

# Datasheet

## Fujitsu ETERNUS LT60 S2

Scalable Mid-range System for High Capacity Requirements

### ETERNUS LT TAPE LIBRARY SYSTEM

The affordable ETERNUS LT tape systems offer impressive scalability and reliability. Highly automated, simple and remote operation enables usage without any demand for local expert skills. ETERNUS LT systems feature LTO technology and are certified for market-leading backup and archiving software. Connectivity is given via the SAS or FC interface.

### ETERNUS LT60 S2

The ETERNUS LT60 S2 addresses customers with high capacity requirements. It combines exceptional storage density and up to 300 TB of compressed capacity in a compact 4U form factor, giving room for unpredictable data growth. The system comes with standardized LTO technology providing high speed and low media costs. The ETERNUS LT60 offers comprehensive flexibility as it has up to four drives for redundancy and partitioning. ETERNUS LT60 can be split into two virtual libraries serving different application environments in parallel. This provides maximum efficiency and cost-effectiveness. The slot upgrade option gives customers a start with 12 slots and upgrades to 48 slots. The slot upgrade option means that customers can pay as they grow and remain flexible as they can even mix different LTO generations with into one system. One advanced feature available with the ETERNUS LT60 is the redundant power supply that ensures uninterrupted operation should there be a power failure.



# Features and benefits

Main features	Benefits
<p><b>Latest technology</b></p> <ul style="list-style-type: none"> <li>■ Upgradeability from 24 to 36 or 48 slots via software license</li> <li>■ LTO-3/LTO-4/LTO-5/LTO-6 HH or LTO-4/LTO-5 FH SAS technology</li> <li>■ LTO-4/LTO-5/LTO-6 HH or LTO-4/LTO-5 FH drive with optional Fibre Channel interface</li> <li>■ Partitioning via license key</li> </ul> <p><b>Many extras at no additional cost</b></p> <ul style="list-style-type: none"> <li>■ Mail slot</li> <li>■ Barcode reader</li> <li>■ Remote management utility and user friendly operator panel</li> </ul>	<ul style="list-style-type: none"> <li>■ Easy upgrade to the needed storage capacity</li> <li>■ High investment protection</li> <li>■ SAS interface meets both enterprise and midrange/nearline storage requirements at relatively low costs, providing users and integrators with flexible storage architectures</li> <li>■ High data throughput of up to 8 Gb/s</li> <li>■ Smaller backup window is needed</li> <li>■ Makes it easier to separate different LTO generations, avoids undesired incompatible media loads</li> <li>■ Build up two independent libraries out of one system</li> <li>■ Easy input and output of up to three cartridges</li> <li>■ Simplified media management</li> <li>■ Short initialization time thanks to slot barcodes, also with unoccupied data slots</li> <li>■ Easy administration, enables configuration and diagnostic</li> <li>■ Automatism help to decrease the error rate of backup processes</li> <li>■ Ethernet network for Firmware upgrades, statistics</li> </ul>

# Technical details

Possible basic configurations	Number of tape drives	Tape system interface
LTO-3, half height, SAS	1-4	SAS
LTO-4, half height, SAS	1-4	SAS
LTO-4, half height, Fibre channel	1-4	Fibre Channel
LTO-5, half height, SAS	1-4	SAS
LTO-5, half height, Fibre channel	1-4	Fibre Channel
LTO-6, half height, SAS	1-4	SAS
LTO-6, half height, Fibre channel	1-4	Fibre Channel
LTO-4, full height, SAS	1-4	SAS
LTO-4, full height, Fibre channel	1-4	Fibre Channel
LTO-5, full height, SAS	1-4	SAS
LTO-5, full height, Fibre channel	1-4	Fibre Channel

