

# Data Sheet FUJITSU Storage ETERNUS DX600 S3 Disk System

Leading storage performance, automated quality of service



#### 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 in large-scale databases, business-critical 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 DX600 S3**

The scalable, unified Fujitsu Storage ETERNUS DX600 S3 system delivers leading storage performance and automated quality of service management enabling a maximum of system utilization and contributing to a fast ROI. It is the perfect solution when consolidating data applications and business analytics / big data – all into one system. It provides ample headroom for demanding server / desktop virtualization environments and enterprise file services. Extensive high-availability and disaster recovery capabilities make ETERNUS DX600 S3 an ideal storage system for businesscritical data.









### Features & Benefits

Main Features	Benefits
Market-leading performance combined with automated performance management	
	<ul> <li>Leading performance enables large-scale storage consolidation delivering a fast ROI</li> <li>Automatically aligns storage performance with business priorities</li> <li>Delivers reliable and predictable quality of service for business-critical data</li> <li>Enables the operation of productive and analytical tasks in parallel on one storage system</li> <li>High scalability within the system and upgrade options to higher system-class and bigger systems support high data increases at low costs of growth and ensure investment protection</li> </ul>
Rock-solid operation	<ul> <li>Comprehensive high-availability, quality of service and disaster resilience functions ensure predictable and reliable operation</li> <li>Flexible disaster recovery, including transparent failover, with a multitude of snapshot concepts and remote replication between different models and generations</li> <li>Extensive non-disruptive maintenance and upgrade capabilities reduce planned downtimes</li> </ul>
Truly unified architecture	<ul> <li>Unified SAN and NAS access drive system utilization improving ROI</li> <li>Unified management functions across the entire product line result in operational efficiency</li> <li>Unified connectivity supports a large range and many combinations of networking types</li> <li>Unified architecture allows flexible combinations of 2.5" and 3.5" disk types</li> </ul>

