following advantages:

- Maximum offline security to guard against the threat of ransomware
- Almost limitless, scalable storage capacity
- Ultra low cost of ownership for long term data protection, backup and archiving
- High reliability and performance
- Lower CO<sub>2</sub> emissions associated with storing archive data for long time frames, potentially spanning decades
- Compatibility with a broad range of operating systems and servers (e.g., a mixed system environment)
- A solid 14 generation roadmap for future generations of the technology
- An open format available from multiple vendors

### **Proven Reliability**

- Hewlett Packard Enterprise ensures the highest level of quality with a specification for HPE Storage LTO Ultrium media that goes beyond industry standard logo tests...
- Ultimately, the best possible microscope to test tape cartridges is a tape drive, or rather many tape drives, performing the same backup and restore tasks as end users. As a leader in LTO Ultrium hardware and storage supplies, HPE has comprehensive R&D and manufacturing programs to scrutinise the performance of tape backup solutions under every conceivable kind of stress.
- HPE Storage LTO Ultrium Media Brand Qualification also includes procedures like drop testing, creep append, load/unload, environmental stress tests and archival simulation that are not required to gain the LTO Ultrium logo
- Designed for the demanding environment of large-scale libraries, HPE LTO Ultrium media has a 30-year archival storage life when stored in recommended conditions (see below).

### **HPE Storage LTO-10 Ultrium Format**

The latest HPE Storage LTO-10 Ultrium data cartridges offer 30 TB native, 75 TB compressed capacity (assuming 2.5:1 compression). The media has an areal density of 545 kb/inch and contains 15,104 tracks. HPE Storage LTO-10 media is 1035m long and 5.2 microns thick. Data is recorded simultaneously to 32 channels and data is written in a serpentine pattern; the tape reverses direction after each set of thirty-two tracks is written, which means it takes 472 wraps to complete a full backup. LTO Ultrium formats are open standards. This means that data written on any certified LTO Ultrium tape drive can be interchanged directly with Ultrium tape drives from different vendors.

### **Compatibility Testing**

HPE Storage LTO Ultrium data cartridges are fully supported and compatible with all certified LTO Ultrium tape products. Because HPE Storage LTO Ultrium media is LTO Ultrium logo compliant, it may be used with any non- HPE tape device that bears the LTO Ultrium logo.

### **Related Hardware Options**

#### **HPE Storage LTO Ultrium Tape Drives**

Based on the LTO Ultrium format, an open standard with a well-defined fourteen-generation roadmap, HPE Storage LTO Ultrium tape solutions offer customers the best choice for investment protection. With ultimate reliability and ease of use in mind, even at 100% duty cycles, HPE's rugged design builds on superior LTO technology and adds advanced features like hardware data encryption to create a new level of data protection. HPE tape drives employ dynamic data rate matching to adjust to the speed of the host, reducing wear and tear on both drive and media and increasing performance, even on slower hosts. The family of tape drives also features support for HPE Library and Tape Tools which provides HPE TapeAssure health monitoring, diagnostics, and performance optimization.

#### HPE Storage MSL 1/8 Tape Autoloader G3

Small organisations are beginning to encounter some of the storage management challenges that were formerly the preserve of much bigger organisations. They have considerable amounts of data to manage and the ongoing cost of preserving all of it in the public cloud could become prohibitive for many. At the same time, however, small companies typically have fewer IT resources and are averse to deploying complex on-prem solutions that can be difficult to manage. They are also regarded as easier targets for cybercriminals precisely because of this skills gap. The **HPE Storage MSL 1/8 Tape Autoloader G3** is an ideal "starter" tape solution to address all of these challenges. It's inexpensive; it can hold up to 360 TB of compressed data using LTO-9; it stores data offline behind air gap; and it runs in the background with minimal intervention needed. In the event that organisations need to migrate to larger tape libraries, both the drive and the media can be reused in the new device without extra charges or licence fees.

