Data Sheet FUJITSU Storage ETERNUS DX60 S3 **Disk Storage System**

The Economy Storage System for SMBs

ETERNUS DX - Business-centric Storage

Combining leading performance architecture with automated quality of service management the Fujitsu Storage ETERNUS DX series aligns storage resources with business priorities, thus enabling higher system utilization and delivering increased system consolidation capabilities and a faster ROI. Unified scalable entry-level and midrange systems, a provides functionality to ensure data protection. seamless family concept enabling system upgrades and ETERNUS SF, the unified management suite across the product line, reduce operational and migration costs. ETERNUS SF provides enterpriseclass functionalities in the entry and midrange class and allows flexible disaster recovery and business continuity concepts for the different model sizes, thus decreasing investment costs

ETERNUS DX60 S3

Delivering reliable operation at an affordable price makes ETERNUS DX60 S3 an ideal disk storage system for small and medium-sized IT environments.

Management software, included at no extra cost, reduces administration effort and Flexible support for different network connections and disk types enables choice in cost and performance optimization.

Designed for smaller environments it provides remarkable scalability in storage capacity offering good headroom for future growth. The perfect storage solution for consolidation of distributed data and for smaller server virtualization projects.







Features & Benefits

Main Features	Benefits
Reliable operation at an affordable price	
	Affordability
	Leading performance for the entry-level
	Rich data safety functionality
	Enterprise proven capabilities already in entry-level storage
Ideal for small and medium-sized IT environments	
	Easy to install, configure, operate and maintain
	Perfect fit for storage consolidation starters & virtualization
	newcomers with medium capacity requirements and predictable
	growth rates
Free-of-charge ETERNUS SF Express Storage Management	
	Free-of-charge, richly featured management suite
	Single point administration
	Easy and efficient operation

Technical details

General	system infor	mation
uchiciu	<i>system</i> mor	

No. of controllers	2.5-inch Controller Enclosure 3.5-inch Controller Enclosure				
	1/2				
No. of host interfaces	2/4 ports				
Maximum Cache Capacity	4 GB				
Maximum Disk Drives	96 48				
Max. no. of drive enclosures	3				
Supported RAID levels	0, 1, 1+0, 5, 5+0, 6				
Host Interfaces	Fibre Channel (8 Gbit/s, 4 Gbit/s)				
	iSCSI (10 Gbit/s [10GBase-T], 1 Gbit/s)				
	SAS (6 Gbit/s, 3 Gbit/s)				
Max. no. of hosts	128				
Maximum Storage Capacity	288 TB				
Drive Type	2.5-inch, SAS, 15,000 rpm (600 GB / 300 GB) 2.5-inch, SAS, 10,000 rpm (1.2 TB / 900 GB / 600 GB / 300 GB)				
	2.5-inch, Nearline SAS, 7,200 rpm (1 TB)				
	2.5-inch, SSD (1.6 TB / 800 GB / 400 GB)				
	3.5-inch, SAS, 10,000 rpm (1.2 TB / 900 GB)				
	3.5-inch, Nearline SAS, 7,200 rpm (6 TB / 4 TB / 2TB)				
	3.5-inch, SSD (1.6 TB / 800 GB / 400 GB)				
Aixed 2.5 inch/ 3.5 inch drive enclosures					
rive interface	Serial Attached SCSI (6 Gbit/s)				
Nax. no. of LUNs	1,024				
Nax. LUN capacity	128 TB				
co-mode	Yes				
hin Provisioning	Yes				
Business Continuity Features					
lo. of snapshots - max.	1,024				
Nax. no. of copy generations	512				
Data protection features	Cache Protection, Data Block Guard, Dedicated Hot Spare, Disk Drive Patrol, Global Hot Spare, Fast Recovery				
Security features	HTTPS (SSL), One Time Password, RADIUS, SSH				
Options					
Reporting function	Yes				
Note	Options can be activated via ETERNUS SF Software				
ynamic configuration					
ield model upgrade	to ETERNUS DX100 S3				
lon-disruptive firmware upgrade	Yes				
AID migration	Yes				
.UN online expansion w/o interruption	Yes				
Vide striping	Yes				
Hot part replacement/ expansion	Yes				
Management					
Interfaces	Ethernet (1000 Base-T / 100 Base-TX / 10 Base-T)				
Supported protocols	SNMP (version1, 2C, 3), SMI-S 1.6				
Administration	Web-based graphical user interface, CLI (Command Line Interface), ETERNUS SF				
Remote Support	Event notification (E-mail / SNMP / Syslog), Remote maintenance				

