

# DATASHEET

## FUJITSU ETERNUS DX60 S2 DISK STORAGE SYSTEM

### ETERNUS DX S2 DISK STORAGE SYSTEMS

The second generation of Fujitsu ETERNUS DX disk storage systems, ETERNUS DX S2, are The Flexible Data Safe for Dynamic Infrastructures. Enterprise-proven capabilities protect data assets across all types of IT infrastructure. Redundant components, RAID protection and build-in data protection provide the highest system reliability to ensure business continuity is maintained.

ETERNUS DX S2 models are comprehensive disk storage platforms with superior scalability to address the demands of intensive data growth and highest performance. Free choice of modular disk storage and state-of-the-art connectivity across the entire model range delivers maximum configuration flexibility allowing choice in performance and TCO. Data-in-place upgrade options are also available throughout the system's lifecycle to ensure maximum investment protection.

The unified ETERNUS SF storage management software enables single point administration, easy data protection and efficient operation across the entire ETERNUS DX range. In virtualized IT environments in particular, ETERNUS SF perfectly integrates the powerful ETERNUS DX disk storage with minimal administration effort.

#### ETERNUS DX60 S2

ETERNUS DX60 S2 with Intel® Xeon® processor is an affordable disk storage system for small and midsize environments. ETERNUS DX60 S2 scales flexibly up to 24 disk drives. Different 2.5 inch, 3.5 inch SAS and high capacity Nearline SAS drive types are supported in mixed configurations, to enable efficient implementation of a tiered storage environment. Non-disruptive capacity upgrades are possible just by adding disks or a second enclosure. Customers can choose from FC, iSCSI, or SAS, host interfaces.

ETERNUS SF Express management software provided with ETERNUS DX60 S2 simplifies monitoring, management, and data copy tasks, for single or multiple ETERNUS DX disk storage systems, from a central console.



MAIN FEATURES	BENEFITS
The Flexible Data Safe for Dynamic Infrastructures	<ul style="list-style-type: none"> <li>Enterprise proven capabilities to protect all data assets</li> <li>Redundant components and RAID protection provide highest reliability</li> </ul>
Innovative ETERNUS SF Storage Management	<ul style="list-style-type: none"> <li>Unified storage management across the entire ETERNUS DX range</li> <li>Single point administration, easy data protection and efficient operation</li> <li>Powerful disk storage united with minimal administration efforts in virtualized environments</li> </ul>

# TECHNICAL DETAILS

## GENERAL SPECIFICATION

CPU Frequency

RAID Levels

Host Interfaces

Number of controllers

Number of host interfaces

Number of hosts

Fibre Channel

iSCSI

SAS

Cache memory capacity

Number of drive enclosures

Number of drives

Storage capacity

Physical capacity

Logical capacity

Drives

3.5-inch

SAS disk drives

Nearline SAS disk drives

- Notes

2.5-inch

SAS disk drives

- Notes

Drive interface

Redundancies

RAID Controller

Fan

Power Supply

Number of LUN

LUN capacity

Number of Snapshots

Standard (built-in)

Maximum (option)

- Note Remote Copy feature

Number of copy generations

Remote Copy feature

## 3.5" BASE MODEL

SINGLE

CONTROLLER

DUAL

CONTROLLER

## 2.5" BASE MODEL

SINGLE

CONTROLLER

DUAL

CONTROLLER

800 MHz

0, 1, 1+0, 5, 5+0, 6

Fibre Channel (4/2/1Gbit/s)

iSCSI (1Gbit/s)

SAS (3Gbit/s)

1

2

1

2

2

4

2

4

Max. 32

Max. 64

Max. 32

Max. 64

Max. 32

Max. 64

Max. 32

Max. 64

Max. 2

Max. 4

Max. 2

Max. 4

1 GB

2 GB

1 GB

2 GB

Max. 1 (3.5" only)

Max.24 (3.5" CE + 3.5" DE)

Max. 24 (2.5" CE)

Max. 72.0 TB

Max. 21.6 TB

Max. 53.4 TB

Max. 16.0 TB

600 GB/450 GB/300 GB (15,000 rpm)

3 TB/2 TB/1 TB/750 GB (7,200 rpm)

3.5" drives are available only for 3.5" drive enclosures.

900 GB/600 GB/450 GB/300 GB (10,000 rpm)

2.5" drives are available only for 2.5" drive enclosures.

Serial Attached SCSI (3Gbit/s)

No

Yes

No

Yes

Yes

Yes

Yes

Yes

Yes

Yes

Yes

Yes

Max. 512

Max. 32 TB

8

512

Snap/Clone License must be purchased to maximize the number of Snapshots

8

No

TECHNICAL DETAILS

INSTALLATION SPECIFICATION			3.5" BASE MODEL	2.5" BASE MODEL
Dimensions (W x D x H)	Standard		483 x 650 x 88mm (19 x 25.5 x 3.5 inch) [2U]	
	Maximum		483 x 650 x 177mm (19 x 25.5 x 7 inch) [4U]	483 x 650 x 88 mm (2U) 19 x 25.5 x 3.5 in. (2U)
Service Area	Front		800 mm (31.5 inch) or more	
	Rear		800 mm (31.5 inch) or more	
Maximum Weight			70 kg (35 kg per single enclosure) 155 lbs. (77.2 lbs. per single enclosure)	35 kg (35 kg per single enclosure) 77.2 lbs. (77.2 lb per single enclosure)
Power	Voltage		AC 100 – 120 V / AC 200 – 240 V	
	Phase		Single	
	Frequency		50 Hz / 60 Hz	
Maximum Power Consumption	AC 100 - 120V	CE	510 W (520 VA)	440 W (450 VA)
		DE Max	—	370 W (380 VA)
	AC 200 - 240V	CE	—	810 W (820 VA)
		DE	500 W (510 VA)	430 W (440 VA)
		DE Max	—	370 W (380 VA)
			—	800 W (820 VA)
Maximum Heat Generation	AC 100 - 120V		1,840 kJ/h (1,740 BTU/h)	2,920 kJ/h (2,760 BTU/h)
	AC 200 - 240V		1,800 kJ/h (1,700 BTU/h)	2,880 kJ/h (2,720 BTU/h)
Environmental Conditions	Temperature		10 – 40°C (Operating)	
			50 – 104°F (Operating)	
Altitude	Humidity		20 – 80% RH (Operating)	
			3,000 m	
			10,000 ft.	

