

Quantum®

LTO-4 HH



> DATASHEET

High Performance. Half the Size. Incredible Value.

Quantum's LTO-4 HH tape drive is a half-height tape drive that offers high capacity, 1.6TB (2:1 compressed) and performance, 576GB/hr (2:1 compressed), all in a space-saving and energy-efficient half-height format. Quantum's LTO-4 HH tape drive also provides native AES 256-bit hardware data encryption, providing easy-to-enable security to protect the most sensitive data and prevent unauthorized access of tape cartridges. By using LTO-4 encryption, not only is data fully capable of being compressed, therefore maximizing capacity, but encrypted backups are also completed without a loss in performance.

Quantum's LTO-4 HH tape drives protect your investment by providing backward-read-and-write compatibility with LTO-3 media and backward-read compatibility with LTO-2 media. With ultimate reliability and ease of use in mind, even at a 100% duty cycle, Quantum's rugged design builds on superior LTO technology and adds advanced features to create a new level of data protection. Quantum's LTO-4 HH tape drives employ dynamic data rate matching to adjust to the speed of the host, reducing wear-and-tear on both drive and media and increasing performance, even on slower hosts. The drive also features an ultra-durable soft-load feature that automatically positions the data cartridge, and the highly reliable leader-capture mechanism virtually eliminates lost leaders, increasing the success of your backup and restore operations.

Quantum's LTO-4 HH is available in a server-installable internal, convenient tabletop or space-efficient rackmount configuration. Quantum "Backup Ready" certified solutions allow you to go from box to backup in minutes with the highly reliable Quantum LTO-4 HH tape drive and durable Quantum media.

FEATURES & BENEFITS

Capacity

Capacity of 1.6TB – 2X LTO-3 HH.

Value

Cost-effective half-height design allows for more attractive price point versus full-height drives.

Format/Security

Space-saving half-height format, AES 256-bit native encryption, WORM capability.

Compatibility

Investment protection with backward-read/write compatibility to LTO-3 media and backward-read compatibility to LTO-2 media.

Warranty

"Backup Ready" Solution with 3-year rapid exchange warranty.



> LEARN MORE:
www.quantum.com/lto

TECHNICAL SPECIFICATIONS

DRIVE CAPACITY AND PERFORMANCE

Drive Type	Interface	Cartridge Capacity Native/Compressed (GB)	Drive Throughput Native/Compressed (MB/sec)
LTO-4 HH	3GB/sec SAS	800 / 1600	120 / 240
LTO-4 HH	Ultra 320 SCSI	800 / 1600	80 / 160

Configurations: Internal Bare, Internal Kit, Tabletop Kit and 1U Rackmount

Interface Connector Type
 3GB/s SAS: SFF8482 (Internal), SFF8088 (Tabletop and Rack)
 Ultra 320 SCSI: HD68 LVDS

Burst Transfer Rate (MB/sec)
 SAS (max): 550
 SCSI (max): 320

Data Rate Matching Range: 33 to 80MB/sec native

Data Buffer Size
 128MB SCSI
 256MB SAS

TAPE/FORMAT COMPATIBILITY

LTO-4 (read/write): 800GB native capacity
LTO-4 WORM (read/write): 800GB native capacity
LTO-3 (read/write): 400GB native capacity
LTO-3 WORM (read/write): 400GB native capacity
LTO-2 (read/write): 200GB native capacity

RELIABILITY

MTBF (hours): 250,000 @ 100% duty cycle
Load/Unload Life: 50,000 cycles
Non-recoverable Error Rate: 1×10^{17} bits (non-media error, clean drive)

PHYSICAL SPECIFICATIONS

LTO-4 HH SCSI				
Form Factor	Internal w/o bezel	Internal w/ bezel	Tabletop	1U Rackmount
Width (in/mm)	5.75 / 146.1	5.88 / 149.3	8.8 / 223.0	19.0 / 483.0
Height (in/mm)	1.63 / 41.7	1.69 / 42.9	3.0 / 77.0	1.75 / 44.4
Length (in/mm)	8.11 / 206.0	8.3 / 211.0	11.7 / 295.0	25.25 / 641.0
Weight (lbs/kg)	3.0 / 1.36	3.09 / 1.4	10.3 / 4.65	20.0 / 9.1