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## Technical details

General system information				
,	ETERNUS DX600 S3			
No. of controllers	2			
No. of host interfaces	4-16 ports [iSCSI, FCoE, Ethernet(10Gbit/s], 4-32 ports [FC], 8-32 ports [Ethernet(1Gbit/s)]			
Maximum Cache Capacity	128 GB (block) / 128 GB + 64 GB (block + file)			
Extreme Cache	5,600 GB			
Extreme Cache Pool	3,200 GB			
Maximum Disk Drives	1,056			
Max. no. of drive enclosures	44			
Note	44 with 2.5" or 3.5" DE, 16 with HD-DE or mixture of DEs up to Max no. Drives			
Supported RAID levels	0, 1, 1+0, 5, 5+0, 6			
Host Interfaces	Fibre Channel (16 Gbit/s, 8 Gbit/s, 4 Gbit/s)			
	FCoE (10 Gbit/s)			
	iSCSI (10 Gbit/s, 1 Gbit/s)			
	Ethernet (10 Gbit/s, 1 Gbit/s)			
Mixed host interfaces	Yes			
Max. no. of hosts	1,024			
Supported NAS protocols	CIFS (SMB 2.0), CIFS (SMB 3.0), NFSv2, NFSv3			
Maximum Storage Capacity	6,336 TB			
Drive Type	2.5-inch, SAS, 15,000 rpm (600 GB / 300 GB)			
	2.5-inch, SAS, 10,000 rpm (1,200 GB / 900 GB / 600 GB / 300 GB)			
	2.5-inch, SAS (self-encrypting), 10,000 rpm (1,200 GB / 900 GB)			
	2.5-inch, Nearline SAS, 7,200 rpm (1 TB)			
	2.5-inch, SSD (1,600 GB / 800 GB / 400 GB)			
	3.5-inch, Nearline SAS, 7,200 rpm (6 TB / 4 TB / 3 TB / 2 TB)			
	3.5-inch, SSD (1,600 GB / 800 GB / 400 GB) HDDE, SAS, 10,000 rpm (1.2 TB)			
	HILLE MEATINE SAS / ZULLTOM 14 LK / 3 LK / Z LK I			
Note	HDDE, Nearline SAS, 7,200 rpm (4 TB / 3 TB / 2 TB)  2.5-inch drives are available only for 3.5-inch drive enclosures and 3.5-inch drives are available only for 3.5-inch drives.			
Note				
Note  Max. no. of SSDs	2.5-inch drives are available only for 2.5-inch drive enclosures and 3.5-inch drives are available only for 3.5-inch drive			
Max. no. of SSDs	2.5-inch drives are available only for 2.5-inch drive enclosures and 3.5-inch drives are available only for 3.5-inch drive enclosures.  unlimited			
Max. no. of SSDs Mixed 2.5 inch/ 3.5 inch drive enclosures	2.5-inch drives are available only for 2.5-inch drive enclosures and 3.5-inch drives are available only for 3.5-inch drive enclosures.  unlimited			
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Max. no. of SSDs Mixed 2.5 inch/ 3.5 inch drive enclosures Drive interface Back-end disk connectivity	2.5-inch drives are available only for 2.5-inch drive enclosures and 3.5-inch drives are available only for 3.5-inch drive enclosures.  unlimited  Yes  Serial Attached SCSI (12 Gbit/s)			
Max. no. of SSDs Mixed 2.5 inch/ 3.5 inch drive enclosures Drive interface Back-end disk connectivity Max. no. of LUNs	2.5-inch drives are available only for 2.5-inch drive enclosures and 3.5-inch drives are available only for 3.5-inch drive enclosures.  unlimited  Yes  Serial Attached SCSI (12 Gbit/s)  4 pairs of four-lane x 12 Gbit/s Serial Attached SCSI buses (SAS 3.0 wide)			
Max. no. of SSDs Mixed 2.5 inch/ 3.5 inch drive enclosures Drive interface Back-end disk connectivity Max. no. of LUNs Max. LUN capacity	2.5-inch drives are available only for 2.5-inch drive enclosures and 3.5-inch drives are available only for 3.5-inch drive enclosures.  unlimited  Yes  Serial Attached SCSI (12 Gbit/s)  4 pairs of four-lane x 12 Gbit/s Serial Attached SCSI buses (SAS 3.0 wide)  16,384			
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Max. no. of SSDs Mixed 2.5 inch/ 3.5 inch drive enclosures Drive interface Back-end disk connectivity Max. no. of LUNs Max. LUN capacity No. of snapshots - max. Max. no. of copy generations	2.5-inch drives are available only for 2.5-inch drive enclosures and 3.5-inch drives are available only for 3.5-inch drive enclosures.  unlimited  Yes  Serial Attached SCSI (12 Gbit/s)  4 pairs of four-lane x 12 Gbit/s Serial Attached SCSI buses (SAS 3.0 wide)  16,384  128 TB  8,192			
Max. no. of SSDs Mixed 2.5 inch/ 3.5 inch drive enclosures Drive interface Back-end disk connectivity Max. no. of LUNs Max. LUN capacity No. of snapshots - max. Max. no. of copy generations Eco-mode	2.5-inch drives are available only for 2.5-inch drive enclosures and 3.5-inch drives are available only for 3.5-inch drive enclosures.  unlimited  Yes  Serial Attached SCSI (12 Gbit/s)  4 pairs of four-lane x 12 Gbit/s Serial Attached SCSI buses (SAS 3.0 wide)  16,384  128 TB  8,192  512			
