



LTO-5

Quantum's Latest LTO
Tape Drive – Best in Class
Performance and Reliability.

Quantum's LTO-5 tape drive delivers tremendous capacity and performance at an affordable price. In addition, it uses less power on average than LTO-4 drives, making it a "greener" and more energy efficient solution.

The drive has a native capacity of up to 1.5TB and a native transfer rate of 140MB/sec. It uses the latest industry-standard interface – 6 Gb/sec Serial Attached SCSI (SAS) – to allow for easy installation and integration into your data centre. Quantum's LTO-5 tape drives also protect your investment by providing backward read and write compatibility with LTO-4 media and backward read compatibility with LTO-3 media.

Quantum's FastSense™ variable speed feature monitors the speed of incoming data and matches the speed at which the drive streams data. The result is that Quantum's LTO-5 tape drives complete backups faster and more efficiently. In addition, Quantum also provides exclusive features like SmartVerify™ to concurrently verify all data written to the tape, virtually eliminating the time consuming verify pass during backup operations.

And with Quantum's LTO-5 drives, you can be assured of security with AES 256-bit data encryption. Encryption on LTO-5 tape drives is hardware based, allowing for the highest level of security without any loss of performance during the encryption process. In addition, LTO-5 is WORM capable when used with LTO WORM data cartridges. And the new partitioning functionality allows tape-aware file searches to address the growing needs of marketplace segments such as Rich media.

Quantum's LTO-5 is available in a server-installable internal, convenient tabletop or rackmount half-height or full-height configuration. Quantum "Backup Ready" certified solutions allow you to go from box-to-backup in minutes with the highly reliable Quantum LTO-5 tape drive, world-class Backup Exec™ QuickStart software and durable Quantum media.

TAPE DRIVE

UP TO 1.5TB NATIVE CAPACITY

UP TO 140MB/SEC NATIVE
TRANSFER RATE

AES 256-BIT DATA ENCRYPTION
SECURITY AND PARTITIONING

"BACKUP READY" SOLUTION WITH
3-YEAR RAPID EXCHANGE WARRANTY

FEATURES AND BENEFITS

- **Capacity** – Native capacity of 1.5TB – Nearly 2X over LTO-4 and 4X over LTO-3
- **Performance** – Native transfer rates of 140MB/sec
- **Reliability** – Enterprise-class reliability in a cost-effective midrange tape drive
- **Value** – Lower Total Cost of Ownership (TCO) versus current LTO tape drives
- **Format/Security** – AES 256-bit native encryption, WORM capability and new partitioning feature
- **Compatibility** – Investment protection with backward read/write compatibility to LTO-4 media and backward read compatibility to LTO-3 media

DRIVE CAPACITY AND PERFORMANCE

Drive Type	Interface	Cartridge Capacity Native/Compressed (GB)	Drive Throughput Native/Compressed (MB/sec)	Average File Access Time (sec)
LTO-5	6 Gb/sec SAS	1500 / 3000	140 / 280	52

Configurations: Internal Bare, Internal Kit, Tabletop Kit and rackmount (full-height) and 1U rackmount (half-height)

Interface Connector Type:
6 Gb/s SAS
SFF8482 w/integrated power (Internal), SFF8088 (Tabletop and Rack)

Burst Transfer Rate (MB/sec):
SAS (max) 600

Data Buffer Size: 256 MB

TAPE/FORMAT COMPATIBILITY

LTO-5 (read/write):	1500GB native capacity
LTO-5 WORM (read/write):	1500GB native capacity
LTO-4 (read/write):	800GB native capacity
LTO-4 WORM (read/write):	800GB native capacity
LTO-3 (read only):	400GB native capacity
LTO-3 WORM (read only):	400GB native capacity

RELIABILITY

MTBF hours:	250,000 @ 100% duty cycle
MSBF:	100,000 cycles
Load/Unload Life:	120,000 cycles
Non-recoverable Error Rate:	1 in 1×10^{17} bits (non-media error, clean drive)

PHYSICAL SPECIFICATIONS

Full-Height

Form Factor	Internal w/o bezel	Internal w/ bezel	Tabletop
Width (mm)	146.1	149.1	218
Height (mm)	82.5	85.5	120
Length (mm)	203	208	297
Weight (kg)	2.26	2.3	5.3

Half-Height

Form Factor	Internal w/o bezel	Internal w/ bezel	Tabletop
Width (mm)	146.1	149.1	224
Height (mm)	41.65	44.65	79
Length (mm)	206	211	301
Weight (kg)	1.41	1.45	3.7

ENVIRONMENTAL

Operating
Temperature °F (°C): 50° to 104° (10° to 40°) @ 8 CFM @ 5 CFM for half-height
Humidity: 20% to 80% (non-condensing)
Altitude (maximum): 4,000 m

Non-operating
Temperature °F (°C): -40° to 149° (-40° to 66°) excluding media
Humidity: 10% to 95% (non-condensing)

Voltage (V): +5, +12

Power Consumption Full-Height
Idle: 6.7 Watts
Typical: 23.1 Watts
Peak: 37.2 Watts

Power Consumption Half-Height
Idle: 6.5 Watts
Typical: 21.4 Watts
Peak: 30.2 Watts

TAPE FORMAT SPECIFICATIONS

Format:	LTO Ultrium 5
Recording Density:	15,143 Kb/mm
Encoding Method:	16 Channel 32/33 RLL NPML
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 (L×W×H):	102mm × 105.4mm × 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-L51AN-BR	LTO-5 FH, Internal Bare, 6Gb/s SAS, black bezel	TC-L52AN-EZ	LTO-5 HH, Internal, SAS HBA Bundle, 6Gb/s SAS, 5.25", Black
TC-L51BN-AR	LTO-5 FH, Tabletop Kit, 6Gb/s SAS, black	TC-L52BN-AR	LTO-5 HH, Tabletop, 6Gb/s SAS, Black
TC-L53FN-AR	LTO-5 FH, 3U Rackmount, 6Gb/s SAS, black	TC-L52BN-EZ	LTO-5 HH, Tabletop, SAS HBA Bundle, 6Gb/s SAS, Black
TC-L52AN-BR	LTO-5 HH, Internal, 6Gb/s SAS, 5.25", Black, Bare	TC-L53CN-AR	LTO-5 HH, Single, 1U Rackmount, 6Gb/s SAS, Black
TC-L52AN-EY	LTO-5 HH, Internal, 6Gb/s SAS, 5.25", Black		

For contact and product information,
visit quantum.com

Quantum®

Preserving the World's Most Important Data. Yours.™

Quantum Corporation – Northern Europe
3 Bracknell Beeches, Old Bracknell Lane West,
Bracknell RG12 7BW, United Kingdom
Tel: +44 (0)1344 353500

Quantum Corporation – Central Europe
Willy-Brandt-Allee 4,
81829, München, Germany
Tel: +49 (0)89 94303-0

Quantum Corporation – Southern Europe
8 rue des Gravières
92200 Neuilly-Sur-Seine, France
Tel: +33 (0)1 41 43 49 00