

# DATASHEET

## FUJITSU ETERNUS LT60

### RELIABLE TAPE SOLUTION

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The ETERNUS LT60 from Fujitsu is a highly reliable and scalable tape library that is optimized to dramatically reduce the risk of manual errors in remote backups.

It is an ultra compact tape library with up to 48 media slots and up to four drives on four height units. Depending on your individual requirements, you can either order it with an LTO-3\*1, LTO-4 or LTO-5 half height / full height drive, and can connect it to the server via the SAS (Serial Attached SCSI) or Fibre Channel interface.

The library offers a maximum compressed storage capacity of 144 TB when equipped with 48 LTO-5 cartridges.

The ETERNUS LT60 uses the most current, future-proof standard for high data transfer rates and uninterruptible transmission.

The base configuration includes 24 slots. Because all 48 slots are already built in the other 24 slots can be easily activated via a software license.

Like all products from Fujitsu designed for small and medium sized companies, the ETERNUS LT60 is reliable, easy to use and affordable.

\*1LTO-3 only with half height drives available



# FEATURES AND BENEFITS

MAIN FEATURES	BENEFITS
<ul style="list-style-type: none"> <li>■ Upgradeability from 24 to 36/48 slots via software license</li> <li>■ Environmentally friendly design</li> <li>■ LTO-3 / LTO-4 / LTO-5 HH or LTO-4 / LTO-5 FH SAS technology</li> <li>■ LTO-4 HH drive with optional Fibre Channel interface</li> <li>■ Partitioning via license key</li> </ul>	<ul style="list-style-type: none"> <li>■ Easy upgradeability of the needed storage capacity</li> <li>■ High investment protection</li> <li>■ Environmentally friendly over its entire lifecycle: Acquisition, running costs, right through to disposal</li> <li>■ Future-proof, fault-tolerant, robust</li> <li>■ High data throughput</li> <li>■ Redundancy (up to four HH drive or up to two FH drive possible)</li> <li>■ Build up two independent libraries out of one system</li> </ul>
<p><b>MANY EXTRAS AT NO EXTRA COST:</b></p> <ul style="list-style-type: none"> <li>■ Mailslots</li> <li>■ Barcode reader</li> <li>■ Remote management utility and user friendly operator panel</li> </ul>	<ul style="list-style-type: none"> <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

<b>GENERAL SPECIFICATION</b>					
Type	Half height Drive			Full height Drive	
	LTO-3 SAS	LTO-4 SAS / Fibre Channel	LTO-5 SAS / Fibre Channel	LTO-4 SAS / Fibre Channel	LTO-5 SAS / Fibre Channel
<b>Total capacity native TB</b>	9.6 - 19.2	19.2 - 38.4	36 - 72	19.2 - 38.4	36 - 72
<b>Total capacity compressed* TB</b>	19.2 - 38.4	38.4 - 76.8	72 - 144	38.4 - 76.8	72 - 144
<b>No. of slots</b>	24 - 48	24 - 48	24 - 48	24 - 48	24 - 48
<b>No. of MTC drives</b>	1 - 4	1 - 4	1 - 4	1 - 2	1 - 2
<b>Max. data throughput native/compressed*</b>	216 / 432 GB/hr	288 / 576 GB/hr	504 / 1008 GB/hr	432 / 864 GB/hr	504 / 1008 GB/hr
<b>DRIVES</b>					
<b>Drive type</b>	LTO-3 Half height	LTO-4 Half height	LTO-5 Half height	LTO-4 Full height	LTO-5 Full height
<b>Write/read speed</b>					
<b>at write/read head*</b>	60 / 120 MB/s	80 / 160 MB/s	140 / 280 MB/s	120 / 240 MB/s	140 / 280 MB/s
<b>Variable speed recording**</b>	27 - 60 MB/s	33 - 80 MB/s	44 - 140 MB/s	33 - 120 MB/s	44 - 140 MB/s
<b>Cartridge loading time</b>	< 19 s	< 19 s	< 19 s	< 19 s	< 19 s
<b>Buffer size</b>	64 MB	128 MB	256 MB	128 MB	256 MB
<b>Data compression factor*</b>	2	2	2	2	2
<b>Recording format</b>	Multiple Track linear	Multiple Track linear	Multiple Track linear	Multiple Track linear	Multiple Track linear
<b>Maximum data rate (interface)</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
<b>PROCESSES DATA VOLUMES</b>					
<b>LTO-1</b>	Read	-	-	-	-
<b>LTO-2</b>	Write / Read	Read	-	Read	-
<b>LTO-3</b>	Write / Read	Write / Read	Read	Write / Read	Read
<b>LTO-3 WORM</b>	Write Once / Read Many	Write Once / Read Multiple	Read	Write Once / Read Multiple	Read
<b>LTO-4</b>	-	Write / Read	Write / Read	Write / Read	Write / Read
<b>LTO-4 WORM</b>	-	Write Once / Read Multiple	Write Once / Read Multiple	Write Once / Read Multiple	Write Once / Read Multiple
<b>LTO-5</b>	-	-	Write / Read	-	Write / Read
<b>LTO-5 WORM</b>	-	-	Write Once / Read Multiple	-	Write Once / Read Multiple
<b>Hardware encryption</b>	-	Possible	Possible	Possible	Possible
<b>CARTRIDGE DATA VOLUMES</b>					
<b>LTO-1 (native / compressed*)</b>	100 / 200 GB	-	-	-	-
<b>LTO-2 (native / compressed*)</b>	200 / 400 GB	200 / 400 GB	-	200 / 400 GB	-
<b>LTO-3 (native / compressed*)</b>	400 / 800 GB	400 / 800 GB	400 / 800 GB	400 / 800 GB	400 / 800 GB
<b>LTO-3 WORM (native / compressed*)</b>	-	400 / 800 GB	400 / 800 GB	400 / 800 GB	400 / 800 GB
<b>LTO-4 (native / compressed*)</b>	-	800 / 1600 GB	800 / 1600 GB	800 / 1600 GB	800 / 1600 GB
<b>LTO-4 WORM (native / compressed*)</b>	-	800 / 1600 GB	800 / 1600 GB	800 / 1600 GB	800 / 1600 GB
<b>LTO-5 (native / compressed*)</b>	-	-	1500 / 3000 GB	-	1500 / 3000 GB
<b>LTO-5 WORM (native / compressed*)</b>	-	-	1500 / 3000 GB	-	1500 / 3000 GB
<b>Bandwidth</b>	½ inch				
<b>*Note</b>	As used for storage capacity, one gigabyte (GB) = one billion bytes, and one terabyte (TB) = one trillion bytes. Assuming a compression factor of 2 (The compression factor depends on the data structure and is typically 2 or less.)				
<b>**Note</b>	Uncompressed at nominal capacity.				