Supported OS for ETERNIUS SE Express	c			
Supported OS for ETERNUS SF Express Operation Management Server Operation Management Client	s Windows Server® 2012 R2 Da Windows Server® 2012 R2 St Windows Server® 2012 Datad Windows Server® 2012 Stanc Windows Server® 2008 R2 Da Windows Server® 2008 R2 Er Windows Server® 2008 R2 Er Windows Server® 2008 Datad Windows Server® 2008 Enter Windows Server® 2008 Enter Windows 7 Home Premium Windows 7 Home Premium Windows 7 Home Premium Windows Vista® Home Basic Windows Vista® Home Premi Windows Vista® Home Premi Windows Vista® Business Windows Vista® Enterprise Windows Vista® Ultimate Windows Vista® Ultimate Windows XP Home Edition Windows XP Professional	andard center Jard atacenter nterprise andard center prise		
	Windows Server® 2008 Stanc Windows Server® 2008 Enter Windows Server® 2008 Data Windows Server® 2012 Stanc Windows Server® 2012 Data Windows Server® 2012 R2 St Windows Server® 2012 R2 Da	prise center dard center andard		
Note	See the ETERNUS SF datashe	et for further options		
Supported configurations	Detailed support matrix:	t ems, servers and business a port/products/computing/stora		tions
Installation specification				
10// 1	Ma a			
19" rackmount	Yes			
	Front: 850 mm (33.5 inch) o Rear: 850 mm (33.5 inch) or			
Service Area	Front: 850 mm (33.5 inch) o	more		
Service Area Power voltage	Front: 850 mm (33.5 inch) o Rear: 850 mm (33.5 inch) or	more		
Service Area Power voltage Power frequency	Front: 850 mm (33.5 inch) o Rear: 850 mm (33.5 inch) or AC 100 - 120 V / AC 200 - 240	more		
Service Area Power voltage Power frequency Power supply efficiency	Front: 850 mm (33.5 inch) o Rear: 850 mm (33.5 inch) or AC 100 - 120 V / AC 200 - 240 50 / 60 Hz	more) V		
Service Area Power voltage Power frequency Power supply efficiency Maximum Power Consumption	Front: 850 mm (33.5 inch) o Rear: 850 mm (33.5 inch) or AC 100 - 120 V / AC 200 - 240 50 / 60 Hz 92 % (80 PLUS gold)	more) V 140 VA)		
Service Area Power voltage Power frequency Power supply efficiency Maximum Power Consumption Maximum Power Consumption	Front: 850 mm (33.5 inch) o Rear: 850 mm (33.5 inch) or AC 100 - 120 V / AC 200 - 240 50 / 60 Hz 92 % (80 PLUS gold) AC 100 - 120 V: 1,900 W (1,9	more) V 140 VA)		
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Service Area Power voltage Power frequency Power supply efficiency Maximum Power Consumption Maximum Power Consumption Power phase	Front: 850 mm (33.5 inch) o Rear: 850 mm (33.5 inch) or AC 100 - 120 V / AC 200 - 240 50 / 60 Hz 92 % (80 PLUS gold) AC 100 - 120 V: 1,900 W (1,9 AC 200 - 240 V: 1,890 W (1,9 Single	more) V 140 VA)	2.5-inch Drive Enclosure 482 x 540 x 88 mm 19 x 21.3 x 3.5 inch 2 U	3.5-inch Drive Enclosure 482 x 560 x 88 mm 19 x 22 x 3.5 inch 2 U
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Service Area Power voltage Power frequency Power supply efficiency Maximum Power Consumption Maximum Power Consumption Power phase Dimensions (W x D x H) Weight Maximum Power Consumption (AC 100 - 120 V) Maximum Power Consumption (AC 200 - 240 V) Environment Maximum Heat Generation	Front: 850 mm (33.5 inch) o Rear: 850 mm (33.5 inch) or AC 100 - 120 V / AC 200 - 240 50 / 60 Hz 92 % (80 PLUS gold) AC 100 - 120 V: 1,900 W (1,9 AC 200 - 240 V: 1,890 W (1,9 Single 2.5-inch Controller Enclosure 482 x 645 x 88 mm 19 x 25.4 x 3.5 inch 2 U 35 kg (77 lb) 610 W (610 VA) AC 100 - 120 V: 7,000: kJ/h	more) V 40 VA) 30 VA) 3.5-inch Controller Enclosure 482 x 670 x 88 mm 19 x 26.4 x 3.5 inch 2 U 35 kg (77 lb) 530 W (540 VA)	482 x 540 x 88 mm 19 x 21.3 x 3.5 inch 2 U 35 kg (77 lb) 430 W (440 VA)	482 x 560 x 88 mm 19 x 22 x 3.5 inch 2 U 35 kg (77 lb) 340 W (350 VA)
