# Online Storage Systems and Network Components





# **ETERNUS DX Family**







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Model	ETERNUS DX60 S2	ETERNUS DX80 S2 / DX90 S2	ETERNUS DX410 S2 / DX440 S2	ETERNUS DX8700 S2	
Interfaces	Fibre Channel (4 / 2 / 1 Gbit/s), iSCSI (1 Gbit/s), SAS (3 Gbit/s)	Fibre Channel (8 / 4 / 2 Gbit/s), FCoE (10 Gbit/s), iSCSI (10 / 1 Gbit/s), SAS (6 / 3 Gbit/s)	Fibre Channel (8 / 4 / 2 Gbit/s), FCoE (10 Gbit/s), iSCSI (10 / 1Gbit/s)	Fibre Channel (8 / 4 / 2 Gbit/s), FCoE (10 Gbit/s), iSCSI (10 / 1Gbit/s)	
Max. Drives	24 x SAS and Nearline SAS in mixed configuration	120 / 240 x SSD, SAS and Nearline SAS in mixed configuration (3.5" / 2.5")	480 / 960 x SSD, SAS and Nearline SAS in mixed configuration (3.5" / 2.5")	Up to 3,072 x SSD, SAS and Nearline SAS in mixed configuration (3.5" / 2.5")	
Max. Capacity	72 TB	360 TB	720 / 1,440 TB	4,608 TB	
No. of host interfaces	2 - 4	4 - 8	4 - 16 / 4 - 32	4 - 128	
No. of connect. hosts	32 x FC / iSCSlor 4 x SAS	Max. 1,024	Max. 1,024	Max. 2,048	
RAID Level	0, 1, 1+0, 5, 5+0, 6				
Thin Provisioning & AST	-	✓	✓	✓	
Remote Replication	-	✓ for DX90 S2	✓	✓	
Storage Management	ETERNUS SF software suite				

### ETERNUS JX40



NetApp FAS	o &
V-series	
Model	











Model	ETERNUS JX40
Туре	Passive direct server attached drive extension (JBOD)
Maximum Capacity	12 / 72 TB
Hard Disks	1 - 144 SAS and SATA, 2.5" drives mixable in up to 6 shelves
Protocols	SAS
RAID Level	1, 3, 5, 6, 1+0, 5+0 (with host-based controller)
Interfaces	SAS 6 Gbit/s



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	FAS2220	FAS2240

Model	FAS2220	FAS2240	FAS3210 / FAS3240 / FAS3270	FAS6210 / FAS6240 / FAS6280	V3200 series / V6200 serie
Туре	NAS, iSCSI SAN	NAS, FC, SAN, iSCSI SAN Open Storage Contr			Open Storage Controller
Maximum Capacity	180 TB	432 TB	480 / 1,200 / 1,920 TB	2,400 / 2,880 / 2,880 TB	Up to 1,920 TB / 2,880 TB   V-single system (dependin external system)
Hard Disks	60	144	240 / 600 / 960	1,200 / 1,440 / 1,440	Supports all disk technolog
Protocols	NFS, CIFS, iSCSI	NFS, CIFS, HTTP, FTP, FCP, ISCSI, FCOE			
RAID Type		Standard RAID levels + RAID DP			
Interfaces	Ethernet	FC, Ethernet			

### **Brocade Switches**





Thin Provisioning & FlexCache ✓





### Cisco Switches



FC Switches and Directors





Cisco Catalyst Series



Model	odel FC 8G FC 16G Brocade 300 / 5100 / 5300 Brocade 6505 / 6510		Brocade 7800, VDX6720, FCX 648S, FastIron WS 648G	Brocade Director Products  Modular FC Director	
Туре	FC Sw	FC Switches			
Ports	B300: 8 Port (-16, -24; PoD*) B5100: 24 Port (-32, -40; PoD*) B5300: 48 Port (-64, -80; PoD*)	B6505: 12 Port (-24; PoD*) B6510: 24 Port (-36, -48; PoD*)	B7800: FCIP Router (FC to IP 1 GbE) B6720: DCB/FC0E Switch (24P; 1 / 10 GbE) FCX 648S: IP Switch (48P; 1 GbE; uplink: 2x 10 GbE) Fastlion WS 648G: (48P; 1 GbE)	DCX-4S: FC Director 8 Gbit/s, 16-256 Ports DCX: FC Director 8 Gbit/s, 16-512 Ports 8510-4: FC Director 16 Gbit/s, 16-256 Ports 8510-8: FC Director 16 Gbit/s, 16-512 Ports	
Speed	1, 2, 4, 8 Gbit/s	FC: 2, 4, 8, 10, 16 Gbit/s	FC: 2, 4, 8 Gbit/s; IP: 1, 10 GbE	FC8G: 1, 2, 4, 8, 10 Gbit/s; FC1P: IP: 1, 10 Gb FC16G: 2, 4, 8, 10, 16 Gbit/s; FCIP: IP: 1, 10 Gb	

