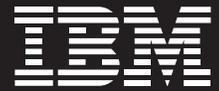


High-capacity, high-performance tape drive for a broad range of computing environments



IBM® TotalStorage® Enterprise Tape Drive 3592



IBM drives innovation in tape technology

For more than 50 years, IBM has paved the way for advancements in tape storage technology. The latest tape innovation from IBM, the TotalStorage Enterprise Tape Drive 3592, offers a design focused on high capacity and performance and high reliability for storing mission-critical data. Whether configured as a stand-alone drive or part of an automated tape library, the 3592 is designed to offer both fast access to data and high capacity in a single drive, helping to reduce the complexity of your tape infrastructure.

Building upon the capabilities of previous IBM tape drives, the 3592 can help address the needs for improved performance, increased capacity and reduced costs.

Highlights

- *Offers native data transfer rate of up to 40MB/sec*
- *Offers native cartridge physical capacity of up to 300GB (up to 900GB with 3:1 compression)*
- *Supports wide variety of platforms, including IBM AIX®, OS/390®, OS/400®, VSE/ESA®, z/OS® and z/VM® operating systems; Microsoft® Windows® 2000, Windows NT® and Windows Server 2003 operating systems; and Linux, HP-UX and Sun Solaris operating systems*
- *Can integrate into many existing tape automation systems such as the IBM Enterprise Tape Library 3494 and StorageTek 9310 Powderhorn Tape Library*
- *Offers high capacity in a small form factor, helping reduce data center floor-space requirements*
- *Designed to support reliability and availability with redundant power supplies that offer automatic failover*

Performance and capacity surpass its predecessors

The IBM TotalStorage Enterprise Tape Drive 3592 surpasses the capabilities of its predecessors by providing up to 5 times the capacity and 2.5 times the data transfer rates of the IBM 3590 series. The 3592 uses cartridges with up to 300GB physical capacity (up to 900GB with 3:1 compression), allowing more data to be stored on fewer tapes, which can help reduce total cost of ownership (TCO) as well as floor-space requirements and cartridge handling time. In automated tape systems, the cartridge handling time can translate to improved automation slot utilization.

In addition to increased capacity over earlier enterprise tape drives, the 3592 provides up to a 40MB/sec native data transfer rate. This improved throughput can help shorten data access time as well as reduce backup and recovery times—enhancing productivity in the data center. By providing faster data access, the 3592 can help address common storage-related issues such as reducing batch windows and the need for high application availability.

The 3592 offers this high-performance, high-capacity storage at the same price point as existing tape drives. And, as data growth accelerates, the resulting potential savings from higher density media and higher performance drives can help data center managers better control costs and more efficiently manage data.

Dual-purpose drive addresses multiple storage needs

By offering such significant advancements in capacity and data transfer rates, the Enterprise Tape Drive 3592 helps address storage requirements that are often filled by two types of drives—those that provide fast access for nearline data recovery and those that provide high capacity for long-term backups. The 3592 drive handles both types of use, helping simplify your tape infrastructure.

The 3592 uses a single media type—the IBM TotalStorage Enterprise Tape Cartridge 3592—which can be reformatted as required.

Multiplatform support helps drive accommodate a broad range of environments

IBM has tested the Enterprise Tape Drive 3592 for interoperability with selected IBM @server™ iSeries™, IBM @server pSeries™, IBM @server xSeries® and IBM @server zSeries® servers as well as with IBM AS/400®, RS/6000® and S/390® servers. In addition, the 3592 can be integrated into the IBM Enterprise Tape Library 3494 and StorageTek 9310 Powderhorn Tape Library or reside in a stand-alone rack.

The 3592 drive is supported on IBM AIX and OS/400 operating systems as well as on HP-UX; Linux; Sun Solaris; and Microsoft Windows 2000, Windows NT and Windows Server 2003 operating systems. For zSeries and S/390 servers, support for the IBM OS/390, VSE/ESA, z/OS and z/VM operating systems is available by using the IBM TotalStorage Enterprise Tape Controller 3590 Model A60 or Enterprise Tape Controller 3592 Model J70. By supporting a broad range of hardware and operating systems, the 3592 drive can help facilitate multiplatform storage consolidation, a common way of reducing IT costs.

Controller enables interoperability with zSeries, S/390 servers

The IBM TotalStorage Enterprise Tape Controller 3592 Model J70 allows the 3592 tape drive to attach to ESCON® and FICON™ interfaces of IBM @server zSeries and S/390 servers. In addition, the 3592 tape drive is backward compatible with the IBM TotalStorage Enterprise Tape Controller 3590 Model A60.

The 3592 Model J70 Controller allows up to eight ESCON server attachments and up to four FICON server attachments while supporting up to twelve 3592 tape drives. For ESCON attachments, the maximum channel speed is 17MB/sec simplex and the maximum distance (direct-attach) is 3 km; for FICON attachments, the speed is 2Gbps full-duplex and the maximum distance (direct-attach) is 10 km.