Service Area Power voltage Power frequency Power supply efficiency Maximum Power Consumption Maximum Power Consumption Power phase Dimensions (W x D x H) Weight Maximum Power Consumption (AC 100 - 120 V) Maximum Power Consumption (AC 200 - 240 V) Environment Maximum Heat Generation Temperature (operating)	Front: 850 mm (33.5 inch) o Rear: 850 mm (33.5 inch) or AC 100 - 120 V / AC 200 - 240 50 / 60 Hz 92 % (80 PLUS gold) AC 100 - 120 V: 1,900 W (1,9 AC 200 - 240 V: 1,890 W (1,9 Single 2.5-inch Controller Enclosure 482 x 645 x 88 mm 19 x 25.4 x 3.5 inch 2 U 35 kg (77 lb) 610 W (620 VA) 600 W (610 VA) AC 100 - 120 V: 7,000: kJ/h AC 200 - 240 V: 7,000: kJ/h	more) V 40 VA) 30 VA) 3.5-inch Controller Enclosure 482 x 670 x 88 mm 19 x 26.4 x 3.5 inch 2 U 35 kg (77 lb) 530 W (540 VA)	482 x 540 x 88 mm 19 x 21.3 x 3.5 inch 2 U 35 kg (77 lb) 430 W (440 VA)	482 x 560 x 88 mm 19 x 22 x 3.5 inch 2 U 35 kg (77 lb) 340 W (350 VA)
Service Area Power voltage Power frequency Power supply efficiency Maximum Power Consumption Maximum Power Consumption Power phase Dimensions (W x D x H) Weight Maximum Power Consumption (AC 100 - 120 V) Maximum Power Consumption (AC 200 - 240 V) Environment Maximum Heat Generation Temperature (operating) Temperature (not operating)	Front: 850 mm (33.5 inch) o Rear: 850 mm (33.5 inch) or AC 100 - 120 V / AC 200 - 240 50 / 60 Hz 92 % (80 PLUS gold) AC 100 - 120 V: 1,900 W (1,9 AC 200 - 240 V: 1,890 W (1,9 Single 2.5-inch Controller Enclosure 482 x 645 x 88 mm 19 x 25.4 x 3.5 inch 2 U 35 kg (77 lb) 610 W (620 VA) AC 100 - 120 V: 7,000: kJ/h AC 200 - 240 V: 7,000: kJ/h AC 200 - 240 V: 7,000: kJ/h	more) V 40 VA) 30 VA) 3.5-inch Controller Enclosure 482 x 670 x 88 mm 19 x 26.4 x 3.5 inch 2 U 35 kg (77 lb) 530 W (540 VA) 530 W (540 VA)	482 x 540 x 88 mm 19 x 21.3 x 3.5 inch 2 U 35 kg (77 lb) 430 W (440 VA)	482 x 560 x 88 mm 19 x 22 x 3.5 inch 2 U 35 kg (77 lb) 340 W (350 VA)
19" rackmount Service Area Power voltage Power frequency Power supply efficiency Maximum Power Consumption Maximum Power Consumption Power phase Dimensions (W x D x H) Weight Maximum Power Consumption (AC 100 - 120 V) Maximum Power Consumption (AC 200 - 240 V) Environment Maximum Heat Generation Temperature (operating) Temperature (not operating) Humidity (not operating)	Front: 850 mm (33.5 inch) o Rear: 850 mm (33.5 inch) or AC 100 - 120 V / AC 200 - 240 50 / 60 Hz 92 % (80 PLUS gold) AC 100 - 120 V: 1,900 W (1,9 AC 200 - 240 V: 1,890 W (1,9 Single 2.5-inch Controller Enclosure 482 x 645 x 88 mm 19 x 25.4 x 3.5 inch 2 U 35 kg (77 lb) 610 W (620 VA) 600 W (610 VA) AC 100 - 120 V: 7,000: kJ/h AC 200 - 240 V: 7,000: kJ/h 10 - 40 °C 0 - 50 °C	more) V 40 VA) 30 VA) 3.5-inch Controller Enclosure 482 x 670 x 88 mm 19 x 26.4 x 3.5 inch 2 U 35 kg (77 lb) 530 W (540 VA) 530 W (540 VA) 10 x 20 x	482 x 540 x 88 mm 19 x 21.3 x 3.5 inch 2 U 35 kg (77 lb) 430 W (440 VA)	482 x 560 x 88 mm 19 x 22 x 3.5 inch 2 U 35 kg (77 lb) 340 W (350 VA)

