FUJITSU

Datasheet
Fujitsu ETERNUS DX60 S2 Disk Storage System

The Economy Storage

ETERNUS DX S2 DISK STORAGE SYSTEMS

Fujitsu's second generation of 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.

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

Delivering reliable operation at an affordable price makes ETERNUS DX60 S2 an ideal disk storage system for small and medium-sized IT environments.

Management software, included at no extra cost, reduces administration effort and provides functionality to ensure data protection. 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 of up to 72 TB offering good headroom for future growth. The perfect storage solution for consolidation of distributed data and for smaller server virtualization projects.

Green IT

Green Policy Innovation

Green Product
This product cleared our company's original evaluation standard which followed global environmental measures.

Features and benefits

Main features	Benefits
Reliable operation at an affordable price	**Combines affordable price-level with** ■ High performance ■ 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 **Fits perfectly to** ■ Storage consolidation starters & virtualization newcomers ■ Medium capacity requirements with moderate growth rates
Free of charge ETERNUS SF Express Storage Management	■ Comes with a richly featured management suite at no extra costs ■ Single point administration ■ Easy and efficient operation

Technical details

General Specification		2.5" Base Model		3.5" Base Model	
		Single Controller	Dual Controller	Single Controller	Dual Controller
RAID Levels		0, 1, 1+0, 5, 5+0, 6			
Host Interfaces		Fibre Channel (4/2/1 Gbit/s)			
		iSCSI (1 Gbit/s / 100Mbit/s)			
		SAS (3 Gbit/s)			
Number of controllers		1	2	1	2
Number of host interfaces		2 ports	4 ports	2 ports	4 ports
Number of hosts	Fibre Channel	Max. 32	Max. 64	Max. 32	Max. 64
	iSCSI	Max. 32	Max. 64	Max. 32	Max. 64
	SAS	Max. 2	Max. 4	Max. 2	Max. 4
Cache memory capacity		1 GB	2 GB	1 GB	2 GB
Number of drive enclosures		—		Max. 1	
Number of drives		Max. 24 (2.5"CE)		Max. 24 (3.5"CE +3.5"DE)	
Storage capacity	Physical capacity	Max. 24.0 TB		Max. 72.0 TB	
	Logical capacity	Max. 17.8 TB		Max. 53.4 TB	
Drives 3.5-inch	SAS disk drives	600 GB/450 GB/300 GB (15,000 rpm)			
	Nearline SAS disk drives	3 TB/2 TB/1 TB (7,200 rpm)			
- Notes		3.5" drives are available only for 3.5" drive enclosures.			
2.5-inch	SAS disk drives	900 GB/600 GB/450 GB/300 GB (10,000 rpm)			
	Nearline SAS disk drives	1 TB (7,200 rpm)			
- Notes		2.5" drives are available only for 2.5" drive enclosures.			
Drive interface		Serial Attached SCSI (3 Gbit/s)			
Redundancies	RAID Controller	No	Yes	No	Yes
	Fan	Yes	Yes	Yes	Yes
	Power Supply	Yes	Yes	Yes	Yes
Number of LUN		Max. 512			
LUN capacity		Max. 32 TB			
Number of Snapshots	Standard (built-in)	8			
	Maximum (option)	512			
- Note		Local Copy License must be purchased to maximize the number of Snapshots			
Number of copy generations		8			
Remote Copy feature		No			

Installation Specification		2.5" Base Model	3.5" Base Model
Dimensions (W x D x H)	Standard	483 x 650 x 88mm (2U)	
		19 x 25.5 x 3.5 inch [2U]	
	Maximum	483 × 650 × 88 mm (2U)	483 × 650 ×176 mm (4U)
		19 × 25.5 × 3.5 inch [2U]	19 × 25.5 × 7 inch [4U]
Service Area	Front	800 mm (31.5 inch) or more	
	Rear	800 mm (31.5 inch) or more	
Maximum Weight		35 kg (35 kg per single enclosure)	70 kg (35 kg per single enclosure)
		77.2 lb (772. lb per single enclosure)	154.4 lb (772. lb per single enclosure)
Power	Voltage	AC 100 – 120 V / AC 200 – 240 V	
	Phase	Single	
	Frequency	50 Hz / 60 Hz	

Installation Specification (Continued)

Installation Specification (Continued)			2.5" Base Model	3.5" Base Model
Maximum Power Consumption	AC 100 - 120V	CE	510 W (520 VA)	440 W (450 VA)
		DE	—	370 W (380 VA)
		Max	—	810 W (820 VA)
	AC 200 - 240V	CE	500 W (510 VA)	430 W (440 VA)
		DE	—	370 W (380 VA)
		Max	—	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℃ (Operating)	
			50 – 104°F (Operating)	
	Humidity		20 – 80% RH (Operating)	
Altitude			3,000 m (10,000 ft.)	
Operating environment			FTS 04230 Guideline for Data Center (installation locations)	
Operating environment link			http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12dbe	

Supported RAID Levels

Supported RAID Levels	
RAID 0	Data striping on several disk drives, not recommended
RAID 1	Mirrored disk drives
RAID 1+0	Data mirroring, then striping of the data over several disk drives
RAID 5	Striping with distributed parity
RAID 5+0	RAID 5 arrays, striped again over several drives
RAID 6	Striping with distributed double parity

Management

Management	
Interfaces	Ethernet (1000 Base-T / 100 Base-TX / 10 Base-T)
Supported protocols	SNMP (version1, 2C, 3), SMI-S 1.4
Administration	Web-Environment, CLI (Command Line Interface), ETERNUS SF Express

Supported OS For ETERNUS SF Express

Supported OS For ETERNUS SF Express	
Operation Management Server	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
Operation Management Client	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

Options	
License	ETERNUS SF Local Copy License

Noise Emission	2.5" Base Model	3.5" Base Model
Sound Power Level (LWAd)	5.9 B	6.0 B
Sound Pressure Level (LpAm)	42.0 dB(A)	43.5 dB(A)
- Notes	measured with single enclosure according to ISO7779 and declared according to ISO9296	

Warranty	
Global Base Warranty	3 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.

More information

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/
- PRIMERGY: Industry standard server
- SPARC Enterprise: UNIX server
- PRIMEQUEST: Mission-critical IA server
- ETERNUS: Storage system

Software

www.fujitsu.com/software/
- Interstage: Application infrastructure software
- Systemwalker: System management software

More information

Learn more about Fujitsu ETERNUS DX60 S2, please contact your Fujitsu sales representative, 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 resolve issues of environmental energy efficiency through IT. Please find further information at:
www.fujitsu.com/global/about/environment/

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