

hp StorageWorks
ESL9000 series
of tape libraries

high-density, low hassle

keep your data safe
like never before





**mission critical
unattended backup and
restore solution**

heavy duty backup

The HP StorageWorks ESL9000 series of tape libraries offers the ultimate in a high-capacity mission critical unattended backup and restore solution. It is perfect for large server pools and centralized backup/restore requirements. With component level redundancy and high capacity, the ESL9000 series of tape libraries can provide years of fully automated operation. These libraries can handle the toughest storage situations by offering unique features such as:

- the highest density available
- hot swappable components
- redundant power distribution, power supplies, and cooling fans
- easy to use graphical user interface
- HP branded tape media that is tested beyond industry standards to optimize performance of the library

The HP StorageWorks ESL9000 series of tape libraries provides you with the ultimate in data protection, simplification, and investment protection.

maximum uptime, minimum involvement

You can't afford to be without your mission critical data. To ensure that what you need is always available, the ESL9000 libraries have been engineered for maximum uptime. With redundant power distribution, power supplies, and cooling fans, you can put your mind at ease. But we didn't stop there. For the best in high availability and continuous operation, you also get hot pluggable drive carriers along with hot swappable-power supplies, and cooling modules.

the right solution
to grow with your needs



The HP StorageWorks ESL9000 series of tape libraries delivers unprecedented levels of flexibility, capacity and availability for the most demanding enterprise environments.

simplify your life

The browser-based, graphical touch-screen control panel on the HP StorageWorks ESL9000 series of tape libraries provides easy access to library functions. To increase efficiency and lower total cost of ownership, management and diagnostic tools are also included with the libraries.

a good investment

The data protection world never stays the same for long. How do you make sure you are able to keep up with new enhancements? By using HP multi-unit scalability* and modular libraries, as well as compact PCI slots that enable you to enhance functionality in the future.

HP StorageWorks ESL9000 series of tape libraries provides an innovative answer to your backup and restore requirements. The libraries have unique enterprise level features such as hot plug drives, dual redundant hot swap power supplies, and a PCI backplane. Combine this functionality with the industry's highest storage density and you've got the right solution to grow with your needs.

* Multi-unit scalability is planned for the future

hp StorageWorks
ESL9322 tape library



hp StorageWorks
ESL9595 tape library



hp StorageWorks ESL9322 tape library with ultrium 230 drives

The HP StorageWorks ESL9322 tape library with Ultrium 230 drives provides 222 or 322 slots and up to 8 hot plug LTO Ultrium 230 drives. The ESL9322L1 offers up to 32.2 TB of native data storage and native transfer rates up to 432 GB/hr. A maximum of 5 units can be connected together* with 40 drives and 1474 slots configurable for a native capacity of 147.4 TB (294.8 TB with 2:1 compression).

hp StorageWorks ESL9322 tape library with SDLT 160/320 drives

The HP StorageWorks ESL9322 tape library with SDLT 160/320 drives provides 222 or 322 slots and up to 8 hot plug SDLT 160/320 drives. The ESL9322S2 offers up to 51.52 TB of native data storage and native transfer rates up to 460.8 GB/hr. A maximum of 5 units can be connected together* with 40 drives and 1474 slots configurable for a native capacity of 235.84 TB (471.68 TB with 2:1 compression).

hp StorageWorks ESL9595 tape library with Ultrium 230 drives

The HP StorageWorks ESL9595 tape library with Ultrium 230 drives provides 400/500/595 slots and up to 16 LTO Ultrium 230 drives. The ESL9595L1 offers up to 59.5 TB of native data storage and native transfer rates up to 864 GB/hr. A maximum of 4 units can be connected together* with 64 drives and 2278 slots configurable for a native capacity of 227.8 TB (455.6 TB with 2:1 compression).

hp StorageWorks ESL9595 tape library with SDLT 160/320 drives

The HP StorageWorks ESL9595 tape library with SDLT 160/320 drives provides 400/500/595 slots and up to 16 SDLT 160/320 drives. The ESL9595S2 offers up to 95.2TB of native data storage and native transfer rates up to 921.6 GB/hr. A maximum of 4 units can be connected together* with 64 drives and 2278 slots configurable for a native capacity of 364.48 TB (728.96 TB with 2:1 compression).

hp StorageWorks ESL9595 tape library with SDLT 110/220 drives

The HP StorageWorks ESL9595 tape library with SDLT 110/220 drives provides 400/500/595 slots and up to 16 SDLT 220 drives. The ESL 9595SL offers up to 66.45TB of native data storage and native transfer rates up to 633.6 GB/hr. A maximum of 4 units can be connected together* with 64 drives and 2278 slots configurable for a native capacity of 250.58TB (503.16 with 2:1 compression).

* Multi-unit scalability is planned for the future

compatibility

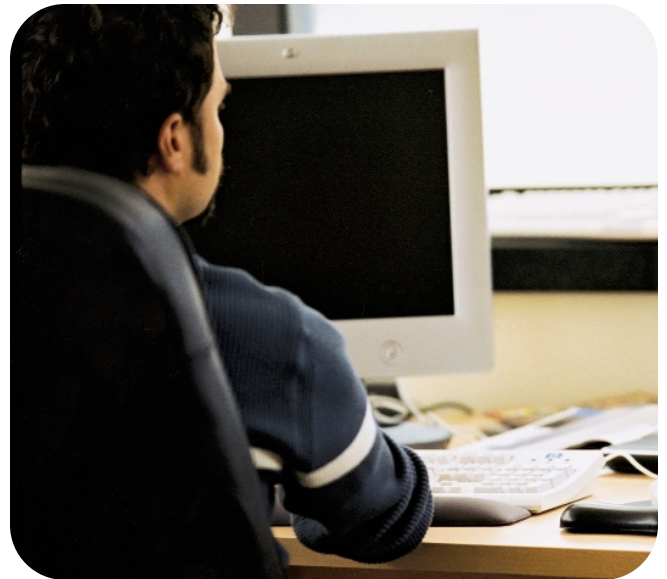
hp StorageWorks ESL9000 series of tape libraries supports the following backup/restoration applications software packages:

- HP OpenView Data Protector
- Computer Associates BrightStor ARCserve2000™ for Microsoft® Windows NT®/Windows 2000®
- Computer Associates BrightStor ARCserveIT™ v7.0 for Novell NetWare
- Legato NetWorker v6.1.2
- VERITAS Backup Exec™ 8.6
- VERITAS NetBackup v3.4.3, v4.5

hp StorageWorks ESL9000 series of tape libraries is qualified with the following operating systems:

- HP Tru64 UNIX®
- Microsoft Windows NT/Windows 2000
- Novell NetWare
- SUN Solaris
- IBM AIX
- Linux Red Hat
- Linux SUSE
- HP ProLiant servers, HP-UX servers, HP AlphaServer systems and other product lines

Note: not all backup applications and operating systems are supported on all the hardware listed above. Please visit the HP website at hp.com/products/tapestorage for the Comparison Matrix.



hp StorageWorks ESL9000 series of tape libraries matrix

	hp StorageWorks ESL9322L1	hp StorageWorks ESL9322S2	hp StorageWorks ESL9595SL	hp StorageWorks ESL9595L1	hp StorageWorks ESL9595S2
Drive type	LTO Ultrium 230	SDLT 320 GB	SDLT 220 GB	LTO Ultrium 230	SDLT 320 GB
Unit dimensions (H x W x D) inch/cm	75x40x29 in 190.5x101.6x73.7 cm	75x40x29 in 190.5x101.6x73.7 cm	75x60x29 in 190.5x152.4x73.7 cm	75x60x29 in 190.5x152.4x73.7 cm	75x60x29 in 190.5x152.4x73.7 cm
Shipping dimensions (H x W x D) (cm)	80x52x48 in 203.2x132.1x121.9 cm	80x52x48 in 203.2x132.1x121.9 cm	80x71x48 in 203.2x180.3x121.9 cm	80x71x48 in 203.2x180.3x121.9 cm	80x71x48 in 203.2x180.3x121.9 cm
Unit weight (lbs/Kg)	1335 lbs/605.5 kg	1335 lbs/605.5 kg	1660 lbs/753 kg	1660 lbs/753 kg	1660 lbs/753 kg
Shipping weight (lbs/Kg)	1362 lbs/617.8 kg	1362 lbs/617.8 kg	1822 lbs/826.4 kg	1822 lbs/826.4 kg	1822 lbs/826.4 kg
Native drive throughput (MB/s)	15	16	11	15	16
Recording method	Linear serpentine	Linear serpentine	Linear serpentine	Linear serpentine	Linear serpentine
Maximum number of drives supported in a single unit	8	8	16	16	16
Single unit maximum native backup performance (GB/hr)	432	460.8	633.6	864	921.6
Single unit number of slots	222, 322	222, 322	400, 500, 595	400, 500, 595	400, 500, 595
Single unit native backup capacity (TB)	32.2	51.52	65.45	59.5	95.2
Robotics reliability (MSBF)	2 million	2 million	2 million	2 million	2 million
Multi-unit scalability	Yes, up to 5 units*	Yes, up to 5 units*	Yes, up to 4 units	Yes, up to 4 units*	Yes, up to 4 units*
Maximum native scaled capacity (TB)	147.4	235.84	250.58	227.8	364.48
Maximum native scaled performance (GB/hr)	2160	2304	2534	3456	3586.4
interface	Ultra2 SCSI (LVD)	Ultra2 SCSI (LVD)	Ultra2 SCSI (LVD)	Ultra2 SCSI (LVD)	Ultra2 SCSI (LVD)
High availability features	Hot plug drives Hot swap redundant power and cooling	Hot plug drives Hot swap redundant power and cooling	Hot plug drives Hot swap redundant power and cooling	Hot plug drives Hot swap redundant power and cooling	Hot plug drives Hot swap redundant power and cooling
Control panel	GUI touch screen	GUI touch screen	GUI touch screen	GUI touch screen	GUI touch screen
Power requirements	90 to 132V AC @ 47 to 63Hz 180 to 264V AC @ 47 to 63Hz	90 to 132V AC @ 47 to 63Hz 180 to 264V AC @ 47 to 63Hz	90 to 132V AC @ 47 to 63Hz 180 to 264V AC @ 47 to 63Hz	90 to 132V AC @ 47 to 63Hz 180 to 264V AC @ 47 to 63Hz	90 to 132V AC @ 47 to 63Hz 180 to 264V AC @ 47 to 63Hz
Power consumption (typical/max)	1200W	1200W	1600 W	1600 W	1600 W
Warranty	One year, next business day on-site	One year, next business day on-site	One year, next business day on-site	One year, next business day on-site	One year, next business day on-site
Mission critical support services	Optional	Optional	Optional	Optional	Optional
Servers supported	HP-UX servers, HP NetServers, HP ProLiant servers	HP AlphaServer systems, HP ProLiant servers	HP AlphaServer systems, HP ProLiant servers	HP-UX servers, HP NetServers, HP ProLiant servers	HP AlphaServer systems, HP ProLiant servers

* Multi-unit scalability is planned for the future

for more information, visit:
hp.com/products/tapestorage

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