Environment			
Sound pressure (LpAm)	49dB(A)		
Sound power (LWAd; 1B = 10dB)	6.7B		
Noise notes	Measured with single enclosure according to ISO 7779 and declared according to ISO 9296		
Operating environment	FTS 04230 – Guideline for Data Center (installation specification)		
Operating environment link	http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12dbe		
Compliance			
Product safety	UL 60950-1, CSA-C22.2 No. 60950-1, EN 60950-1, IEC 60950-1, GOST-R		
Electromagnetic Compatibility	CNS 13438, FCC CFR 47 class A , ICES 003 Class A, EN 55022 Class A, VCCI Class A, AS/NZS CISPR 22 Class A		
Electromagnetic Immunity	EN 55024		
CE certification	2004/108/EC, 2006/95/EC, 2011/65/EC		
Approvals	CB, CE, C-Tick, FCC, EAC, GS, VCCI		
Environmental compliance	RoHS compliant, WEEE compliant		
Compliance 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	http://globalsp.ts.fujitsu.com/sites/certificates		
Warranty			
Warranty period	3 years		
Warranty type	Onsite warranty		
Warranty Terms & Conditions Product Support Services - the perfect	www.fujitsu.com/support		
Support Pack Options	Globally available in major business areas:		
11F	9x5, Next Business Day Onsite Response Time		
	9x5, 4h Onsite Response Time		
	24x7, 4h Onsite Response Time		
Recommended Service	24x7, Onsite Response Time: 4h		
Service Lifecycle	5 years after end of product life		
Service Weblink	www.fujitsu.com/services/product-services		

Fujitsu OPTIMIZATION Services

In addition to Fujitsu ETERNUS DX60 S3, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Fujitsu Portfolio

Built on industry standards, Fujitsu offers a full portfolio of IT hardware and software products, services, solutions and cloud offering, ranging from clients to datacenter solutions and includes the broad stack of Business Solutions, as well as the full stack of Cloud offerings. This allows customers to select from alternative sourcing and delivery models to increase their business agility and to improve their IT operation's reliability.

Computing Products

www.fujitsu.com/global/products/computing/

Software

www.fujitsu.com/software/

More information

Learn more about Fujitsu ETERNUS DX60 S3, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website. 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 contribute to the creation of a sustainable environment for future generations through IT. Please find further information at http://www. fujitsu.com/global/about/environment



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