### **HPE Storage MSL2024 Tape Library**

Traditional SMEs are beginning to encounter data storage challenges that were formerly the preserve of the Enterprise. While SMEs may remain similarly-sized in terms of headcount or physical premises to their forbears, the amount of data they are capturing and processing is growing rapidly. This means that strategic questions of storage capacity, data accessibility, data security and archiving are becoming more pressing. In recent years, there has been a tendency for SME's to migrate all their data to the public Cloud due to concerns about cost and a lack of IT resources. But storing large amounts of data indefinitely in the Cloud can quickly become expensive for SME OPEX, while concerns about cybersecurity and compliance persist. Easy to set up, easy to use, the **HPE Storage MSL2024 Tape Library**, with a maximum capacity of 1 PB native using LTO-9, offers 'set and forget' flexibility and functionality and can help SME's affordably address their data storage challenges wjhile complementing their cloud storage investment.

### HPE Storage MSL3040 Tape Library

The enormous, data-driven potential of emerging technologies like Al, ML and IoT is creating a plethora of opportunities for businesses to transform their operations. The challenge is that though these opportunities abound, they are truly diverse and may require very different storage optimisations. And any business that is trying to manage typical data growth rates of around 40-50% per year has a number of considerations when developing its strategic approach to data storage. ROI is important as the world navigates the post-Covid recovery period: IT budgets must deliver value. The enhanced **HPE Storage MSL3040 Tape Library** (which can also be deployed on a pay-per-use, OPEX basis via HPE Storage GreenLake for Tape Libraries) offers enormous density in a cyber-resilient, scalable and flexible form factor. With the MSL3040, you can start small but scale massively, with a much lower TCO than other longer term archival storage alternatives.

# HPE Storage MSL6480 Tape Library

The enormous, data-driven potential of emerging technologies like AI, ML and IoT is creating a plethora of opportunities for businesses to transform their operations. The challenge is that though these opportunities abound, they are truly diverse and may require very different storage optimisations. And any business that is trying to manage typical data growth rates of around 40-50% per year has a number of considerations when developing its strategic approach to data storage. The **HPE Storage MSL6480 Tape Library** (which can also be deployed on a pay-per-use, OPEX basis via HPE GreenLake Flex Solution built for Tape Libraries) offers huge density and highest modular performance in a cyber-resilient, scalable form factor. With the MSL6480, you can scale quickly and increase throughput, with a much lower TCO than other longer term archival storage alternatives.

### **HPE GreenLake Flex Solution built for Tape Libraries**

The enormous, data-driven potential of emerging technologies like AI, ML and IoT is creating a plethora of opportunities for businesses to transform their operations. The challenge is that though these opportunities abound, they are truly diverse and may require very different storage optimisations. And any business that is trying to manage typical data growth rates of around 40-50% per year has a number of considerations when developing its strategic approach to data storage. **HPE GreenLake Flex Solution built for Tape Libraries** delivers the full benefit of the HPE GreenLake 'as a service' model, featuring consumption-based pricing, where customers deploy the tape capacity that they need and pay only for what they use. It avoids the inefficiency of an over provisioned solutions, while still offering the traditional advantages of HPE Storage tape: enhanced defences against cyber threats, easy scalablity to PB's; low TCO for long term archiving; sustainable storage that reduces energy and cooling costs

#### **Spectra Enterprise Tape Libraries**

The **Spectra Cube Tape Library** combines field-proven reliability with storage innovation and gives you access to a full suite of enterprise storage capabilities in a compact footprint. It delivers powerful library management, superior and proactive data integrity administration, and the lowest total cost of ownership (TCO) for any tape solution in its class. The Spectra Cube Tape Library starts small and expands up to 1670 slots and 30 petabytes of native capacity with LTO-9 and grows capacity and performance seamlessly without disrupting operations.