			2000 / 3000 / 5500 / 7000
Туре	FC Switches	IP Switches	Data Center Fabric Switches
Ports	MDS9124: 8 Port (-16, -24; PoD*) MDS9148: 24 Port (-36, -48; PoD*) MDS95xx: Slots 4 / 7 / 11; Ports: 12 -192 / -336 / -528 MDS9222: FCIP Router (18-66 Port FC4G + 4 Port IP 1G)	24-577	24-768 (Ethernet/FC/FCoE)
Speed	1, 2, 4, 8, 10 Gbit/s	10/100/1000 Mbit/s, 10 Gbit/s	1/10/40 Gbit/s, 100 Gbit/s ready

## Data Protection and Services







## Tape Systems







Tape Systems					_	
Model	LTO Desktop Drive	ETERNUS LT20 S2	ETERNUS LT40 S2	ETERNUS LT60 S2	Scalar i500 / i6000	SL500 / SL3000* / SL8500*
Туре	LTO-4 / LTO-5		LTO-3 / LTO-4 / LTO-5		LTO-3, LTO-4, LTO-5	LTO-4, LTO-5
Capacity (max.) (native)	0.8 / 1.5 TB	3.2 / 6.4 / 12 TB	9.6 / 19.2 / 36 TB	19.2 / 38.4 / 72 TB	613 / 8,064 TB	862 / 8,887 TB / 150 PB
Cartridges	1	2 x 4	2 x 12	4 x 12	409 / 5,376	575 / 5,925 / 100,000
Drives (max.)	1 HH	1 HH	1 FH / 2 HH	2 FH / 4 HH	18 / 96	18 / 56 / 640
Interfaces	SAS		SAS, FC			SCSI, SAS, FC / FC / FC
Note		*also available with enterprise drive types T9840, T10000				

### ETERNUS CS800

Model

Capacity

Path-to-Tape

Shares (max.)
Partitions (max.)

Host Ethernet and

NAS Backup Target

Replication Interface

Fibre Channel Interface

(VTL and Path-to-Tape)

Virt. Tape Drives (max.)

Virtual Cartridges (max.)

**Tape Drives Emulations** 

Standard Software included

Library Emulations

Performance

Note



ETERNUS CS800 VTL

32 to 160 TB

5 x 1 GbE

4 x 8 GbFC

Symantec OST support of direct tape creation,

Application specific (except Entry Systems)

NFS and/or CIFS mount point

128

64 (except Entry Systems)

9000 (except Entry Systems)

DLT7000, SDLT 320, SDLT 600, SLT-S4, LTO-1, LTO-2, LTO-3,

LTO-4, LTO-5 (except Entry Systems)

Quantum Scalar 24 / 100.

Scalar i500 / i2000 / i6000 (except Entry Systems)

Up to 6.3 TB/h

Deduplication, Replication,

Path-to-Tape, Multiprotocol Support (except Entry Systems)

For detailed specification refer to the data sheet

256

ETERNUS CS800 NAS Series

5 or 7 x 1 GbE + 2 x 10 GbE

(except Entry Systems)

80 (except Entry Systems)

4 to 160 TB

2 x 8 GbFC





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Model	ETERNUS CS Series CS50 to CS5000, CS500 DL, CS1500 DL CS1500 ViNS, CS2000 ViNS
NAS Frontend Ports (max.)	4 x 10 GbE or 4 x 1 GbE per node
32 NAS Backend Target	NFS and/or CIFS mount point
Shares (max.)	2,048
VTL Frontend Ports	2 to 40
Virtual Tape Drives	16 to 1280 (FC), up to 640 (ESCON, FICON)
Backend Ports	2 to 40
Physical Tape Drives (mixed)	2 to 112
Physical Tape Libraries (mixed)	Up to 10
System Volume Cache	2.4 to 3648 TB
Sustained Performance (max.)	55 TB/h
Numer of Files (max.)	2 billion
Virtual Tape Volumes (max.)	3,000,000
Physical Tape Volumes (max.)	50,000
Deduplication Store Option	Up to 1,600 TB
Note	For detailed specification refer to the data sheet

### Storage Software

Simpana: By leveraging a single unified code base and platform, Simpana software simplifies an IT organizations

ability to manage data across its lifecycle with integrated modules for Backup & Recovery, Archive,

Replication, Resource Management and Search.

Backup Exec: Cost-effective backup and recovery for small and medium businesses that lets you easily protect more

data while reducing storage and management costs.

NetBackup: Simplifies the protection of your information driven enterprise by automating advanced technologies

and standardizing operations across applications, platforms, and virtual environments.

Enterprise Vault: The industry's most widely-deployed archiving solution, is a platform that bridges the gap between

legal and IT by adding intelligence to the way organizations store, manage, and discover information.

### ETERNUS DX Storage Management

ETERNUS SF: Fujitsu's Storage Management Software ETERNUS SF reduces total cost of ownership by managing the

operation of ETERNUS DX disk storage systems throughout the data's lifecycle. For today's complicated storage environments, ETERNUS SF achieves business continuity and optimizes storage resources.

More information about our software portfolio is available on: fujitsu.com/fts/products/computing/storage/software

### Services

Fujitsu offers a complete portfolio of enterprise storage solutions that include hardware, software, consulting, integration and service. Professional Services from Fujitsu support you in meeting your IT storage requirements. They help you exploit the full solution potential of your storage systems.

### Integration concepts for

storage strategystorage solutions

storage consolidation
 storage disaster recovery

Technical design and standard implementation services for ETERNUS CS, DX and LT, Storage Area Networks and more. More information: fujitsu.com/fts/services/support

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