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Max. no. of SSDs Mixed 2.5 inch/ 3.5 inch drive enclosures Drive interface Back-end disk connectivity Max. no. of LUNs Max. LUN capacity No. of snapshots - max. Max. no. of copy generations Eco-mode Continuity management Storage Cluster Remote Copy functionality Note Performance management Automated Storage Tiering	2.5-inch drives are available only for 2.5-inch drive enclosures and 3.5-inch drives are available only for 3.5-inch drive enclosures.  unlimited  Yes  Serial Attached SCSI (12 Gbit/s)  4 pairs of four-lane x 12 Gbit/s Serial Attached SCSI buses (SAS 3.0 wide)  16,384  128 TB  8,192  512  Yes  Yes  Synchronous and asynchronous			
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Capacity management						
RAID migration	Yes	Yes				
LUN online expansion w/o interruption	Yes					
Reporting function	Yes					
Management						
Interfaces	Ethernet (1000 Base-T / 1	00 Base-TX / 10 Base-T)				
Supported protocols	SNMP (version1, 2C, 3), S	MI-S 1.6				
Administration	Web-based graphical user	Web-based graphical user interface, CLI (Command Line Interface), ETERNUS SF				
Remote Support	Event notification (E-mail / SNMP / Syslog), Remote maintenance					
Supported configurations	All major host operating systems, servers and business applications Detailed support matrix: www.fujitsu.com/global/support/products/computing/storage/disk/supported-configrations					
Installation specification						
19" rackmount	Yes					
Service Area		Front: 850 mm (33.5 inch) or more Rear: 850 mm (33.5 inch) or more				
Power voltage	AC 100 - 120 V / AC 200 -	240 V				
Power frequency	50 / 60 Hz					
Power supply efficiency	92 % (80 PLUS gold)					
Maximum Power Consumption	AC 100 - 120 V: 26,240 W	(26,800 VA)				
Maximum Power Consumption	AC 200 - 240 V: 26,520 W	AC 200 - 240 V: 26,520 W (27,080 VA)				
Power phase	Single					
	ETERNUS DX600 S3	2.5-inch Drive Enclosure	3.5-inch Drive Enclosure	High-Density Drive Enclosure		
Dimensions (W x D x H)	482 x 805 x 133 mm 19 x 31.7 x 5.2 inch 3 U	482 x 540 x 88 mm 19 x 21.3 x 3.5 inch 2 U	482 x 560 x 88 mm 19 x 22 x 3.5 inch 2 U	482 x 980 x 176 mm 19 x 38.6 x 6.9 inch 4 U		
Weight	54 kg (119 lb)	35 kg (77 lb)	35 kg (77 lb)	95 kg (209 lb)		
Maximum Power Consumption (AC 100 - 120 V)	720 W (730 VA)	430 W (440 VA)	340 W (350 VA)	1,300 W (1,320 VA)		
Maximum Power Consumption (AC 200 - 240 V)	1,000 W (1,010 VA)	430 W (440 VA)	340 W (350 VA)	1,300 W (1,320 VA)		
Environment						
Maximum Heat Generation	AC 100 - 120 V: 97,200: kJ/h					
	AC 200 - 240 V: 98,200: kJ/h					
Temperature (operating)	10 - 40 °C					
Temperature (not operating)	0 - 50 °C					
Humidity (operating)	20 - 80 % (relative humidity, non-condensing)					
Humidity (not operating)	8 - 80 % (relative humidity, non-condensing)					
Altitude	3,000 m (10,000 ft.)					
Sound pressure (LpAm)	54dB(A)					
Sound power (LWAd; 1B = 10dB)	7.2B					
Noise notes	Measured with single enc	losure according to ISO 7779 ar	nd declared according to ISO 9	296		
Operating environment	FTS 04230 – Guideline for	Data Center (installation speci	fication)			
Operating environment link	http://docs.ts.fujitsu.com/	dl.aspx?id=e4813edf-4a27-46	1a-8184-983092c12dbe			
Туре	ETERNUS DX600 S3	2.5-inch Drive Enclosure	3.5-inch Drive Enclosure	High-Density Drive Enclosure		
Compliance						
Product safety	UL 60950-1, CSA-C22.2 No	o. 60950-1, EN 60950-1, IEC 60	950-1, 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					
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Compliance				
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 perfo	www.fujitsu.com/support			
Support Pack Options	Available in major business areas: 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			

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#### Fujitsu OPTIMIZATION Services

In addition to Fujitsu ETERNUS DX600 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 DX600 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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