



# Call for Backup

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*With the amount of data being stored on your company's network increasing exponentially, you need efficient back-up hardware and software that can keep up with the veritable explosion of data. Fortunately, you have many different options when choosing a method to back up your company's network data. The question is, of course, "Which products are best suited for your current network environment?"*

*If your company is like most companies, your IT budget has taken a beating, and you are looking for ways to cut costs. Today, the most cost-efficient method of backing up large amounts of data is tape, whether it's Digital Linear Tape (DLT), Mammoth 2, or Linear Tape Open (LTO). The products highlighted in this article give you a sample of the options that are available for backing up your company's network using tape technologies. (If you need to back up your laptop, see "Backing Up Laptops.")*

*For more information about any of the products featured in this article, visit the vendor's web site. You may also want to visit Novell's developer web site (<http://developer.novell.com/solutions>) to view a list of back-up products that are Novell Yes, Tested and Approved.*

## IBM ULTRIUM EXTERNAL TAPE DRIVE TX200

The Ultrium External Tape Drive TX200 (from the StorageSmart family of IBM) is the foundation of a new family of scalable tape solutions from IBM Corp. The Ultrium External Tape Drive TX200 can handle the back-up, archive, and disaster-recovery storage needs for a wide range of computer systems.

The Ultrium External Tape Drive TX200 has a capacity of up to 200 GB. As your company's back-up needs grow, you can move to the StorageSmart Ultrium Tape Autoloader SL7 (data capacity of up to 1.4 TB). You can also choose the StorageSmart Ultrium Scalable Tape

Library SL72 (data capacity of up to 14.4 TB) or the StorageSmart UltraScalable Tape Library SL7500 (data capacity of up to 496.2 TB). The tape media is interchangeable among all four devices.

The Ultrium External Tape Drive TX200 includes the following features:

- Native Transfer Rate: 15 MBps
- Compressed Transfer Rate: 30 MBps
- Native Capacity: 100 GB
- Compressed Capacity: 200 GB
- Tape Drive Type: LTO drive
- Dimensions: 5.75 in. H x 6.74 in. W x 13.11 in. D (14.6 cm x 17.1 cm x 33.3 cm)
- Weight: 14.3 lb. (6.6 kg)

For more information about the Ultrium External Tape Drive TX200, visit [www.storage.ibm.com/storagesmart/lto/tx200data.htm](http://www.storage.ibm.com/storagesmart/lto/tx200data.htm).

## BENCHMARK VALUSMART TAPE 80

Benchmark Storage Innovations Inc. recently released the ValuSmart Tape 80, the industry's first half-high DLT tape drive. The ValuSmart Tape 80 is read-compatible with the DLTi and DLT4000 and uses DLTtape IV media. In addition, Quantum Corp.'s Super DLTtape will back-read data written on the ValuSmart Tape 80, extending DLT scalability throughout your company's enterprise.

ValuSmart Tape 80 includes the following features:

- Native Transfer Rate: 3 MBps
- Compressed Transfer Rate: 6 MBps
- Native Capacity: 40 GB
- Compressed Capacity: 80 GB
- Burst Transfer Rate: 16 MBps
- Average File Access: 68 seconds
- Interface: wide ultra SCSI-2, low voltage differential (LVD)
- Number of Tracks: 168 tracks (84 logical track pairs)
- Recording Density: 123 kbp
- Track Density: 336 tracks per inch (tpi)
- Encoding Method: RLL
- Data Compression: DLZ
- Data Cartridges: DLTtape IV
- Media Durability: 1,000,000 head passes
- Mean Time Before Failure (MTBF): 200,000 hours (100 percent duty cycle, excluding head life)
- Media Life: Archive Storage 30 years with less than 5 percent loss in demagnetization
- Height: 1.725 in. (43.82 mm) with bezel/1.625 in. (41.70 mm) without bezel
- Width: 5.834 in. (148.18 mm) with bezel/5.750 in. (146.05 mm) without bezel
- Weight: 3.2 lb. (1.45 kg)

For more information about the ValuSmart Tape 80, visit [www.4benchmark.com](http://www.4benchmark.com).

## Backing Up Laptops

Along with backing up the data on your company's network, you must also back up the data on your company's laptops. CMS offers a solution that will secure the important information being stored on laptops: the Automatic Backup Solution (ABS).

After installation, simply turn the laptop's power on, and the system is instantly available for use. Each time the ABS unit is plugged in or launched, a backup is automatically initiated. The size of a deck of playing cards, the ABS offers convenient instant-disaster recovery and a bootable, removable hard drive.

To protect the data on your laptop, the ABS unit includes password protection capabilities. CMS also offers a USB-to-PCMCIA converter, which enables you

to transfer data from your laptop to a desktop PC.

Because the ABS stores data in native file format, you can also use the ABS as an external hard drive on any laptop. When an ABS is plugged in to another computer, the unit is recognized simply as an additional hard drive with all your data available.

