

## **LTO Ultrium 2 Half-Height Tape Drive**

### **The Missing Link For SMB Tape Drives To Reach Enterprise Level Requirements**

#### **Executive Summary:**

LTO technology based tape drives have typically been used by large enterprise level companies who require advanced features, higher capacity and performance. The rapid growth of mission-critical digital content throughout all segments of business, the focus on disaster recovery strategies and the increased burden of government regulated data retention policies has highlighted the need within the SMB (Small and Medium Business) market segment for more sophisticated backup solutions. The high price tag for these enterprise devices has prohibited SMB customers from incorporating LTO tape drives into their storage framework. The recent introduction of the Tandberg 420LTO half-height LTO2 tape drive has now made the entry into LTO technology based data protection solutions affordable for this segment. When compared with the alternatives available today, this new drive clearly stands out, bringing great value, high performance, world renowned reliability and the lowest TCO to the SMB market.

#### **Introduction:**

Small and Medium Business (SMB) needs have evolved rapidly over the past few years as the internet has stressed the need for digital data use and server uptime and, when needed, recovery. The spread of viruses and worms and stricter data retention policies has only increased the sensitivity to data loss. There have been many studies that show the majority of businesses that suffer severe or complete data loss will go out-of-business soon thereafter. The most common protection against data loss and downtime due to computer problems is to back-up the servers and their data. This is true for the Enterprise level companies as well as the SMBs.

Tandberg Data recognized the need of the SMB market to expand their capabilities when it comes to data storage and protection. In order to meet this need Tandberg has become the fourth manufacturer of the LTO format tape drive. Joining IBM, HP and Quantum in this area is no leap for Tandberg. Tandberg Data has been designing and manufacturing data tape drives for over 25 years and is world renowned for their quality and reliability. Tandberg leaned heavily on this vast experience to produce the best performing LTO2 drive in the most compact package using the least power of any LTO

drive available today. By using the LTO format, Tandberg has guaranteed the investment protection of its users with full interoperability as designated by the LTO consortium specifications. The Tandberg Data 420LTO offers an upgrade path to those who have already invested in LTO1 technology and guarantees compatibility with LTO3 and future generations of LTO. The open format of LTO technology ensures compatibility and provides greater investment protection.

### **An Overview of Linear Tape Open:**

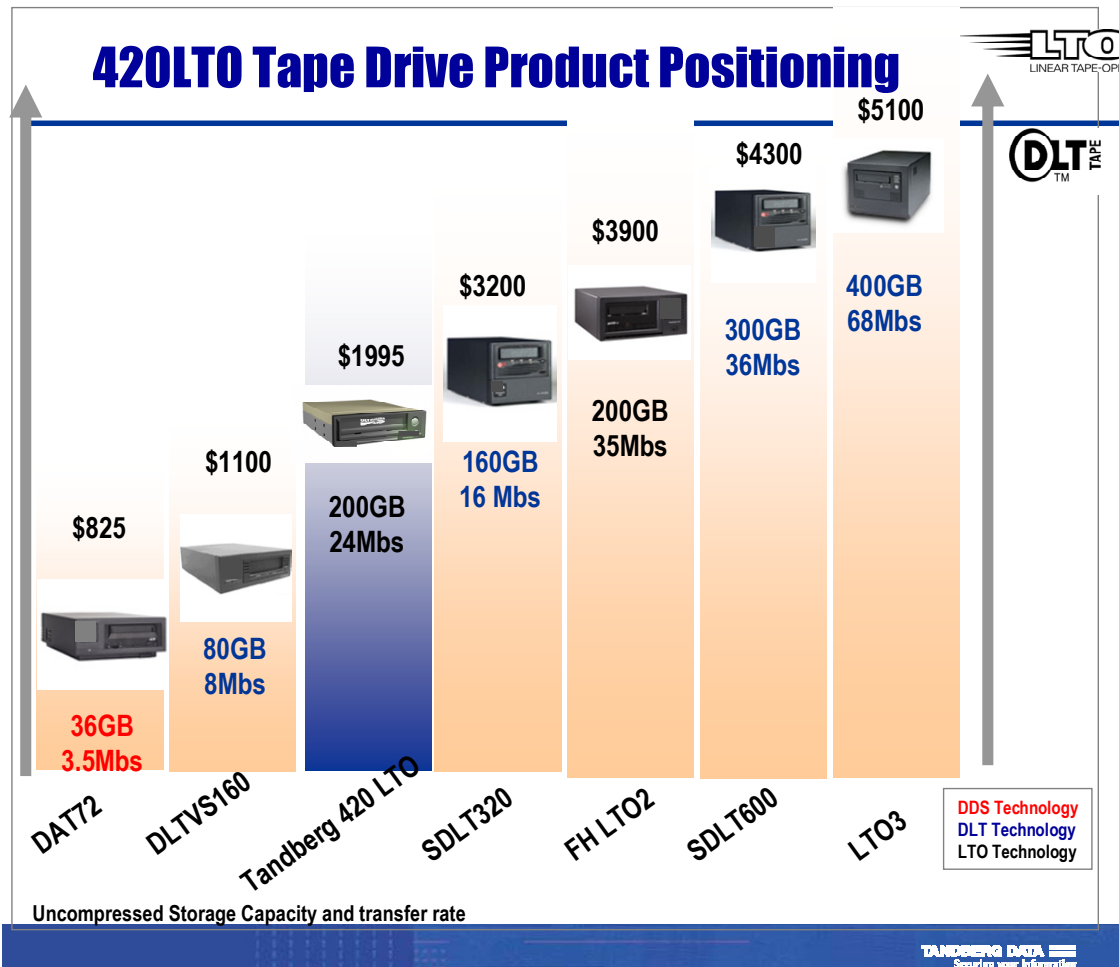
Announced in November 1997 by Certance (formerly Seagate Removable Storage Solutions), Hewlett-Packard, and IBM, the LTO open specification was made to address a set of common tape storage needs that were perceived in the marketplace. Prior to LTO the market was generally dominated by single-source, proprietary technologies. These single-source technologies posed serious concerns for large system and server OEMs selling them. Product allocation and competitive pricing were the foremost concerns since the product was controlled by a single vendor. An open specification with multi-vendor support and products was the answer to these concerns. It was believed that this method would produce competition between suppliers for pricing, availability, quality, service and even development. The open specification also included interchange capabilities between all the licensed manufacturers of LTO thereby ensuring that OEMs and end-users had a choice of tape drive and cartridge suppliers from which to buy. For investment protection the LTO roadmap now includes 6 generations of LTO extending many years into the future. The Linear Tape-Open specification includes drives and cartridges and no manufacturer is allowed to use the LTO symbol or advertise LTO compliance without meeting the test and interchange specifications put forth by the consortium and tested by a consortium specified third party testing facility.