Page 5

The **Spectra T950 Tape Library** combines field-proven reliability with storage innovation and gives you access to a full suite of enterprise storage capabilities. It delivers powerful library management, superior and proactive data integrity administration, and the outstanding total cost of ownership (TCO) for any tape solution. Storage can expand up to 120 drives and 10,020 Linear Tape-Open (LTO) slots (7,614 enterprise slots) in eight frames.

Meeting enterprise data growth challenges head-on, **Spectra TFinity ExaScale Tape Libraries** deliver enormous scalability to keep pace with unpredictable data growth. Choose from a range of base configurations and scale up to 56,400 LTO tape cartridges or 42,930 TS11xx Technology cartridges in increments of 10 LTO or 9 TS11xx Technology slots for capacity on demand. Incorporating between 1 and 144 LTO-9 tape drives or TS1170 tape drives you can consolidate and store up to 2.53 EB (compressed 2:1) using LTO-9 tape cartridges or 6.45 EB (compressed 3:1) using TS1170 Technology of enterprise data.

## **Warranty and Support**

Includes a limited lifetime warranty, fully supported by a worldwide network of resellers and service providers as well as toll-free 24 X 7 technical phone support during the warranty period. For full details on warranty and support for pre-labeled media, please go to: https://www.hpe.com/us/en/contact-hpe.html

# **Support and Services**

#### **HPE Services**

No matter where you are in your digital transformation journey, you can count on HPE Services to deliver the expertise you need when, where and how you need it. From planning to deployment, ongoing operations and beyond, our experts can help you realize your digital ambitions.

#### https://www.hpe.com/services

### **Consulting Services**

No matter where you are in your journey to hybrid cloud, experts can help you map out your next steps. From determining what workloads should live where, to handling governance and compliance, to managing costs, our experts can help you optimize your operations.

#### https://www.hpe.com/services/consulting

## **HPE Managed Services**

HPE runs your IT operations, providing services that monitor, operate, and optimize your infrastructure and applications, delivered consistently and globally to give you unified control and let you focus on innovation.

## **HPE Managed Services | HPE**

# Operational services

Optimize your entire IT environment and drive innovation. Manage day-to-day IT operational tasks while freeing up valuable time and resources. Meet service-level targets and business objectives with features designed to drive better business outcomes.

#### https://www.hpe.com/services/operational

# **HPE Complete Care Service**

HPE Complete Care Service is a modular, edge-to-cloud IT environment service designed to help optimize your entire IT environment and achieve agreed upon IT outcomes and business goals through a personalized experience. All delivered by an assigned team of HPE Services experts. HPE Complete Care Service provides:

- A complete coverage approach -- edge to cloud
- An assigned HPE team
- Modular and fully personalized engagement
- Enhanced Incident Management experience with priority access
- Digitally enabled and AI driven customer experience

#### https://www.hpe.com/services/completecare

#### **HPE Tech Care Service**

HPE Tech Care Service is the operational support service experience for HPE products. The service goes beyond traditional support by providing access to product specific experts, an Al driven digital experience, and general technical guidance to not only reduce risk but constantly search for ways to do things better. HPE Tech Care Service delivers a customer-centric, Al driven, and digitally enabled customer experience to move your business forward. HPE Tech Care Service is available in three response levels. Basic, which provides 9x5 business hour availability and a 2-hour response time. Essential which provides a 15-minute response time 24x7 for most enterprise level customers, and Critical which includes a 6-hour repair commitment where available and outage management response for severity 1 incidents.

#### https://www.hpe.com/services/techcare

# **Support and Services**

### **HPE Lifecycle Services**

HPE Lifecycle Services provide a variety of options to help maintain your HPE systems and solutions at all stages of the product lifecycle. A few popular examples include:

- Lifecycle Install and Startup Services: Various levels for physical installation and power on, remote access setup, installation and startup, and enhanced installation services with the operating system.
- HPE Firmware Update Analysis Service: Recommendations for firmware revision levels for selected HPE products, taking into account the relevant revision dependencies within your IT environment.
- HPE Firmware Update Implementation Service: Implementation of firmware updates for selected HPE server, storage, and solution products, taking into account the relevant revision dependencies within your IT environment.
- Implementation assistance services: Highly trained technical service specialists to assist you with a variety of activities, ranging from design, implementation, and platform deployment to consolidation, migration, project management, and onsite technical forums.
- HPE Service Credits: Access to prepaid services for flexibility to choose from a variety of specialized service activities, including assessments, performance maintenance reviews, firmware management, professional services, and operational best practices.