## General system information

Type	LTO-3 Half height	LTO-4 Half height	LTO-5 Half height	LTO-4 Full height	LTO-5 Full height	LTO-6 Half height
<b>Total capacity native</b>	9.6 – 19.2 TB	19.2 – 38.4TB	36 – 72 TB	19.2 – 38.4TB	36 – 72 TB	60 – 120 TB
<b>Total capacity compressed</b>	19.2 – 38.4 TB	38.4 – 76.8 TB	72 – 144 TB	38.4 – 76.8 TB	72 – 144 TB	150 – 300 TB
<b>Write/read speed at write read head</b>	60 / 120 MB/s	80 / 160 MB/s	140 / 280 MB/s	80 / 160 MB/s	140 / 280 MB/s	160 / 400 MB/s
<b>Variable speed recording uncompressed</b>	27 – 60 MB/s	33 – 80 MB/s	44 – 140 MB/s	33 – 80 MB/s	44 – 140 MB/s	53 – 160 MB/s
<b>Buffer size</b>	64 MB	128 MB	256 MB	128 MB	256 MB	512 MB
<b>Recording format</b>	Multiple Track linear					
<b>Maximum data</b>	3 Gbit/s	3 Gbit/s / 4 Gbit/s	6 Gbit/s / 8 Gbit/s	3 Gbit/s / 4 Gbit/s	6 Gbit/s / 8 Gbit/s	6 Gbit/s / 8 Gbit/s
<b>Backwards compatible</b>	Read/write compatibility with LTO2	Read/write compatibility with LTO3	Read/write compatibility with LTO4	Read/write compatibility with LTO3	Read/write compatibility with LTO4	Read/write compatibility with LTO5
	Read compatible with LTO1	Read compatible with LTO2	Read compatible with LTO3	Read compatible with LTO2	Read compatible with LTO3	Read compatible with LTO4
<b>Data cassette</b>	LTO 2,3 LTO 3 WORM	LTO 2,3,4 LTO 3,4 WORM	LTO 3,4,5 LTO 3,4,5 WORM	LTO 2,3,4 LTO 3,4 WORM	LTO 3,4,5 LTO 3,4,5 WORM	LTO 4,5,6 LTO 4,5,6 WORM
<b>Capacity</b>	400 GB (uncompressed) / 800 GB (compressed)	800 GB (uncompressed) / 1600 GB (compressed)	1500 GB (uncompressed) / 3000 GB (compressed)	800 GB (uncompressed) / 1600 GB (compressed)	1500 GB (uncompressed) / 3000 GB (compressed)	2500 GB (uncompressed) / 6250 GB (compressed)
<b>Bandwidth</b>	1/2 inch	1/2 inch	1/2 inch	1/2 inch	1/2 inch	1/2 inch
<b>Hardware encryption</b>	-	possible	possible	possible	possible	possible

## Installation specification

<b>Dimension (W x D x H) – standard</b>	447.5 x 810 x 175.2 mm
<b>Height Unit Standard</b>	4 U
<b>Weight</b>	28 kg (HH) / 26 kg (FH)
<b>Power voltage (V)</b>	85 - 264 V (+/- 5%)
<b>Power frequency (Hz)</b>	50 / 60 Hz (+/- 5%)
<b>Switched OFF mode</b>	1.5 W
<b>Unit ready (no tape loaded into 1<sup>st</sup> drive)</b>	34 W (HH) / 39 W (FH)
<b>Unit read (no tape loaded into 2<sup>nd</sup> drive)</b>	46 W (HH) / 56 W (FH)

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**Installation specification**

<b>Write/read data no robotic moves</b>	51 W (HH) / 61 W (FH)
<b>Write/read data with robotic moves</b>	62 W (HH) / 69 W (FH)
<b>Notes</b>	Typical power consumption: One HH drive increase the AC power consumption by 12W for unit ready no tape loaded / by 29W for write/read no robotic moves

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**Environmental**

<b>Temperature (Operating)</b>	15 - 35°C
<b>Temperature (Not Operating)</b>	-30 - 60°C
<b>Humidity (Operating)</b>	20 - 80 % (relative humidity, non-condensing)
<b>Humidity (Not Operating)</b>	10 - 90 % (non-condensing)
<b>Operating environment Link</b>	<a href="http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12dbe">http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12dbe</a>

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**Compliance**

<b>Product safety</b>	EN 60950-1, IEC 60950-1, UL 60950-1, CSA 60950-1
<b>Electromagnetic Compatibility</b>	EN 55022 Class A, EN 61000-3-3, EN 61000-3-2, ICES-003 Class A, FCC Part-15 Class A, VCCI Class A, AS/NZS CISPR 22 Class A, CNS 13438(C6357) Class A
<b>Electromagnetic Immunity</b>	EN 55024
<b>CE certification</b>	2004/108/EC, 2006/95/EC, 2011/65/EC
<b>Environmental compliance</b>	RoHS compliant, WEEE compliant
<b>Compliance notes</b>	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.

# 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/](http://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/](http://www.fujitsu.com/software/)  
- Interstage: Application infrastructure software  
- Systemwalker: System management software

## More information

Learn more about Fujitsu ETERNUS, please contact your Fujitsu sales representative, Fujitsu business partner, or visit our website. [www.fujitsu.com/eternus/](http://www.fujitsu.com/eternus/)

## Fujitsu green policy innovation

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: [www.fujitsu.com/global/about/environment/](http://www.fujitsu.com/global/about/environment/)



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## Contact

FUJITSU Limited  
Website: [www.fujitsu.com/eternus/](http://www.fujitsu.com/eternus/)  
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