# QuickSpecs

## Overview

## **HPE TeraPack Media**

Because HPE offers a comprehensive data protection portfolio for Hybrid IT, it understands the requirements for current and next generation LTO Ultrium tape solutions. In particular, the importance of media reliability in providing a long term home for archive data, as well as a final safeguard against natural disasters, network or power outages, human error, or malicious acts.

HPE TeraPack<sup>®</sup> Media is designed to make certain that customers have the most reliable and automated tape storage solution available. Our approach places the emphasis on ongoing enhancements and features that simplify virtually all aspects of the media management process.



HPE TeraPack® Media

Models	
Description	SKU
HPE LTO-9 Ultrium 45TB RW Non Custom Labeled TeraPack 10 Data Cartridges	R7C12A
HPE LTO-9 Ultrium 45TB RW Custom Labeled TeraPack 10 Data Cartridges	R7C13A
HPE LTO-8 Ultrium 30TB RW Non Custom Labeled TeraPack 10 Data Cartridges	Q2R69A
HPE LTO-8 Ultrium 30TB RW Custom Labeled TeraPack 10 Data Cartridges	Q2R70A
HPE LTO-8 Ultrium Type M 22.5 TB RW Non Custom Labeled TeraPack 10 Data Cartridges	QS211A
HPE LTO-8 Ultrium Type M 22.5 TB RW Custom Labeled TeraPack 10 Data Cartridges	QS212A
HPE LTO-7 Ultrium 15TB RW Non Custom Labeled TeraPack 10 Data Cartridges	Q1H01A
HPE LTO-7 Ultrium 15TB RW Custom Labeled TeraPack 10 Data Cartridges	Q1H02A
HPE LTO-6 Ultrium 6.25TB BaFe RW Non Custom Labeled TeraPack 10 Data Cartridges	Q1G95A
HPE LTO-6 Ultrium 6.25TB BaFe RW Custom Labeled TeraPack 10 Data Cartridges	Q1G96A
HPE TS1160 JE Non Custom Labeled TeraPack 9 Data Cartridges	ROR28A
HPE TS1160 JE Custom Labeled TeraPack 9 Data Cartridges	ROR29A
HPE TS1150/TS1155 JD Non Custom Labeled TeraPack 9 Data Cartridges	Q1G99A
HPE TS1150/TS1155 JD Custom Labeled TeraPack 9 Data Cartridges	Q1H00A



Models

SKU
Q1H03A
Q1H04A
Q1H05A
Q1J40A
Q1J41A
Q2P43A

# **Standard Features**

## Why Buy HPE TeraPack Media?

- All HPE TeraPack media is pre-initialised using RFID LTO-Cartridge Memory
- This CM flag is unique to HPE TeraPack media and integrates with advanced Media Lifecycle Management tools
  - MLM records up to 40 health statistics every time a tape is loaded
  - Combined with BlueScale software, you can manage, track and report every stage of an individual tape's usage, from creation to retirement, all within the same console
  - BlueScale reporting allows easy visibility of tapes with high error rates, even in multiple drives and partitions, allowing for their removal before they cause data corruption.
- MLM / BlueScale reporting is only available for pre-initialised TeraPack media e.g. it is not accessible using non-TeraPack media
- Unique benefits of MLM enabled by TeraPack:
  - Reduce media-related errors
  - Monitor a tape's health at any point during its lifecycle
  - Leverage user-defined thresholds to protect critical data sets
  - Quickly identify overused and underused media
  - Identify when media should be retired
  - Know when tape has been used in unplanned locations
  - Simplify and improve troubleshooting
  - Track and monitor cleaning media's history

## 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: <a href="https://www.hpe.com/us/en/contact-hpe.html">https://www.hpe.com/us/en/contact-hpe.html</a>

## **Reliable Archival Storage and Restore**

- Only the highest quality media becomes HPE TeraPack Media. This makes certain you have the most reliable and worry-free data protection possible.
- HPE TeraPack Media also undergoes a unique 'Carbide Clean' process to remove any trace of debris that may have
  originated during manufacturing or transportation, giving you additional peace of mind that your system will run at peak
  performance.

## **Protection and Encryption**

When combining HPE TeraPack Media with HPE's Enterprise tape library integrated BlueScale® Encryption Key Management, your data is protected with a straightforward, easily installed solution.

#### Intelligence and Verification

- Media Lifecycle Management (MLM) allows you to proactively manage your tape inventory through simple monitoring of over 40 health statistics.
- HPE TeraPack Media assures data integrity using an integrated, intelligent and comprehensive set of Data Integrity Verification (DIV) 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.



QuickSpecs

#### Ease of Management and Installation

- Media is customized with individual tapes unwrapped and pre-applied barcode labels bundled in TeraPack containers, ready for bulk loading. A myriad of choices allow you to specify the exact number of tapes you require in custom or non-custom barcode sequences.
- An optional dust cover is available for off-site storage in archive.
- TeraPack architecture utilizes 3D space within the library frame increasing density per square foot. Multiple tape cartridges are grouped in a single container that is used throughout the library and beyond.
- Library robotics can transport a TeraPack within the library and select a requested tape from the TeraPack case. In this unique architecture, each TeraPack case equals 9 x Enterprise media or 10 x LTO media tape slots.
- A robot can move a bar-coded TeraPack case that contains 9 or 10 pieces of media in a single robotic move, while other tape libraries require 9 or 10 separate robotic moves to accomplish this task.
- Traditional libraries organize tapes one-tape-deep along the library chassis wall. The T950 library uses TeraPack cases to store tapes, with each TeraPack case extending into the library's interior. This provides HPE Tape Libraries with very high density, allowing more tapes in a given area than competitors' libraries.