Notes: To review the list of Lifecycle Services available for your product go to: Lifecycle Services | HPE

For a list of the most frequently purchased services using service credits, see the **HPE Service Credits Menu** 

# Other Related Services from HPE Services: HPE Education Services

Training and certification designed for IT and business professionals across all industries. Broad catalogue of course offerings to expand skills and proficiencies in topics ranging from cloud and cybersecurity to AI and DevOps. Create learning paths to expand proficiency in a specific subject. Schedule training in a way that works best for your business with flexible continuous learning options.

## IT training & certification | HPE Services

#### **Defective Media Retention**

An option available with HPE Complete Care Service and HPE Tech Care Service and applies only to Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction.

Consult your HPE Sales Representative or Authorized Channel Partner of choice for any additional questions and services options.

#### Parts and Materials

HPE will provide HPE-supported replacement parts and materials necessary to maintain the covered hardware product in operating condition, including parts and materials for available and recommended engineering improvements.

Parts and components that have reached their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual, product QuickSpecs, or the technical product data sheet will not be provided, repaired, or replaced as part of these services.

#### **How to Purchase Services**

Services are sold by Hewlett Packard Enterprise and Hewlett Packard Enterprise Authorized Service Partners:

- Services for customers purchasing from HPE or an enterprise reseller are quoted using HPE order configuration tools.
- Customers purchasing from a commercial reseller can find services at <a href="https://ssc.hpe.com/portal/site/ssc/">https://ssc.hpe.com/portal/site/ssc/</a>

# **Support and Services**

#### Al Powered and Digitally Enabled Support Experience

Achieve faster time to resolution with access to product-specific resources and expertise through a digital and data driven customer experience

Sign into the HPE Support Center experience, featuring streamlined self-serve case creation and management capabilities with inline knowledge recommendations. You will also find personalized task alerts and powerful troubleshooting support through an intelligent virtual agent with seamless transition when needed to a live support agent at:

Hewlett Packard Enterprise (HPE) - Auth - Sign In

#### **Consume IT On Your Terms**

**HPE GreenLake** edge-to-cloud platform brings the cloud experience directly to your apps and data wherever they are—the edge, colocations, or your data center. It delivers cloud services for on-premises IT infrastructure specifically tailored to your most demanding workloads. With a pay-per-use, scalable, point-and-click self-service experience that is managed for you, HPE GreenLake edge-to-cloud platform accelerates digital transformation in a distributed, edge-to-cloud world.

- Get faster time to market
- Save on TCO, align costs to business
- Scale quickly, meet unpredictable demand
- Simplify IT operations across your data centers and clouds

To learn more about HPE Services, please contact your Hewlett Packard Enterprise sales representative or Hewlett Packard Enterprise Authorized Channel Partner. Contact information for a representative in your area can be found at:

Contact Us - Hewlett Packard Enterprise - HPE - Contact Sales and Support | HPE

For more information: Services I HPE

# **Configuration Information**

Description	SKU
HPE Storage LTO-10 Ultrium 75 TB RW Data Cartridge	Q2080A
HPE Storage LTO-10 Ultrium 75 TB RW 960 Data Cartridge Pallet without Cases	Q2080AB
HPE Storage LTO-10 Ultrium 75 TB RW Custom Labeled Library Pack 20 Data Cartridges without Cases	Q2080AC
HPE Storage LTO-10 Ultrium 75 TB RW 960 Data Cartridge Pallet with Cases	Q2080AD
HPE Storage LTO-10 Ultrium 75 TB RW 20 Data Cartridges Library Pack without Cases	Q2080AH
HPE Storage LTO-10 Ultrium 75 TB RW Custom Labeled 20 Data Cartridges with Cases	Q2080AL
HPE Storage LTO-10 Ultrium 75 TB RW Non Custom Labeled 20 Data Cartridges with Cases	Q2080AN
HPE Storage LTO-10 Ultrium 75 TB WORM Data Cartridge	Q2080W
HPE Storage LTO-10 Ultrium 75 TB WORM Custom Labeled 20 Data Cartridges with Cases	Q2080WL
HPE Storage LTO-9 Ultrium 45 TB RW Data Cartridge	Q2079A
HPE Storage LTO-9 Ultrium 45 TB RW 960 Data Cartridge Pallet without Cases	Q2079AB
HPE Storage LTO-9 Ultrium 45 TB RW Custom Labeled Library Pack 20 Data Cartridges without Cases	Q2079AC
HPE Storage LTO-9 Ultrium 45 TB RW 960 Data Cartridge Pallet with Cases	Q2079AD
HPE Storage LTO-9 Ultrium 45 TB RW 20 Data Cartridges Library Pack without Cases	Q2079AH
HPE Storage LTO-9 Ultrium 45 TB RW Custom Labeled 20 Data Cartridges with Cases	Q2079AL
HPE Storage LTO-9 Ultrium 45 TB RW Non Custom Labeled 20 Data Cartridges with Cases	Q2079AN
HPE Storage LTO-9 Ultrium 45 TB WORM Data Cartridge	Q2079W
HPE Storage LTO-9 Ultrium 45 TB WORM Custom Labeled 20 Data Cartridges with Cases	Q2079WL
HPE Storage LTO-8 Ultrium 30 TB RW Data Cartridge	Q2078A
HPE Storage LTO-8 Ultrium 30 TB RW 960 Data Cartridge Pallet without Cases	Q2078AB
HPE Storage LTO-8 Ultrium 30 TB RW Custom Labeled Library Pack 20 Data Cartridges without Cases	Q2078AC
HPE Storage LTO-8 Ultrium 30 TB RW 960 Data Cartridge Pallet with Cases	Q2078AD
HPE Storage LTO-8 Ultrium 30 TB RW 20 Data Cartridges Library Pack without Cases	Q2078AH
HPE Storage LTO-8 Ultrium 30 TB RW Custom Labeled Library Pack 20 Data Cartridges with Cases	Q2078AL
HPE Storage LTO-8 Ultrium 30 TB RW Non Custom Labeled Library Pack 20 Data Cartridges with Cases	Q2078AN
HPE Storage LTO-8 Ultrium 30 TB WORM Data Cartridge	Q2078W
HPE Storage LTO-8 Ultrium 30 TB WORM Custom Labeled 20 Data Cartridges with Cases	Q2078WL
HPE Storage LTO-7 Ultrium 15 TB RW Data Cartridge	C7977A
HPE Storage LTO-7 Ultrium 15 TB No Case 960 Tape Pallet	C7977AB
HPE Storage LTO-7 Ultrium RW 15 TB No Case Custom Labeled Data Cartridge 20 Pack	C7977AC
HPE Storage LTO-7 Ultrium RW 15 TB 960 Tape Pallet	C7977AD
HPE Storage LTO-7 Ultrium 15 TB Eco Case Data Cartridge 20 Pack	C7977AH
HPE Storage LTO-7 Ultrium RW Custom Labeled Data Cartridge 20 Pack	C7977AL
HPE Storage LTO-7 Ultrium Non Custom Labeled Data Cartridge 20 Pack	C7977AN
HPE Storage LTO-7 Ultrium WORM Data Cartridge	C7977W
HPE Storage LTO-7 Ultrium WORM Custom Labeled Data Cartridge 20 Pack	C7977WL
HPE Storage LTO-7 Ultrium RW Bar Code Label Pack	Q2014A
HPE Storage LTO-6 Ultrium 6.25 TB RW Data Cartridge	C7976A
HPE Storage LTO-6 Ultrium 6.25 TB RW Custom Labeled 20 Data Cartridges with Cases	C7976AL
HPE Storage LTO-6 Ultrium 6.25 TB RW Non Custom Labeled 20 Data Cartridges with Cases	C7976AN
HPE Storage LTO-6 Ultrium 6.25 TB RW 960 Data Cartridge Pallet with Cases	C7976AD
HPE Storage LTO-6 Ultrium 6.25 TB RW Custom Labeled 20 Data Cartridges Library Pack without Cases	C7976AC