By supporting multiple tape drives, these controllers allow capacity to be scaled in a cost-effective manner. Tape drives can easily be added or removed as storage needs change. In addition, the controllers can help facilitate drive sharing and tape storage consolidation, which can help simplify your storage environment.

Additional features enhance reliability, data protection

The Enterprise Tape Drive 3592 is designed to help protect mission-critical data. By incorporating error-correction code (ECC) and factory-written servo tracks on the tape cartridge for precise head positioning, the 3592 can help increase data integrity. The IBM TotalStorage Enterprise Tape Cartridge 3592 also is well suited for long term archiving.

Furthermore, the tape drive includes redundant power supplies with automatic failover to help prevent outages, and thus improve system reliability and data availability.

Large capacity in a small form factor can help save space and costs

The large capacity of the Enterprise Tape System 3592 can help significantly reduce the need for additional tape drives as well as cartridges, floor space, shelf space and automation slots. The 3592 also has a smaller form factor than many existing tape drives—including its predecessor, the Enterprise Tape Drive 3590—which allows more drives to reside in a single frame or automation system.

Building on past, planning for future helps provide investment protection

The Enterprise Tape Drive 3592 helps protect your existing investments in tape automation by offering compatibility with the IBM TotalStorage Enterprise Tape Library 3494—in which it can coexist with 3490 and 3590 tape drives—and the StorageTek 9310.

Application Software

Tivoli Storage Manager and other industry-leading compatible software offerings provide storage and tape management software for the 3592 Model J1A. Supporting software and applications must be obtained separately from IBM, IBM Business Partners, or independent software vendors (ISV). For a list of compatible software and additional information, refer to the 3592 Model J1A ISV Matrix at the following Web site: ibm.com/storage/tape/conntrix/

3592 media

The IBM TotalStorage Enterprise Tape Drive 3592 uses the IBM TotalStorage Enterprise Tape Cartridge 3592 as its media. For more information, contact your IBM representative or IBM Business Partner or visit ibm.com/storage/media.

IBM TotalStorage Enterprise Tape Drive 3592 at a glance



Characteristics

Recording technique	Linear Serpentine
Number of tracks	512
Cartridge capacity (with 3:1 compression)	up to 300GB (up to 900GB)
Native drive rate	40MB/sec
Burst data rate with Fibre Channel	200MB/sec (or 2Gbps)
High-speed search	8mps (meters per second)
Warranty	One-year

Physical characteristics

Dimensions	95 mm H x 198 mm W x 467 mm D (3.8 in x 7.8 in x 18.4 in)
Weight	5.7 kg (12 lbs 7 oz)

Operating environment

Temperature	With media: 16° to 32° C (60° to 90° F)
Relative humidity	20% to 80% non-condensing (limited by media)
Wet bulb maximum	23° C (73.4° F)
Heat output	307 BTU/hr
Power requirements	0.1 kVA

Supported systems

IBM @server iSeries, pSeries, xSeries and zSeries servers; IBM AS/400, RS/6000 and S/390 servers; IBM AIX, OS/390, OS/400, VSE/ESA, z/OS and z/VM operating systems; Microsoft Windows 2000, Windows NT and Windows Server 2003 operating systems; Linux, HP-UX and Sun Solaris operating systems; IBM Enterprise Tape Library 3494; StorageTek Powderhorn Tape Library

© Copyright IBM Corporation 2003

IBM Corporation
IBM Systems Group
9000 Rita Road
Tucson, AZ 85744

Produced in the United States of America
09-03

All Rights Reserved

IBM, the IBM logo, the e-business logo, AIX, AS/400, ESCON, eServer, FICON, iSeries, OS/390, OS/400, pSeries, RS/6000, S/390, TotalStorage, VM/ESA, xSeries, z/OS, zSeries and z/VM are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries or both.

Other company, product and service names may be trademarks or service marks of others.

GB equals one billion bytes; when referring to hard drive capacity, accessible capacity may be less.

References in this publication to IBM products, programs or services do not imply that IBM intends to make them available in all countries in which IBM operates. IBM hardware products are manufactured from new parts, or new and used parts. In some cases, the hardware product may not be new and may have been previously installed. Regardless, IBM warranty terms apply.

Performance data contained in this document was obtained in a controlled environment based on the use of specific data. The results that may be obtained in other operating environments may vary significantly. Product data is accurate as of initial publication and is subject to change without notice. Data provided is for information only and does not constitute a warranty of performance.

Competitive Financing Options

IBM Global Financing offers some of the industry's most competitive rates for a wide range of IBM products and services, including the Enterprise Tape Drive 3592, for the duration of the financing term. For more information, please visit ibm.com/financing.

For more information

For more information, contact your IBM representative or IBM Business Partner. In the United States or Canada, you also can call IBM Direct: 1-800-IBM-CALL (1-800-426-2255). Or visit ibm.com/totalstorage.