

Ultrium tape technology with autoloading capabilities for backup, restore and archival solutions.



IBM TotalStorage 3581 Tape Autoloader featuring the LTO Ultrium 3 drives



IBM TotalStorage 3581 Tape Autoloader

Today, all types of businesses rely on data as a key corporate asset. You need to access data quickly and reliably, archive large databases and retrieve them when needed, and complete these tasks economically—whether you are using a high performance network server or an individual workstation.

Highlights

- **Designed to support the new IBM LTO® Ultrium® 3 Tape Drive, for increased capacity and performance including 2 Gbps Fibre Channel and LVD Ultra160 SCSI attachment**
- **Designed to offer leading capacity, performance, and reliability for midrange and network tape storage environments in a 2U form factor**
- **Designed to support cost-effective backup, save/restore, and archival storage**
- **Designed to provide continuous, easy-to understand drive information with an LCD status display**
- **Adheres to widely supported Linear Tape-Open® (LTO) design specifications**

The IBM TotalStorage® 3581 Tape Autoloader and 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 3581 is an excellent solution for large capacity or high-performance tape backup with or without random access. The 3581 models are also an excellent choice for tape automation for IBM @server® pSeries®, RS/6000®, IBM @server iSeries™, AS/400®, IBM @server xSeries® and other open systems.

The IBM 3581 Tape Autoloader is well suited for handling backup, save/restore, and archival data storage needs for small-to-medium size environments. With its single Ultrium 3 or Ultrium 2 tape drive and eight tape cartridges, the IBM 3581 is designed to leverage Linear Tape-Open (LTO) technology to cost effectively handle growing storage requirements.

The new IBM Ultrium 3 drive has more than double the drive performance of the second generation LTO Ultrium Tape Drives and more than 4x the performance of the first generation drive. The IBM LTO Ultrium 3 Tape Drives are designed to support up to 80 MBps native data transfer rates. In addition, with the use of the new IBM TotalStorage LTO Ultrium 400GB Data Cartridge, the IBM Ultrium 3 Tape drive doubles tape cartridge capacity up to 400GB native physical capacity (800GB with 2:1 compression), providing an IBM 3581 Autoloader capacity of up to 6.4TB with 2:1 compression or 3.2TB native. The IBM Ultrium 3 Tape Drives are designed to read and write second generation LTO Ultrium Data Cartridges and read LTO Ultrium 1 Data Cartridges at original capacities. As your needs grow, you can build on this storage investment by moving to higher capacity and performance automated libraries employing the new IBM Ultrium 3 tape drive technology.

Advanced features

The IBM 3581 Tape Autoloader, features Low Voltage Differential (LVD) Ultra160 SCSI (Model L38 for Ultrium 3 or Model L28 for Ultrium 2) or native switched 2 Gbps Fibre Channel (Model F38 for Ultrium 3 or Model F28 for Ultrium 2) drive interfaces and can attach to a wide variety of open system servers. The Model L28 can also attach to High Volume Differential (HVD) interfaces with an optional HVD converter kit (Feature Code 3104).

The sequential or random access autoloader comes in a standalone base configuration. Additional optional features include rack-mount installation kit, bar code reader and remote management unit. The IBM 3581 also has an LCD display and indicators for power, drive and autoloader activity, error status, and message information.

Software support

You can increase the power of the IBM 3581 Tape Autoloader by managing it with tape management solutions such as Tivoli® Storage Manager or other third party storage software.

Why IBM LTO?

LTO is an open tape architecture developed by a consortium of three world class storage producers. IBM LTO Ultrium drives are designed to provide best-of breed technology. Advanced multi-track recording capabilities, state-of-the-art magneto-resistive (MR) heads, and a sophisticated track following servo system work together to produce extremely high recording densities. New Ultrium 3 drive enhancements include a new dual stage 16-channel head actuator designed to provide precision head alignment to help support higher track density. IBM Copper chip technology and power management designed to provide reduced power consumption. IBM generation 3 drives also feature a larger internal data buffer and 704 data tracks (compared to 512 in the Ultrium 2). IBM and IBM authorized products also provide service and technical support when you invest in an IBM LTO Ultrium solution—including a complete array of servers, software, printers, and storage devices.

Media

You can order media for the IBM 3581 Tape Autoloader at the time of purchase or from IBM Media, Supplies Distribution, and authorized dealers. Call 1-888-IBM-Media (1-888-426-6334) toll-free in the United States and Canada.

IBM TotalStorage 3581 Tape Autoloader at a glance

Model numbers	Ultrium 3 Drive: L38 – LVD Attach; F38 – Fibre Channel Attach Ultrium 2 Drive: L28 – LVD attach; F28 – Fibre Channel attach
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Optional Feature Codes

Remote Management Unit	1660
Rack Mount Option	7003
Bar Code Reader	7004
HVD Converter	3104* (*available for L28 only)

Characteristics

Tape drive type	IBM LTO Ultrium 3 or IBM LTO Ultrium 2
Number of drives	1
Number of tape cartridges	8
Capacity per cartridge ¹	Up to 800GB per cartridge compressed; 400GB native Up to 6.4TB per autoloader compressed; 3.2TB native
Data transfer rate	Up to 80 MBps native with LTO Ultrium 3
Media type	IBM LTO Ultrium 3 or IBM LTO Ultrium 2
Data cartridge	IBM TotalStorage LTO Ultrium 400 GB Data Cartridge (PN 24R1922) IBM TotalStorage LTO Ultrium 200GB Data Cartridge (PN 08L9870) Call 1-888-IBM Media IBM TotalStorage LTO Ultrium 200GB Data Cartridge 5-Pack (PN 71P9159)
Cleaning cartridge	IBM TotalStorage LTO Cleaning Cartridge (PN 35L2086)
Dimensions	3.4"H x 16.6"W x 26.2"D (86 mm x 321 mm x 665 mm) table top 3.5"H x 19"W x 34"D (89 mm x 483 mm x 864 mm) rack-mount
Weight	12.5 lb (5.7kg)
Warranty	3-year warranty, Customer Replacement Unit (CRU) in most countries

Operating environment

Temperature	12° to 35° C (54° to 95° F)
Relative humidity	20% to 80% (non-condensing)
Electrical power	0.7-1.3 amps at 100-240 VAC, 50/60 Hz

Attachment and systems support

The IBM 3581 features LVD Ultra160 SCSI and 2 Gbps Fibre Channel interfaces, attaching to IBM pSeries, IBM iSeries, IBM xSeries, RS/6000, RS/6000 SP, AS/400, and IBM Netfinity® systems, and non-IBM servers, workstations and personal computers.

Operating systems support

Native device driver support is available for AIX®, OS/400®, i5/OS™, Windows® 2000, Windows Server™ 2003, Sun® Solaris®, HP-UX, Red Hat® and United Linux®.

For more information

Contact your IBM representative or
IBM Business Partner or visit

ibm.com/storage/lto



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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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¹ Based on 2:1 Compression