#### **CarbideClean®**

The CarbideClean® process provides HPE TeraPack users with extra peace of mind that they have the most reliable media - right from the very first time they load a tape into the drive. Carbide Cleaning removes any vestiges of microscopic debris from the tape surface, maximising the potential that every bit is written and helping to extend the life of your tape drive.

# **Related Options**

## **Related Hardware Options**

#### HPE T950<sup>®</sup> Tape Libraries

Meeting enterprise data growth challenges head-on, HPE T950 Tape Libraries deliver enormous scalability to keep pace with unpredictable data growth. Choose from a range of base configurations and scale up to 10,020 LTO tape cartridges in increments of 10 slots or 7,615 TS11xx Technology tape cartridges in increments of 9 slots for capacity on demand. Incorporating between 1 and 120 tape drives you can consolidate and store up to 456 PB (compressed 2.5:1) using TS1160 Technology or 300 PB (compressed 2.5:1) using LTO-8 tape cartridges, of enterprise data. Learn more at http://www.hpe.com/storage/t950

#### HPE TFinity<sup>®</sup> ExaScale Tape Libraries

Meeting enterprise data growth challenges head-on, HPE 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 53,460 LTO-8 tape cartridges or 40,680 TS11xx Technology cartridges in increments of 10 LTO of 9 TS11xx Technology slots for capacity on demand. Incorporating between 1 and 144 tape drives you can consolidate and store up to 2.4 EB (compressed 2.5:1) using TS1160 Technology or 1.6 EB (compressed 2.5:1) using LTO-8 tape cartridges of enterprise data. Learn more at http://www.hpe.com/storage/tfinity

# **Technical Specifications**

HPE LTO Ultrium Te	eraPack Media					
	LTO-6 Ultrium	LTO-7 & LTO-7 Type M	LTO-8 Ultrium	LTO-9 Ultrium		
Part Number	Q1G95A / Q1G96A	Q1H01A/ Q1H02A Q2S11A / Q2S12A	Q2R69A / Q2R70A	R7C12A / R7C13A		
Quantity per TeraPack	10 cartridges per TeraPa	ack				
Magnetic Material	Barium Ferrite	Barium Ferrite	Barium Ferrite	Barium Ferrite		
Recording Density	385 kbits/inch	485 kbits/inch	525 kbits/inch	545 kbits/inch		
Number of Data Tracks	2,176	3,584 & 5376	6,656	8,960		
Recording Capacity (Native/Compressed)	2.5/6.25 TB	6/15 TB & 9/22.5 TB	12/30 TB	18/45 TB		
Tape Width (mm)	12.65	12.65	12.65	12.65		
Tape Thickness (um)	6.4	5.6	5.6	5.5 (maximum)		
Tape Length (m)	846	960	960	1035		
External Dimensions	1.8 x 4.45 x 4.37 in (2.1 x 11.3 x 11.1 cm)	1.8 x 4.45 x 4.37 in (2.1 x 11.3 x 11.1 cm)	1.8 x 4.45 x 4.37 in (2.1 x 11.3 x 11.1 cm)	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)	0.63 lb (285.2 g)	0.63 lb (285.2 g)	0.63 lb (285.2 g)		
Archival Life	30 years, if stored at the	"Archival Life Recommend	led Storage" conditions			
Recommended Storage Environment	60°F to 90°F (16°C to 32°C) 20% to 80% Relative Humidity (RH)			59°F to 77°F (15°C to 25°C) 20% to 80% RH		
Recommend Operating Environment	50°F to 113°F (10°C to 20% to 80% RH	45°C)				
	Same as the Recommended Operating and Storage Environments			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	°C)		59°F to 77°F (15°C to 25°C) 20% to 80% RH		

# **Technical Specifications**

<b>HPE TS Series Techn</b>	ology TeraPack Media		
	HPE TS Series (TS115X and TS1160) Non Custom TeraPack	HPE TS Series (TS115X and TS1160) Custom TeraPack	HPE TS Series Cleaning TeraPack
Part Number	Q1G99A, R0R28A	HPE TS Series Cleaning TeraPack 9 Cartridges	Q1H04A
Format	TS1150, TS1155, TS1160	TS1150, TS1155, TS1160	
Media Format	Re-Writable	Re-Writable	
Quantity per Package	9 cartridges per TeraPack		
Native Uncompressed Capacity	TS1150 10 TB TS1155 15 TB TS1160 20 TB	TS1150 10 TB TS1155 15 TB TS1160 20 TB	
Compressed Capacity	TS1150 25 TB TS1155 37.5 TB TS1160 60 TB	TS1150 25 TB TS1155 37.5 TB TS1160 60 TB	
Tape Length	1072 m	1072 m	318 m
Tape Width (Metric)	12.65 mm	12.65 mm	12.65 mm
Tape Thickness	5.0 um	5.0 um	5.0 um
Archival Storage Life	30 years		
Warranty	Limited Lifetime Warranty		
Environmental Operating Temperature	16 to 25°C (61 to 77°F)		
Relative Humidity	20-50%		
Max Wet Bulb Temperature	26°C (79°F)		

# Summary of Changes

Date	Version History	Action	Description of Change
04-Oct-2021	Version 5	Changed	Overview and Technical Specifications sections were updated.
06-Jul-2020	Version 4	Changed	QuickSpecs layout was updated, and Branding Refresh was applied.
06-Apr-2020	Version 3	Changed	QuickSpecs layout was updated
06-May-2019	Version 2	Changed	New TS1160 information
			Overview, Technical Specifications and Related Options sections were updated.
05-Feb-2018	Version 1	Added	New QuickSpecs.

# Copyright

Make the right purchase decision. Contact our presales specialists.



Get updates



© Copyright 2021 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.

a00036786enw - 16116 - Worldwide - V5 - 04-October-2021