The ABS includes the following features:

- Data Transfer: 75 MBpm
- Interface: PCMCIA
- Capacities: 6 GB, 10 GB, 20 GB, 30 GB
- Dimensions: 1.25 in. x 5 in. x 3 in.
- Weight: 7 oz.
- Warranty: three years

For more information about the CMS ABS, visit [www.cmsproducts.com](http://www.cmsproducts.com). ●

## TANDBERG DATA SDLT220

Building on the DLTtape platform and magnetic tape technology, the SDLT220 from Tandberg Data features 110 GB of storage and a sustained data transfer rate of 11 MBps in native mode.

The SDLT220 is designed to provide data backup and archive storage for mid-range systems in tape library automation and large corporate departments. Future models will also be back-read compatible with DLT4000, DLT7000, DLT8000, and DLT1 drives using DLT-tape IV cartridge media.

The SDLT220 includes the following features:

- Native Transfer Rate: 11 MBps
- Compressed Transfer Rate: 22 MBps
- Native Capacity: 110 GB
- Compressed Capacity: 220 GB
- Burst Transfer Rate: 80 MBps
- Average File Access: 70 seconds
- Interface: LVD, ultra 2 SCSI/HVD, ultra SCSI
- Number of Tracks: 448 serial serpentine tracks (224 logical track pairs)
- Recording Density: 133 kbp
- Track Density: 896 tpi
- Encoding Method: PRML
- Data Compression: DLZ
- Data Cartridges: SDLTtape I
- Media Durability: 1,000,000 head passes
- MTBF: 250,000 hours at 100 percent duty cycle

- Media Life: 30 years with less than 10 percent loss in demagnetization
- Height: 6.30 in. (160.02 mm)
- Width: 6.9 in. (175.26 mm)
- Weight: 13 lb., 13 oz (9.27 kg)

For more information about the SDLT220, visit [www.tandberg.com](http://www.tandberg.com).

## EXABYTE X200

The X200 from Exabyte Corp. accommodates from two to 10 Mammoth-2 (M2) or Mammoth tape drives and from 40 to 200 Exabyte 225m AME data cartridges with SmartClean. (This cleaning material removes elements that can cause read/write errors.) All Exabyte libraries feature an advanced and durable robotics system as well as a user-friendly interface and modular design.

The X200 supports native Fibre Channel and serverless backup (which eliminates server cycles from backup) with extended copy (e-copy) in the M2 drive. In addition, the Exabyte X200 comes with native Fibre Channel of SCSI connectivity.

The X200 includes the following features:

- Native Transfer Rate: 432 GBph
- Native Capacity: 12,288 GB
- Drives: Mammoth, Mammoth-2
- Cartridge Number: 200
- Access Time: 10 seconds
- Interface: wide, low voltage

differential; wide, high voltage differential

- Reliability: 1,000,000 mean cycles between failures
- MTBF: 250,000 hours
- Standalone: 56.1 in. (142.5 cm) x 19.0 in. (48.3 cm) x 29.0 in. (73.7 cm)
- Width at Base: 27.0 in. (68.6 cm)
- Rack-mount: 52.5 in. (133.3 cm) x 19.0 in. (48.3 cm) x 29.0 in. (73.6 cm)
- Weight: 371 lb. (standalone)

For more information about the Exabyte X200, visit [www.exabyte.com/products/products/x200.cfm](http://www.exabyte.com/products/products/x200.cfm).

## OVERLAND NEO SERIES LXN2000

You can configure the Neo Series LXN2000 from Overland Data Inc. with redundant, hot-swappable drives, power supplies, and robotics. Overland Data uses Distributed Robotic Architecture (DRA) in the Neo Series LXN2000. This architecture provides separate robotics for each library module, much like the separate drive spindles in a Redundant Array of Independent Disks (RAID). Each Neo Series LXN2000 includes a bar-code reader that enables a rapid cartridge inventory.

The DRA architecture enables the Neo Series LXN2000's robotics to continue to operate during possible fault conditions. In multimodule configurations, one Neo Series LXN2000 module is configured as the master controller of the system. The master controller module has a "fail-over" mode whereby another Neo Series LXN2000 module in the system can take over as the standby master controller.

- Native Transfer Rate: 21.6 GBph
- Compressed Transfer Rate: 43.2 GBph
- Native Capacity: 1.04 TB
- Compressed Capacity: 2.08 TB
- Drive: DLT 8000
- Number of Drives: 0, 1, or 2
- Number of Cartridges: 26
- Interface: LVD/SE or HVD ultra wide SCSI, Fibre Channel
- Dimensions: 8.75 in. x 16 in. x 27 in. (22.2 cm x 42.4 cm x 68.5 cm)
- Accessories Included: 1 DLTtape IV cartridge, left and right cartridge, magazines, 1 cleaning cartridge, SCSI drive daisy-chain, cables, SCSI terminator, and bar-code reader

For more information about the Neo Series LXN2000, visit [www.ovrland.com](http://www.ovrland.com). ●