**DIMENSIONS / WEIGHT**

Height x width x depth	175.2 x 447.5 x 810 mm	175.2 x 447.5 x 810 mm
Rack installation height	4 U	4 U
Max. weight, w/o cartridges	27 kg	26 kg

**CLIMATIC CONDITIONS**

<b>Operating range</b>		
Temperature	10 - 35 °C	
Rel. humidity	20 - 80 %	
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.	

**ELECTRICAL SPECIFICATIONS**

Power voltage	85 - 264 V (± 5%)	
Power frequency	50/60 Hz (± 5%)	
<b>Typical power consumption (Watt)</b>		
Switched OFF mode	1.5 W	
Unit ready (no tape loaded into 1 <sup>st</sup> drive)	34 W	39 W
Unit ready (no tape loaded into 2 <sup>nd</sup> drive)	46 W	56 W
Write/read data no robotic moves***	51 W	61 W
Write/read data with robotic moves***	59 W	69 W

\*\*\*Note  
 Typical power consumption: One HH drive increase the AC power consumption by 12 W for unit ready no tape loaded / by 29 W for write/read no robotic moves;  
 LTO-5 drive consumes almost 36% less in standby mode and 10% less in operation mode

**COMPLIANCE**

Product safety	UL60950-1, CSA6090-1, EN60950-1, IEC60950-1
Electromagnetic Compatibility	FCC Part-15 Class A, EN55022 Class A, EN55024, EN6100-3-2, EN61000-3-3
CE certification	Electromagnetic Compatibility Directive 2004/108/EC, Low Voltage Directive 2006/95/EC
Environmental compliance	RoHS compliant, WEEE compliant

**MAINTENANCE AND SUPPORT SERVICES**

Recommended Service Level	24x7 Onsite Service with 4h Response Time
Available Service Level	<a href="http://ts.fujitsu.com/services/maintenance_support/hardware_services.html">ts.fujitsu.com/services/maintenance_support/hardware_services.html</a>
Important Note	For use with the MTC changers, only cartridges certified by Fujitsu with the label "Fujitsu - Preferred Quality" permitted. This product and the accessories (components/materials) released for it by Fujitsu comply with the protection targets of Emission Class A. In special cases, measures for reducing the electromagnetic interference on other devices may be necessary.

#### FUJITSU PLATFORM SOLUTIONS

In addition to Fujitsu ETERNUS LT60, 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

<http://fujitsu.com/global/services/computing/>

##### Software

<http://fujitsu.com/software/>

#### MORE INFORMATION

Learn more about Fujitsu ETERNUS LT60, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.  
[http://ts.fujitsu.com/eternus\\_It](http://ts.fujitsu.com/eternus_It)

#### 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 <http://fujitsu.com/global/about/environment/>



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