# TECHNICAL DETAILS

## SUPPORTED RAID LEVELS

<b>RAID 0</b>	Data striping on several disk drives (not recommended)
<b>RAID 1</b>	Mirrored disk drives
<b>RAID 1+0</b>	Data mirroring, then striping of the data over several disk drives
<b>RAID 5</b>	Striping with distributed parity
<b>RAID 5+0</b>	RAID 5 arrays, striped again over several drives
<b>RAID 6</b>	Striping with distributed double parity

## MANAGEMENT

<b>Interfaces</b>	Ethernet (1000 Base-T / 100 Base-TX / 10 Base-T)
<b>Supported protocols</b>	SNMP (version1), SMI-S 1.4
<b>Administration</b>	Web-Environment, CLI (Command Line Interface), ETERNUS SF Express

## SUPPORTED OS FOR ETERNUS SF EXPRESS

<b>Operation Management Server</b>	Microsoft® Windows Server® 2008 Standard (32-bit) (64-bit) including R2 Microsoft® Windows Server® 2008 Enterprise (32-bit) (64-bit) including R2 Microsoft® Windows Server® 2008 Datacenter (32-bit) (64-bit) including R2
<b>Operation Management Client</b>	Microsoft® Windows® 7 Home Premium Microsoft® Windows® 7 Professional Microsoft® Windows® 7 Ultimate Windows Vista® Home Basic Windows Vista® Home Premium Windows Vista® Business Windows Vista® Enterprise Windows Vista® Ultimate Windows® XP Home Edition Windows® XP Professional Microsoft® Windows Server® 2008 Standard (32-bit) (64-bit) Microsoft® Windows Server® 2008 Enterprise (32-bit) (64-bit) Microsoft® Windows Server® 2008 Datacenter (32-bit) (64-bit)

## OPTIONS

<b>License</b>	ETERNUS SF Local Copy License
----------------	-------------------------------

## NOISE EMISSION

	<b>3.5" BASE MODEL</b>	<b>2.5" BASE MODEL</b>
<b>Sound Power Level (LWAd)</b>	6.0 B	5.9 B
<b>Sound Pressure Level (LpAm)</b>	43.5 dB(A)	42.0 dB(A)
<b>- Notes</b>	Measured with single enclosure according to ISO7779 and declared according to ISO9296	

# TECHNICAL DETAILS

## WARRANTY

Global Factory Warranty	2 years
-------------------------	---------

## MAINTENANCE AND SUPPORT SERVICES

The perfect extension of the product specific base warranty for optimized operation.  
Please check your specific service level with your FUJITSU sales organization or partner.

## SUPPORTED CONFIGURATIONS

**A wide range of host operating systems, servers as well as applications is supported.**  
For a detailed support matrix check:  
<http://www.fujitsu.com/global/services/computing/storage/eternus/products/diskstorage/dx-entry/supported-device/>

## COMPLIANCE WITH STANDARDS

Product safety	UL60950-1, CSA-C22.2 No. 60950-1, 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	EN55024
CE certification	Electromagnetic Compatibility Directive 2004/108/EC Low Voltage Directive 2006/95/EC
Environmental compliance	RoHS-compliant (Restriction of hazardous substances) WEEE-compliant (Waste electrical and electronic equipment)
- 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.

## ABOUT FUJITSU AMERICA

---

Fujitsu America, Inc., is a leading ICT solutions provider for organizations in the U.S., Canada and the Caribbean. Fujitsu enables clients to meet their business objectives through integrated offerings including consulting, systems integration, managed services and outsourcing for enterprise applications, data center and field services operations, based on server, software, storage and mobile technologies. Fujitsu provides industry-oriented solutions for manufacturing, retail, healthcare, government, education, financial services and communications sectors.

For more information, please visit: <http://solutions.us.fujitsu.com/>.

## FUJITSU PLATFORM SOLUTIONS

---

In addition to Fujitsu ETERNUS DX, 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

## 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/)

## FUJITSU AMERICA, INC.

1250 East Arques Avenue  
Sunnyvale, CA 94085-3470, U.S.A.  
Telephone: 800 831 3183  
or 408 746 6000

Web: <http://solutions.us.fujitsu.com>

Contact Form:

<http://solutions.us.fujitsu.com/contact>

Fujitsu, the Fujitsu logo ETERNUS, PRIMEQUEST, Interstage and Systemwalker are trademarks or registered trademarks of Fujitsu Limited in the United States and other countries. PRIMERGY is a trademark or registered trademark of Fujitsu Technology Solutions in the United States and other countries. SPARC Enterprise is a trademark or registered trademark of SPARC International, Inc. in the United States and other countries. All other trademarks mentioned herein are the property of their respective owners.

Product description data represents Fujitsu design objectives and is provided for comparative purposes; actual results may vary based on a variety of factors. Specifications are subject to change without notice.

Copyright ©2011 Fujitsu America, Inc.  
All rights reserved. FPC58-2968-01 09/11.  
FCL\_11.0869