# **Configuration Information**

Description	SKU
HPE Storage LTO-6 Ultrium 6.25 TB RW 20 Data Cartridges Library Pack without Cases	C7976AH
HPE Storage LTO-6 Ultrium 6.25 TB WORM Data Cartridge	C7976W
HPE Storage LTO-6 Ultrium 6.25 TB WORM Custom Labeled 20 Data Cartridges with Cases	C7976WL
HPE Storage LTO-6 Ultrium RW Bar Code Label Pack	Q2013A
HPE Storage LTO-5 Ultrium 3 TB RW Data Cartridge	C7975A
HPE Storage LTO-5 Ultrium Non-custom Labeled Data Cartridge 20 Pack	C7975AN
HPE Ultrium Universal Cleaning Cartridge	C7978A
HPE Storage LTO-5 Ultrium RW Bar Code Label Pack	Q2011A
HPE Storage LTO-6 Ultrium RW Bar Code Label Pack	Q2013A
HPE Storage LTO-7 Ultrium RW Bar Code Label Pack	Q2014A
HPE Storage LTO-8 Ultrium RW Bar Code Label Pack	Q2015A
HPE Storage LTO-9 Ultrium RW Bar Code Label Pack	Q2017A
HPE Storage LTO-10 Ultrium RW Bar Code Label Pack	Q2018A

# **Technical Specifications**

	LTO-6 Ultrium	LTO-7 Ultrium	LTO-8 Ultrium	LTO-9 Ultrium	LTO-10 Ultrium
Magnetic Material	Barium Ferrite	Barium Ferrite	Barium Ferrite	Barium Ferrite	Strontium Ferrite- doped Barium Ferrite
Recording Density	385 kbits/inch	485 kbits/inch	525 kbits/inch	545 kbits/inch	545 kbits/inch
Number of Data Tracks	2,176	3,584 & 5376	6,656	8,960	15,104
Recording Capacity	2.5/6.25 TB	6/15 TB & 9/22.5 TB	12/30 TB	18/45 TB	30/75 TB
Tape Width (mm)	12.65	12.65	12.65	12.65	12.65
Tape Thickness (um)	6.4	5.6	5.6	5.2	5.2
Tape Length (m)	846	960	960	1035	1035
External Dimensions	1.8 x 4.45 x 4.37 in (2.1 x 11.3 x 11.1 cm)				
Cartridge Weight	0.63 lb (285.2 g)				
Archival Life	30 years				
Recommended Storage Environment	60°F to 90°F (16°C to 32°C) 20% to 80% RH			59°F to 77°F (15°C to 25°C)	
Recommended Operating Environment	50°F	F to 113°F (10°C to 4 20% to 80% RH	20% to 80% RH		
Allowable Environment		as Recommended S Operating Environm	59°F to 95°F (15°C to 35°C) 20% to 80% RH		
Archival Life Recommended Storage Conditions	41'	°F to 73°F (5°C to 23 20% to 50% RH	59°F to 77°F (15°C to 25°C) 20% to 80% RH		