LTO-4 HH SAS				
Form Factor	Internal w/o bezel	Internal w/ bezel	Tabletop	1U Rackmount
Width (in/mm)	5.7 / 146.0	5.8 / 148.0	8.4 / 213.0	19.0 / 483.0
Height (in/mm)	1.6 / 41.0	1.7 / 42.7	2.3 / 58.0	1.75 / 44.4
Length (in/mm)	8.1 / 205.0	8.3 / 210.0	13.0 / 332.0	20.0 / 9.1
Weight (lbs/kg)	3.55 / 1.61	3.57 / 1.62	9.4 / 4.3	20.0 / 9.1

ENVIRONMENTAL

OPERATING
Temperature °F (°C): 50° to 104° (10° to 40°) @ 5 CFM
Humidity: 20% to 80% (non-condensing)
Altitude (maximum): 13,000 ft (4,000 m)

NON-OPERATING
Temperature °F (°C): -40° to 150° (-40° to 66°) excluding media
Humidity: 10% to 95% (non-condensing)

VOLTAGE (V): +5VDC, +12VDC (internal); 100-240 VAC 50/60 Hz (external)

POWER CONSUMPTION LTO-4 HH SCSI
Idle: 8 Watts
Typical: 20 Watts
Peak: 33 Watts

POWER CONSUMPTION LTO-4 HH SAS
Idle: 6.5 Watts
Typical: 24.7 Watts
Peak: 69 Watts

TAPE FORMAT SPECIFICATIONS

Recording Format: LTO Ultrium 4
Recording Density: 13.52KB/mm
Encoding Method: 16 Channel PRML
Data Compression: ALDC

COMPATIBILITY

Operating Systems: Microsoft Windows, Sun Solaris, Red Hat Linux, SuSE Linux
Software/Hardware: Go to www.quantum.com for the most up-to-date tested solutions

TAPE SPECIFICATIONS

Cartridge Dimensions (LxWxH): 4" x 4.15" x .85"
 (102mm x 105.4mm x 21.5mm)
Archive Storage: 30 years
Durability: 20,000 load/unload cycles

WARRANTY

Tape: Limited lifetime
Tape Drive: 3 years limited with Rapid Exchange

Model Numbers and Descriptions

TC-L42AX-BR-B LTO-4 HH, Internal Bare, SCSI, black bezel
TC-L42AX-EY-B LTO-4 HH, Internal Kit, SCSI, black bezel
TC-L42BX-EY-B LTO-4 HH, Tabletop Kit, SCSI, black
TC-L43CX-EY-B LTO-4 HH, 1U Rackmount, SCSI, black
TC-L42AN-BR-C LTO-4 HH, Internal Bare, SAS, black bezel

TC-L42AN-EY-C LTO-4 HH, Internal Kit, SAS, black bezel
TC-L42AN-EZ-C LTO-4 HH, Internal Kit, SAS with HBA, black bezel
TC-L42BN-EY-C LTO-4 HH, Tabletop Kit, SAS, black
TC-L42BN-EZ-C LTO-4 HH, Tabletop Kit, SAS with HBA, black
TC-L43CN-EY-B LTO-4 HH, 1U Rackmount, SAS, black

To learn more about Quantum LTO, please visit
www.quantum.com/lt0

©2014 Quantum Corporation [NYSE:QTM]. All rights reserved. Quantum and the Quantum logo are registered trademarks of Quantum Corporation and its affiliates in the United States and/or other countries. Linear Tape-Open, LTO, the LTO Logo, Ultrium and the Ultrium Logo are registered trademarks of HP, IBM and Quantum in the US and other countries. All other trademarks are the property of their respective owners.

Quantum
 BE CERTAIN

www.quantum.com • 800-677-6268

DS00429A-v03 Sept 2014