



hp surestore tape library 20/700



high-capacity,
high-performance
automated
tape backup

The HP Surestore Tape Library 20/700 delivers high-end backup and restore where downtime is not an option. Its hot-swappable and redundant components provide for 24x7 operations. Its native capacity scales from 14 TB to 69 TB*.

The HP Surestore Tape Library 20/700 offers high-capacity, high-performance data storage for a stress-free solution. Industry-leading magnesium alloy robotics for performance, strength and durability, plus an advanced high-availability architecture, make the HP Tape Library 20/700 the industry's most capable tape library. It delivers availability, performance, and capacity, while ensuring data integrity and manageability.

The HP Surestore Tape Library 20/700 is the best choice for backing up large-scale Storage Area Networks (SANs) and environments that require high-capacity storage. It is the perfect companion for the HP Disk Array XP family and Zero Downtime Backup solutions.

key features and benefits

- **manageable:** integrates with HP fibre channel bridges and hubs requiring little to no maintenance
- **available:** uses hot-swappable, redundant components, including tape drives, power supplies and fans, to ensure the most availability in its class
- **scalable:** 216 to 678 cartridge capacity; maximum throughput 1.08 TB/hour
- **fast:** provides lightning-fast performance with robotics capable of over 400 jobs per hour—more than twice as fast as previous library architecture
- **durable:** achieves excellent performance and low-volume operation with precision magnesium alloy robotics
- **effective:** embeds all library functions onto one controller card
- **adaptable:** supports a wide range of commercial software for HP-UX, Windows NT®, Solaris, and MPE/iX
- **efficient:** uses less floor space per cartridge than any other product in its class
- **versatile:** supports up to 20 HP Ultrium 230 drives, 20 DLT 8000 drives, or 12 HP 9840 drives
- **convenient:** supported with HP OpenView Omniback II and other leading storage management software
- **flexible:** ready for SCSI or optical fiber connection—especially suitable for SAN applications

*69 TB is possible with a 20/700 configuration with HP Ultrium 230 drives



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technical specifications

number of cartridge slots
number of drives

216, 384, 678, plus 12 reserved slots for cleaning and diagnostics
Up to 20 Ultrium 230, 20 DLT 8000, or 12 HP 9840 tape drives

library capacity (678 slots)
hp 9840 (20-GB capacity)
hp dlt 8000 (40-GB capacity)
hp ultrium 230
(100-GB capacity)

native	compressed
14 TB	28 TB*
28 TB	56 TB*
69 TB	138 TB*

hp ultrium 230
hp dlt 8000
hp 9840

library throughput (with maximum 12 or 20 drives)

1.08 TB/hr	2.16 TB/hr
432 GB/hr	864 GB/hr
720 GB/hr	1.5 TB/hr

audit time

Less than four minutes

robotics control

SCSI media changer command set, fast/wide interface, single-ended or low-voltage differential (LVD)

bar code reader

Standard camera-based vision system

calibration

Automatic (cells, drives, and cartridge-access port)

drive cleaning

Automatic, library- or software-initiated

cartridge access port

One port, 20-cartridge capacity (additional 20-cartridge capacity available)

control panel

User-friendly configuration and diagnostics controls, status display, and viewing window

serviceability

RS-232C port for diagnostics

recording format

tape drive characteristics

HP Ultrium 230: 384-track serial serpentine

HP DLT 8000: 208-track serial serpentine

HP 9840: 288-track serial serpentine

recording density

HP Ultrium 230: 100 Kbp

HP DLT 8000: 98 Kbp

HP 9840: 86 Kbp

encoding method

2-7 RLL

data compression algorithm

HP Ultrium 230: ALDC Enhanced

HP DLT 8000: LZ

HP 9840: LZ-1 Enhanced

recording medium

HP Ultrium 230 cartridge: 100-GB native

HP DLT IV cartridge: 40-GB native

HP 9840 cartridge: 20-GB native



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technical specifications

average tape access time
average tape exchange time

7 seconds
18 seconds

drive
tape load time
native transfer rate
tape unload time
sustained transfer rate
average access time
hard error rate
undetected error rate

hp ultrium 230

25 seconds
15 MB/s
13 seconds
15 seconds
71 seconds
1x10¹⁷ bits read
1x10²⁷ bits read

hp DLT 8000

37 seconds
6 MB/s
17 seconds
6 seconds
60 seconds
1x10¹⁷ bits read
1x10²⁷ bits read

hp 9840

3.5 seconds
10 MB/s
4 seconds
10 seconds
11 seconds
1x10¹⁴ bits read
1x10³³ bits read

physical characteristics

dimensions (h x d x w)
dimensions, library with
expansion ((h x d x w)
weight (library only)
weight (library with expansion)

72 x 37.5 x 62 in (182.9 x 95.3 x 155.7 cm)
72 x 44 x 62 in (182.9 x 111.8 x 155.7 cm)

941 lb (427 kg)
1,171 lb (531 kg)

reliability and service

MTBF	360,000 hours (mean time between failures)
MSBF	2,000,000 swaps (mean swaps between failures)
safety	CSA standard CAN/CSA-C22.2 no. 950-95 UL Listed to UL 1950, 3rd Edition; EN 60950 GS licensed to EN 60950, 2nd Edition, 1991 + A1, A2, A3, A4 Nemko, Semko, Demko, Fimko certified to EN 60950 (1992) A1/A2/A3/A4/A11, EMKO-TSE (74-SEC) 207/94 CB test certified
emissions	FCC #47, Part 15, Subpart B, Class A; VCCI Class A European Union CE emissions standards AS/NZS 3548:1996 (Australia, N.Z.); ICES-003 (Canada)
immunity	European Union CE immunity standards

*Assumes 2:1 compression ratio.



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ordering information

A5597A	Tape Library 20/700 with 216 slots	Base Tape Library 20/700 with 216 slots
tape drives		
A5598A	9840 drive	HP 9840 Tape Drive for the 20/700 library
A5599A	DLT 8000 drive	HP DLT 8000 Tape Drive for the 20/700 library
A6322A	Ultrium 230 LVDS drive	HP Ultrium LVDS Tape Drive for the 20/700 library
A6323A	Ultrium 230 HVDS drive	HP Ultrium HVDS Tape Drive for the 20/700 library
accessories		
A5600A	Second drive tower	Second Drive Tower for the 20/700 library
A5601A	Second cartridge access port	Second Cartridge Access Port
A5604A	168-cartridge slot upgrade kit	Expansion module to bring library to 400 slots
A5605A	294-cartridge slot upgrade kit	Expansion module to bring library to 700 slots
A6324A	Ultrium HVDS to LVDS converter	HVDS/LVDS Adapter PCA kit to add LVD interface for Ultrium drives
supplies		
C5141F	HP DLT IV data cartridge	
C5142A	HP DLT cleaning cartridge	
C7971A	HP Ultrium 200 GB data cartridge	
C7979A	HP Ultrium cleaning cartridge	

service and support

1-year, next business day, on-site warranty (standard business hours) worldwide

for more information

For more information on HP tape libraries, contact any of our worldwide sales offices or visit our Web site at:
www.hp.com/go/automated