



TEMPEST Level I Dual LTO-Tape Rackmount Storage System

Model - DAT-401 (Level I)

Product Data

Description

API's DAT-401 TEMPEST Level I Rackmount Storage System is capable of holding up to two HP StorageWorks LTO-4 Ultrium 1760 SAS tape drives. The HP StorageWorks LTO-4 Ultrium 1760 Tape Drive is HP's fourth-generation of half-height LTO tape drive technology capable of storing up to 1.6 TB per cartridge in under 3 hours. HP Ultrium drives are designed for server customers in direct attached storage (DAS) environments where hard disk and system bottlenecks can impede data transfer rates. To further protect the most sensitive data, AES 256-bit hardware data encryption provides easy-to-enable security to prevent unauthorized access of tape cartridges. By using LTO-4 hardware data encryption, not only is data fully capable of being compressed therefore maximizing capacity, encrypted backups are completed without a loss in performance. Capable of data transfer rates up to 160 MB/sec, HP's exclusive Data Rate Matching feature further optimizes performance by matching speed of host to keep drives streaming and enabling the fastest performance of any tape drive in the industry. The Ultrium 1760 provides investment protection with full read and write support with LTO-4 and LTO-3 media, and the ability to read LTO-2 cartridge. By doubling the capacity of previous generation Ultrium drives, HP customers now require fewer data cartridges to meet their storage needs, significantly reducing their IT costs and increasing their ROI.

Features

- Certified to NSTISSAM TEMPEST/1-92 Level I and NATO SDIP-27 A standard (formerly AMSG 720B)
- Delivers a capacity of 1.6 TB of compressed data on a single cartridge.
- Fastest half-height LTO drive with a compressed data transfer rate of 160 MB/sec.
- AES 256-bit hardware data encryption prevents unauthorized access of tape cartridges
- Support WORM (Write-Once, Read-Many) media for meeting regulatory compliance
- SAS interfaces
- Industry leading three-year warranty



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Specifications

Capacity

Native 800 GB
Compressed (assumes 2:1 data compression). 1.6 TB

Maximum capacity of 3.2TB when using two Ultrium 1760 SAS tape drives

Performance

Sustained transfer rate, native 80 MB/s
Sustained transfer rate, compressed 160 MB/s
Burst transfer rate 300 MB/s (with 3Gb/sec SAS)
Data rate matching range 33-80 MB/s (native)
Data access time (from BOT) 64 s typical for a 800 GB tape (native)
Average load time 17 s
Average unload time 16 s
Rewind time from EOT 121 s (200 GB tape)

Media Compatibility

LTO Ultrium 2 (Read only);
LTO Ultrium 3 (Read and Write)

Tape Format

Recording method 16-channel linear serpentine
Recording format LTO Ultrium 4/LTO Ultrium 3 (for 400 GB tape)
Data compression LTO DC dual mode compression (an enhanced version of ALDC)
Error detection/correction Reed-Solomon
Read channel technology Partial Response Maximum Likelihood (PRML)

Power Specifications

Power requirements, External . . . 100 to 240 VAC, 50-60 Hz, auto-ranging, 0.7A max
Power consumption 13 Watts idle, 20 Watts typical, 33 Watts max

Physical Specifications

Height (2U) 3.5 in. (8.89 cm)
Width 17.12 in. (43.7 cm)
Depth 15.28 in. (38.8 cm)
Weight 10 lbs. (4.5 kg)

Operating Environment

Temperature
Operating 50° F to 95° F (10° C to 40° C) at a minimum of 6CFM airflow
Storage -40° F to 151° F (-40° C to 66° C)
Humidity
Operating 20-80%
Storage 10-95%

Warranty

3-year on parts and labor

Advanced Programs, Inc. is an NSA-endorsed test services facility and an NSA-endorsed TEMPEST manufacturing facility.

Technical Specifications are subject to change without notice. U.S.A. export controls apply to these products.
E & OE - 3/5/09



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