FUJITSU

Datasheet
FUJITSU ETERNUS LT270 S2

Highly Reliable, Large-Capacity Tape Library for Consolidated Backup of Enterprise System

ETERNUS LT TAPE LIBRARY SYSTEM

ETERNUS LT tape library systems from Fujitsu have impressive scalability, reliability and technical brilliance. They pay particular close attention to the integration and smooth interaction of servers and storage systems. ETERNUS LT enables compact and extremely reliable tape library solutions for small and medium-sized enterprises.

Each library is optimized for reliability, as well as for ease of scalability. This results in a longer service life and a healthy return on your investment.

ETERNUS LT features LTO technology, which is synonymous with high capacity, high speed and very low media costs. Depending on your individual requirements, you can order your library for use with LTO-5/LTO-6/LTO-7/LTO-8 drives. LTO is the most current, future-proof standard for high data transfer rates and trouble-free transmission. This ensures ETERNUS LT series tape library investment will keep pace with future data growth.

Like all products from Fujitsu, ETERNUS LT Tape Libraries are easy to handle, extremely reliable and very reasonably priced

ETERNUS LT270 S2 TAPE LIBRARY

ETERNUS LT270 S2 is an open systems tape library that employs highly reliable, large-capacity LTO Ultrium tape drives. With the capability to back up data from multiple servers into a single tape library, this model achieves efficient utilization of storage assets while reducing operating costs and TCO. ETERNUS LT270 S2 provides high reliability with the duplicate cartridge carrier robots and other mechanisms. If one robot has a malfunction, the other one takes over tasks to continue system operation. A faulty robot can be hot-swapped during operation. Moreover, power supply and fans are in a redundant configuration, enabling uninterrupted operation even during hot swapping in the unlikely event of a malfunction.

Having been improved many times and repeatedly in its long history, tape media technology provides much higher reliability than other comparable technologies. The LTO Ultrium tape drive built into ETERNUS LT270 S2 uses a newly designed tape threading mechanism to further stabilize tape winding, and its variable-speed tape operation eliminates movement for tape repositioning, thereby preventing early tape deterioration an ensuring increased tape reliability.

Features and benefits

Main features	Benefits
High speed and large capacity	
■ Support LTO6, LTO-7 and the latest LTO-8	■ High data throughput
	■ High investment protection
■ Up to 5,644 tape cartridges with 67,728TB(LTO-8) storage capacity	■ Easy upgrade to the needed storage capacity
■ Cartridge memory (LTO-CM)	■ Minimized load time
	■ Fast access to and high-speed restoration from files
High reliability	
■ Dual-robot technology	■ High stable operation
■ Redundant and hot-swappable fans, power supplies, robot controller, robot mechanism, and tape drives	■ Minimize down time
■ Auto-cleaning feature	■ Prevents read/write errors by keeping good condition
Excerent connectivity	
■ Available with major Fiber Channel interface	■ Supports a heterogeneous environment
■ Connects to a wide variety of UNIX and industry standard services	
■ Tape library sharing among OS – Logical Library function	
Easy Operation Management	
■ Cartridge Access Station with up to 20 tape cartridges	■ Simplifies media management
■ Operator friendly large LCD touch panel	■ Makes operation very easy
■ Web based remote management	■ Easy management from any network connected computers
Enhanced security	
■ WORM technology using LTO-6, LTO-7 and LTO-8	■ Provides data security and regulatory compliance
■ Hardware encryption function using LTO-6, LTO-7 and LTO-8	■ Helps secure sensitive data

Topic

High speed and large capacity

ETERNUS LT270 S2 tape library provides a high-speed data backup solution with LTO UltriumTM drives, and offers a wide choice of storage capacity with LTO-8, LTO-7 or LTO-6 tape drives. In the never-ending struggle to manage increasingly large volumes of data, it is designed to provide the support to manage backup operations with minimal time and effort.
ETERNUS LT270 S2 can be equipped with up to 5,644 tape cartridges with maximum capacity of 67,728 TB.
Media management information, including indexing and statistical data on cartridge tape usage, is stored on memory chips built into each cartridge tape. This permits high speed data file access.

High Reliability

Cartridge tapes are transported by internal robot. Robots are redundantly configured. If one robot fails, the other automatically takes over operation. Also, the power supply units and fans have been designed with redundancy. The redundant components can be hot-swapped in the event of failure.
A specially designed tape-threading mechanism on each LTO tape drive provides enhanced tape winding stability and ensures malfunction-free loading and unloading.

Excellent connectivity

For added flexibility, ETERNUS LT270 S2 supports a maximum of 8Gbps Fiber Channel. It also connects to a wide variety of UNIX and industry standard servers.
The Logical Library feature (optional) enables four servers with different operating systems to share a single ETERNUS LT270 S2. This optimizes investment, since a single ETERNUS LT270 S2 can be used to back up both servers in parallel.

Easy Operation Management

Setup and monitoring operations are performed using a touch panel featuring a graphic interface. In addition to functions such as cartridge operation and setting changes, ETERNUS LT270 S2 is designed to permit management from a remote location through Web browser. The powerful CAS (Cartridge Access Station) feature enables consecutively load and ejection of up to 160 cartridge tapes with ETERNUS LT270 S2.