The bottom line is that the end-user is guaranteed investment protection and long life of the LTO products that he purchases.

### **The Tandberg 420LTO (Half-Height LTO2):**

Small to Medium businesses face exploding data growth and thus more complex storage management issues. Loss of this data more often than not means loss of business and ultimate business failure. Some of these companies look to NAS and SAN products to consolidate their storage for ease of use and manageability. The consolidation of information, while very cost effective, can also be catastrophic if this centralized repository of business critical information is compromised, either by mechanical / electrical failure, virus, or even human error. Data consolidation lends itself extremely well to the use of centralized backup, i.e. a high performance tape drive or even an autoloader or small tape library. The backup, while right next to the disk storage in the network virtual sense, can be far away physically and the media removed to another location remote from even the tape backup hardware, thus allowing multiple levels of protection against compromise. In the recent past, the cost of these tape drives and automation units have been very high, and out of reach for many SMBs.

The affordable Tandberg 420LTO now gives SMB customers access to this multiple layered data protection strategy.



Prices shown are estimated street prices

As shown above the Tandberg 420LTO outperforms it's nearest competitors with greater capacity and faster transfer rates and takes a huge leap in performance and capacity from its nearest competitor and even outperforms, with higher capacity per cartridge, the more than 50% more expensive SDLT320.

### Total cost of Ownership (TCO):

The total cost of ownership is a key component in purchasing decisions. The costs per gigabyte, along with overall reliability are both major elements of TCO. The Tandberg 420LTO provides the lowest cost per gigabyte of any tape drive in its class. Consider that you would need almost 20% more SDLT320 data cartridges to achieve the same capacity as LTO2. Users of DLT VS160 tape drives would need 250% more cartridges. There is a clear cost benefit of a higher capacity cartridge and if customers require archiving, space issues also come into play. Limited backup windows in the typical 24/7 business environment make performance a critical decision factor to the SMB market.

The 420LTO is a full 50% faster than the more expensive SDLT320 and 300% faster than the DLTVS160!

Enterprise-level features and benefits, typical of higher priced LTO devices, were not sacrificed on the 420LTO to achieve an affordable entry to LTO2 technology based solutions. In fact, Tandberg has added features and functions that further ensure the reliability, performance and longevity of the 420LTO. Automatic speed matching, in-line hardware data compression, media management, thermal sensors, patented tape threading, patented fast-seek algorithms, high speed search and rewind, low power consumption (the lowest of any LTO product produced today) all add to make the Tandberg Data 420LTO an incredible value.

The Tandberg 420LTO is very compact and will fit into any standard half height bay allowing it to be mounted directly into existing and new servers from any major manufacturer. All of these features and functions contribute to making the Tandberg 420LTO the most cost effective, lowest TCO, high performance tape back-up unit available today.

**Conclusion:**

Recognizing the needs of the growing SMB market Tandberg has tapped into its more than 25 years of tape experience and combined that with the open specification of LTO to produce the Tandberg Data 420LTO. Leveraging Tandberg's world renowned quality and reliability they have brought advanced features and benefits within the reach of the SMB market at an extremely affordable cost.

For more information please visit [www.tandberg.com](http://www.tandberg.com) and [www.420LTO.com](http://www.420LTO.com).