Entry-level LTO Ultrium half-high tape library designed to provide reliable, high capacity, high performance tape backup

IBM System Storage TS3100 Tape Library Express Model featuring half-high Ultrium technology

Highlights

- ***Designed to support the new IBM LTO Ultrium 4 Half-High (HH) Tape Drive and the IBM LTO Ultrium 3 HH Tape Drive, to help increase capacity and performance with Low Voltage Differential (LVD) SCSI and 3 Gb Serial Attached SCSI (SAS) attachments***
- ***Designed to support cost-effective backup, save and restore and archival storage in sequential or random access mode with a standard bar-code reader***
- ***IBM Ultrium 4 technology is designed to support encryption of data with 3 Gbps SAS and continues to support write-once, read-many (WORM) operations***
- ***Designed to offer outstanding capacity, performance and reliability for midrange and network tape-storage environments in a 2U form factor with 24 data cartridge slots and a mail slot***
- ***Remote library management through a standard Web interface supports flexibility and greater administrative control of storage operations***

The IBM System Storage™ TS3100 Tape Library Express Model and its storage management applications are designed to address capacity, performance, data protection, reliability, availability, affordability and application requirements. It is designed as a functionally rich, entry tape-storage solution incorporating LTO Ultrium tape technology. The IBM TS3100 Express model is an excellent solution for large-capacity or high-performance tape backup with or without random access. The TS3100 featuring half-high Ultrium technology is also an excellent choice for tape automation for IBM System p™, IBM System i™, IBM System x™ and other open systems.

The IBM TS3100 Tape Library Express featuring half-high Ultrium technology is well-suited for handling backup, save and restore and archival data-storage

needs for small to medium-size environments. With the use of up to two LTO Half-High tape drives and 24 tape cartridge capacity, the IBM TS3100 HH model is designed to take advantage of LTO technology to cost-effectively handle growing storage requirements. The TS3100 Tape Library featuring half-high drive technology is configured with two removable cartridge magazines, one on the left side (12 data cartridge slots) and one on the right (12 data cartridge slots). Additionally, the left magazine includes a single mail slot to help support continuous library operation while importing and exporting media. A barcode reader is standard in the library, supporting the library's operation in sequential or random access mode. The TS3100 HH also comes standard with remote management capabilities to allow for remote administration of the tape library through a Web interface.

The IBM Ultrium 4 technology is designed to support encryption of data. The hardware encryption and decryption core and control core reside in the IBM Ultrium 4 tape drive (available to the TS3100 with the 3 Gbps SAS interface). A larger internal data buffer helps improve data access rates and reduce cartridge fill and rewind times along with dynamic channel calibration designed to help increase data throughput. In addition to reading and writing to LTO Ultrium 4 tape cartridges, the HH LTO 4 tape drive can read and write to LTO Ultrium 3 cartridges and read LTO Ultrium 2 cartridges. The IBM Ultrium 4 HH tape drive is designed to support up to 120 MBps native data-transfer rates and up to 800 GB native physical capacity when using the IBM System Storage Ultrium 800 GB Data Cartridge (1.6 TB with 2:1 compression). The TS3100 featuring Ultrium 4 HH tape drives has a capacity of up to 19.2 TB native (38.4 with 2:1 compression).

The IBM LTO Ultrium 3 Half-High Tape Drives are designed to support up to 60-MBps native data-transfer rates. In addition, with the use of the IBM TotalStorage® LTO Ultrium 400 GB Data Cartridge, the IBM Ultrium 3 Half-High Tape Drive doubles tape-cartridge physical capacity up to 400 GB native physical capacity (800 GB with a 2:1 compression).

The IBM TS3100 Tape Library Express featuring half-high Ultrium technology offers an LVD SCSI or a 3 Gbps SAS interface for HH LTO 3 drives and 3 Gbps SAS interface for HH LTO 4 and can attach to a wide variety of open-system servers. The sequential or random access library comes in a stand-alone or optional rack-mountable configuration. The IBM TS3100 HH also has an LED display and indicators for power, drive and activity, error status and message information.

IBM System Storage TS3100 Tape Library Express Model featuring half-high Ultrium 3 technology at a glance

Drive options	Ultrium 3 Half-High: LVD SCSI (95P4998); 3 Gbps SAS (95P5000) Ultrium 4 Half-High: 3 Gbps SAS (45E2243)
Available models	3573L32: TS3100 with LTO-3 HH SCSI tape drive 3573S32: TS3100 with LTO-3 HH 3 Gbps SAS tape drive 3573S42: TS3100 with LTO-4 HH 3 Gbps SAS tape drive 3573E42: TS3100 with LTO-4 HH 3 Gbps SAS tape drive and rack mount kit (Express Seller)
Optional feature codes	
Rack mount	23R6998
Right-side magazine set	23R6999
Left-side magazine	45E3327
Tape drive type	IBM LTO Ultrium 3 Half-High; IBM LTO Ultrium 4 Half-High
Number of drives	1-2
Number of tape cartridges	24
Number of mail slots	1
Physical capacity	Up to 1.6 TB per cartridge compressed; 800 GB native Up to 38.2 TB per tape library compressed; 19.2 TB native
Data transfer rate	Up to 120 MBps native with LTO Ultrium 4 Half-High Up to 60 MBps native with LTO Ultrium 3 Half-High
Dimensions (W x H x D)	
Stand alone	17.6 in (447.5 mm) x 3.84 in (97.6 mm) x 31.9 in (810 mm)
Rack mount	17.6 in (447.5 mm) x 3.44 in (87.6 mm) x 29.13 in (740 mm)
Weight	33 lb (15 kg) without rack mount
Operating environment	
Temperature	50 to 113 degrees F, 10 to 45 degrees C
Relative humidity	10% RH to 80% RH (non-condensing)
Electrical power	4.0 amps at 100 V ac, 2.0 amps at 240 V ac 0.1 KVA
Attachment and systems support	The TS3100 Half-High features LVD SCSI and 3 Gbps SAS interfaces, attaching to IBM System p, IBM System i, IBM System x, HP-UX, Sun Solaris, UNIX®, Linux® and Windows® servers and non-IBM servers, workstations and personal computers that support the interface specifications.
Operating systems support	Native device-driver support is available for IBM System p, IBM System i, IBM System x, Windows Server® 2003, Sun Solaris, HP-UX, Red Hat and United Linux.

For more information

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MB, GB and TB equal 1,000,000, 1,000,000,000 and 1,000,000,000,000 bytes, respectively, where referring to storage capacity. Actual storage capacity will vary based upon many factors and may be less than stated. Some numbers given for storage capacities give capacity in native mode followed by capacity using data compression technology.

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