Enhanced security

LTO-6/7/8 Drives support WORM(Write Once Read Many) cartridges[1], enabling the creation of secure data archives. Function for the protection of original data from operation mishaps, alternation and erasure are all provided.
[1] Backup software supporting WORM function is required when using this function in connection with backup software

Technical Details

General system information			LT270 S2		
			Base cabinet	Expansion cabinet	Max. Configuration (8 cabinets)
Number of cartridges			138-713	256-708	4,574-5,644
Total capacity	LTO-6	Native	345.0 – 1,782.5 TB	640.0 – 1,770.0 TB	11,435.0 – 14,110.0 TB
		Compressed (assuming 2.5:1)	862.5 – 4,456.3 TB	1,600.0 – 4,425.0 TB	28,587.5 – 35,275.0 TB
	LTO-7	Native	828.0 – 4,278.0 TB	1,536.0 – 4,248.0 TB	27,444.0 – 33,864.0 TB
		Compressed (assuming 2.5:1)	2,070.0 – 10,695.0 TB	3,840.0 – 10,620.0 TB	68,610.0 – 84,660.0 TB
	LTO-7 Type M	Native	1,242.0 – 6,417.0 TB	2,304.0 – 6,372.0 TB	44,166.0 – 50,796.0 TB
		Compressed (assuming 2.5:1)	3,105.0 – 16,042.5 TB	5,760.0 – 15,930.0 TB	102,915.0 – 126,990.0 TB
	LTO-8	Native	1,656.0 – 8,556.0 TB	3,072.0 – 8,496.0 TB	58,932.0 – 67,728.0 TB
		Compressed (assuming 2.5:1)	4,140.0 – 21,390.0 TB	7,680.0 – 21,240.0 TB	137,220.0 – 169,320.0 TB
Number of robots			2	2	2
Number of tape drives			2-20	0-16	2-128
Number of cartridges at CAS (cartridges Access Station)			20[*1]	20[*1]	160[*1]
Interface			Fibre Channel (Max. 8 Gbit/s)		

[*1] 10 cartridges per magazine

		Base cabinet	Expansion cabinet	Max. Configuration
Drive type		LTO-6 FH	LTO-7 FH	LTO-8 FH
Data transfer speed	Native	160 MB/s	300 MB/s	360 MB/s
	Compressed	400 MB/s	750 MB/s	900 MB/s
Storage capacity per tape	Native	2.5 TB	6 TB	12 TB
	Compressed	6.25 TB	15 TB	30 TB
Variable speed recording	Native	1.708 m/s – 6.833 m/s	1.695 m/s – 5.117 m/s	1.742 m/s – 5.645 m/s
Cartridge loading time		12 seconds	15 seconds	15 seconds
Average tape access time		62 seconds	56 seconds	59 seconds
Hardware Encryption [*2]		Possible	Possible	Possible

[*2] A backup software solution has to be ordered additionally to use the encryption feature successfully

Installation specification	per cabinet
Dimension (W x D x H)	780 x 1,270 x 1,980 mm
Weight	650 kg [*3*4]

[*3] 20 drives configuration (The weight of each drive is approximately 4.3 kg)
[*4] Without cartrigde (The weight of each cartridge is approximately 250 g)

Electrical specification		per cabinet
Power	Voltage	100 V - 240 V (+/- 10%)
	Phase	Single
	Frequency	50 Hz / 60 Hz (+/- 5%)
Maximum Power Consumption		1.2 kW
Maximum Heat Generation		4,320 kJ/h

Electrical specification		
Temperature	Operating	10 - 35°C

Electrical specification

	Non-Operating	-44 – 66 ℃
Humidity	Operating	10 – 80 %RH
	Non-Operating	10 - 80 %RH
Altitude	Operating	0 - 3,000 m
	Non-Operating	0 - 12,000 m
Air quality		The library should be placed in an area with minimal sources of particulate contamination. Avoid areas near frequently used doors and walkways, stacks of supplies that collect dust, printers, and smoke-filled rooms. Excessive dust and debris can damage tapes and drive.

[5] without cartridge

Sound Power Level (LWAd)	7.5 B(A)
Sound Pressure Level (LpAm)	55 dB (A)
- Notes	measured with single enclosure according to ISO7779 and declared according to ISO9296

Compliance

Product safety	UL60950-1, CSA6090-1, EN60950-1, IEC60950-1, GOST-R
Electromagnetic Compatibility	CNS13438(C6357) Class A, FCC CFR47 part 15 Class A, ICES-003 Class A, EN55022 Class A, VCCI Class A, AS/NZS CISPR22 Class A
Electromagnetic Immunity	EN 55024
Environmental compliance	CNS13438(C6357) Class A, FCC CFR47 part 15 Class A, ICES-003 Class A, EN55022 Class A, VCCI Class A, AS/NZS CISPR22 Class A
- Notes	There is general compliance with the safety requirements of all European countries and North America. National approvals required in order to satisfy statutory regulations or for other reasons can be applied for on request.
Compliance link	Compliance link: https://sp.ts.fujitsu.com/sites/certificates/default.aspx

More information

Fujitsu platform solutions

In addition to Fujitsu ETERNUS, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Dynamic Infrastructures

With the Fujitsu Dynamic Infrastructures approach, Fujitsu offers a full portfolio of IT products, solutions and services, ranging from clients to datacenter solutions, Managed Infrastructure and Infrastructure-as-a-Service. How much you benefit from Fujitsu technologies and services depends on the level of cooperation you choose. This takes IT flexibility and efficiency to the next level.

Computing products

www.fujitsu.com/global/services/computing/
- PRIMERGY: Industry standard server
- SPARC Enterprise: UNIX server
- PRIMEQUEST: Mission-critical IA server
- ETERNUS: Storage system

Software

www.fujitsu.com/software/
- Interstage: Application infrastructure software
- Systemwalker: System management software

More information

Learn more about Fujitsu ETERNUS LT270 S2, please contact your Fujitsu sales representative, Fujitsu business partner, or visit our website.
www.fujitsu.com/eternus/

Fujitsu green policy innovation

www.fujitsu.com/global/about/environment/
Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment. Using our global know-how, we aim to resolve issues of environmental energy efficiency through IT. Please find further information at:

Copyright

Disclaimer