# **Summary of Changes**

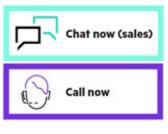
Date	Version History	Action	Description of Change
02-Jun-2025	Version 29	Changed	Overview, Standard Features, Configuration Information and Technical Specifications sections were updated.  Major update for NPI of LTO-10 media. Addition of information about new LTO-10 products. Removal of various LTO-5 and LTO-6 SKUs following EOL. Added new marketing backround information about the value of tape.
04-Dec-2023	Version 28	Changed	HPE Services Rebranding Obsolete SKUs were removed
04-Oct-2021	Version 27	Changed	Standard Features section was updated.
07-Sep-2021	Version 26	Changed	Major update for NPI of LTO-9 media. Addition of information about new LTO-9 products. Removal of LTO-3 and LTO-4 following EOL. Added information about HPE Services and HPE Financial Services. Edited LTO-6 MP SKU product descriptions. Updated temperature and environmental details in Technical Specifications.
17-May-2021	Version 25	Changed	Standard Features and Configuration Information sections were updated.
17-Aug-2020	Version 24	Changed	QuickSpecs layout was updated and Branding Refresh was applied.
16-Dec-2019	Version 23	Changed	Overview, Standard Features and Configuration Information sections were updated.
05-Mar-2018	Version 22	Changed	Information about Type M products was added. Tables and specifications relating to Type M were revised. Type M product descriptions were updated. Certain passages relating to HPE brand testing information that are no longer accurate were removed.
04-Dec-2017	Version 21	Changed	Updated throughout with information about new LTO-8 products
01-Dec-2015	Version 20	Changed	Updated throughout with information about new LTO-7 products
13-May-2013	Version 19	Changed	Overview: Completely updated Models and updated Key features Benefits section.
04-Dec-2012	Version 18	Changed	Changes made to the Introduction of Overview only.
09-Oct-2012	Version 17	Changed	Changes were made in the Product Highlights and Technical Specifications sections.
09-Jun-2011	Version 16	Removed	Mentions of StorageWorks were removed.
18-Mar-2011	Version 15	Changed	Models were revised  Mentions of Bar Code and RFID was added  Related Hardware Options was added to Product Highlights
27-Sep-2010	Version 14	Changed	Options was completely revised and all mentions of HPE RFID Labeled Data Cartridges were added.
29-Mar-2010	Version 13	Changed	Changes were made throughout the QuickSpecs.
01-Sep-2007	Version 12	Changed	Changes made to the Introduction of Overview only.
11-Jun-2007	Version 11	Added	Added EMEA version.
01-Jun-2007	Version 10	Changed	Changes made throughout the entire QuickSpecs, except for the Related Options section.
01-May-2006	Version 9	Changed	Changes made throughout the entire QuickSpecs, except for the Technical Specifications section.
20-Mar-2006	Version 8	Changed	Updated the OVERVIEW section.
25-Apr-2005	Version 7	Changed	Corrected the North America QS to be a duplicate of the Worldwide.
01-Apr-2005	Version 6	Changed	Moved the "Introduction" paragraph to precede the image. Made minor column changes to "Technical Specifications."
	–	Added	Added four models to "Models" Section.
13-Dec-2004	Version 5	Changed	Changes made throughout the entire QuickSpecs, including removing "StorageWorks" from the title.
17-Mar-2004	Version 4	Changed	This QuickSpecs has been completely rebuilt, including a new title.

# **Summary of Changes**

Date	Version History	Action	Description of Change
12-Sep-2003	Version 3	Changed	High ReliabilityLTO Ultrium 100/200 GB tape technology uses a "best of breed" technology approach, taking the best features from other tape technologies and combining them into a single new technology without the need for design compromises to accommodate legacy compatibility requirements. Designed for the demanding environment of large-scale libraries, Ultrium 400 GB media is certified for 1 million passes or 260 full back ups and has a 30 year archival storage life
			20,000 end-to-end passes/260 full tape backups
29-Aug-2003	Version 2	Changed	This QuickSpecs has been converted into the new system.
19-Nov-2002	Version 1	New	New QuickSpecs

# Copyright

Make the right purchase decision. Contact our presales specialists.







© Copyright 2025 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

c04154430 - 11529 - Worldwide - V29 - 02-June-2025