

IBM Total Storage 7133 Serial Disk System Advanced Models D40 and T40



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Highlights

- Provides outstanding disk storage performance with advanced SSA bandwidth of 160MB/sec
- Features high-performance 72.8GB, 36.4GB, 18.2GB, and 9.1GB 10,000 RPM disk drives
- Provides high capacity—up to 1.16TB per tower or drawer and 7.0TB per host adapter
- Enables disk sharing through simultaneous attachment of multiple UNIX®, Windows NT®, and Novell NetWare® hosts to the IBM 7133 Serial Disk System

- Provides high availability with redundant data paths, redundant cooling units, and two power supplies
- Facilitates remote mirroring—up to 10km connection distances—with the Advanced SSA Optical Extender
- Simplifies storage management when used with the IBM StorWatch™ Serial Storage Expert

IBM TotalStorage 7133 Serial Disk System Advanced Models D40 and T40

The IBM Total Storage[™] 7133 Serial Disk System Advanced Models D40 and T40 provide highly available storage for UNIX, Windows NT, and Novell NetWare servers. By implementing a powerful industry-standard serial technology, the 7133 Advanced Models D40 and T40 provide outstanding performance, availability, and attachability.

The rack-mountable 7133 Advanced Model D40 drawer is designed for integration into a supported 19-inch rack. The 7133 Advanced Model T40 is a free-standing deskside tower unit.

Both 7133 Advanced Models can be populated with 72.8GB, 36.4GB, 18.2GB, and 9.1GB disk drives. Drive capacities can be intermixed, providing the flexibility to build storage capacity from gigabytes to terabytes. The 7133 Advanced Models can be intermixed in the same loop with other models of the 7133 (Models 010, 020, 500, 600) as well as with the 7131-405².

SSA multi-host attachment

Capable of connecting and sharing storage with multiple UNIX, Windows NT, and Novell NetWare hosts, the 7133 Serial Disk System is ideally suited for clustered server environments. Servers attach to IBM 7133s via SSA host adapters or via SCSI or Fibre Channel (FC) host adapters combined with IBM 2108 or 7139 routers. These adapters and routers provide flexibility and offer RAID functions for increased data protection and availability.

High performance

The 7133 Advanced Models provide out-standing performance for multiple, concurrent, full-duplex I/O operations. Unlike SCSI bus configurations, SSA devices such as the 7133 Serial Disk System are configured in loops and allow multiple concurrent operations to occur in separate sections of these loops. This results in high overall throughput and superior utilization of the 160MB/sec bandwidth of the 7133 Advanced Models. This SSA capability is referred to as spatial reuse.

IBM TotalStorage 7133 Serial Disk System Advanced Models D40 and T40 at a glance

Models	Rack-mountable D40/Deskside T40
9.1GB disks (10,000 RPM)	36.4GB to 145.6GB
18.2GB disks (10,000 RPM)	72.8GB to 291.2GB
36.4GB disks (10,000 RPM)	145.6GB to 582.4GB
72.8GB disks (10,000 RPM)	291.2GB to 1.16TB
Capacity (per adapter)	Up to 96 drives (48/loop)

Physical specifications

Dimensions (H, W, D)	D40: 171 mm x 444 mm x 737 mm T40: 610 mm x 210 mm x 861 mm
Weight (maximum configuration)	D40: 118.0 lb (53.5kg) T40: 168.0 lb (76.2kg)

Operating environment

Temperature	50° to 104° F (10° to 40° C)
Relative humidity	8% to 80%
Maximum wet bulb	80.6° F (27.0° C)
Power requirements	20 to 400 watts
1 Ower requirements	20 to 400 watts
Warranty	One year limited

Supported systems¹

Selected UNIX and Intel®-based servers

High availability

IBM SSA technology features significant availability advantages over SCSI-based technology. If a cable failure occurs on the loop, the SSA adapter automatically continues accessing disks through an alternate path. If a disk failure occurs, the hot-swappable drives can be removed and replaced without disrupting the communication between the adapter and other disks on the loop.

To further increase availability, the 7133 Advanced Models monitor and provide detailed information on the status of power, cooling, and disk drives.

Investment protection

The 7133 Serial Disk System helps protect investments in existing equipment while providing a clear path for growth. Existing SCSI-based applications should migrate easily, because SSA is compatible with the SCSI command set. The 7133 Serial Disk System is a key building block in the IBM Seascape™ architecture, a blueprint for innovative storage solutions.

To facilitate server consolidation, IBM supports the relocation of existing 7133 Advanced Model D40s into the IBM TotalStorage Enterprise Storage Server™.

For more information

For more information, contact your IBM representative or IBM Business Partner. Or visit ibm.com/storage/disk.



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 $^{2}\mbox{The IBM}$ 7131-405 does not support the use of IBM optical extenders.

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