

# Online Storage Systems



## ETERNUS DX Series



Model	ETERNUS DX60 S3	ETERNUS DX100 / DX200 S3	ETERNUS DX500 / DX600 S3	ETERNUS DX8700 S3 / DX8900 S3
Type	The Economy Disk Storage System for SMBs	Unified disk storage system for small and mid-range enterprises		Enterprise Storage without Limits
Host Interfaces	4 / 8 Gbit/s FC, 1 Gbit/s iSCSI, 3 / 6 Gbit/s SAS	8 / 16 Gbit/s FC, 10 Gbit/s FCoE, 1 / 10 Gbit/s iSCSI, 6 Gbit/s SAS, 1 / 10 Gbit/s Ethernet	8 / 16 Gbit/s FC, 10 Gbit/s FCoE, 1 / 10 Gbit/s iSCSI, 1 / 10 Gbit/s Ethernet	8 / 16 Gbit/s FC, 10 Gbit/s FCoE, 1 / 10 Gbit/s iSCSI
Max. Disk Drives	48 / 96 x Nearline SAS and SAS in mixed configuration (3.5" / 2.5") / incl. 8 SSD max.	144 / 264 x SSD, SAS and Nearline SAS in mixed configuration (3.5" / 2.5")	528 / 1056 x SSD, SAS and Nearline SAS in mixed configuration (3.5" / 2.5")	1,536 / 4,608 x SSD, SAS and Nearline SAS in mixed configuration (3.5" / 2.5")
Max. Storage Capacity	288 TB	864 / 1,584 TB	3,168 / 6,336 TB	4,608 TB / 13,824 TB
Max. Host Interfaces	4	16	16 / 32	128 / 384
No. of connect. hosts	Max. 128	Max. 1,024	Max. 1,024	Max. 8,192
RAID Level			0, 1, 1+0, 5, 5+0, 6	
Thin Provisioning & AST	Thin Provisioning: ✓ AST: -	✓	✓	✓
Transparent Failover & Auto QoS	-	✓	✓	✓
Remote Replication	-	✓	✓	✓
Storage Management	ETERNUS SF V16 Storage Management Software suite to achieve business continuity and to optimize storage resources.			
Optional Software	The Fujitsu ETERNUS Snapshot Manager is feature-rich software to manage and catalog application-consistent hardware snapshots of ETERNUS DX arrays without scripting.			

## ETERNUS AF Series



Model	ETERNUS AF250	ETERNUS AF650
CPU	6core, 2.0 GHz	10core, 3.0 GHz
Max. System Memory	64 GB	256 GB
Number of drives	2 - 24	2 - 96
Max. Capacity <sup>1</sup>	92 TB raw 460 TB effective <sup>2</sup>	368 TB raw 1843 TB effective <sup>2</sup>
Interface	8 x FC 16G / 8 x iSCSI 10G	32 x FC 16G / 16 x iSCSI 10G

## ETERNUS JX



Model	ETERNUS JX40 S2	ETERNUS JX60
Type	Passive direct server attached drive extension (JBOD)	Passive direct server attached drive extension (JBOD)
Host Interfaces	SAS 12 Gbit/s	SAS 6 Gbit/s
Max. Storage Capacity	173 TB with 2.5" disks / 192 TB with 3.5" disks	480 TB
Max. Disk Drives	2.5": max. 96 SAS disks and SSDs 3.5": max. 48 Nearline SAS disks	3.5": max. 120 Nearline SAS disks
Protocols	SAS	SAS
RAID Level	0, 1, 5, 6, 1+0, 5+0, 6+0	0, 1, 5, 6, 1+0, 5+0, 6+0

## ETERNUS CD10000



Model	ETERNUS CD10000	ETERNUS CD10000 Quick Start Edition
Type	Hyper-scale, software-defined storage (SDS)	Ceph storage evaluation platform
Host connectivity options	Block, File and Object <sup>3</sup>	
Software version	Opensource software: Ceph Enterprise	
Hardware platform	Integrated system based on PRIMERGY and ETERNUS	Flex Node
Storage Management	Fujitsu's GUI Management console	
Node Types	Various Storage Nodes and Infrastructure component options	1x Flex Node hosting multiple virtualized nodes
Basic Configuration	4x Storage node + 1x Management node + Infrastructure included	1x Quick Start Edition
Max. no of nodes	Upgradable up to 500 nodes <sup>4</sup>	1x Flex Node
Max. usable capacity	100 PB <sup>5</sup>	44 TB
DR capabilities	Split-site and Geo-replication across clusters	
Application interfaces	Ceph storage interfaces (Object, S3, Block, File), OpenStack interfaces (Swift, Cinder, Glance)	

## CELVIN NAS Servers



Model	CELVIN NAS Server QE705 / QE805 / Q805 / Q905 / QR806 / QR1006
Host Interfaces	Ethernet(1GbE), 10GbE(QR-Models), USB3.0/USB2.0
Max. Storage Capacity	12 TB / 24 TB / 24 TB / 36 TB / 24 TB / 48 TB
VMware, Citrix, Hyper-V Virtualization	yes, for CELVIN QR and Q systems
Snapshots	QE: no / Q: yes w/4GB RAM / QR: yes
Backup / Replication / Restore	yes, all models
FTP, file, web, printer, SQL and multimedia server	yes
Cloud Synchronization	yes

## NetApp FAS Series (Hybrid / All Flash)



Model	FAS2620 / FAS2650	FAS8200 / FAS9000	AFF A300 / A700	SF2405 / SF4805 / SF9606 / SF19210
Type	Unified, Hybrid, Scale-Out Storage			
Max. Capacity	1243 - 1440 TB	4.8 - 14.4 PB	5.9 - 7.3 PB	2.4 - 19.2 TB (per node)
Effective Capacity <sup>6</sup>	Depends on usage of NetApp's efficiency features			5 - 80 TB (per node)
Protocols	FC, FCoE, iSCSI, NFS, pNFS, SMB			FC, iSCSI
RAID Type	RAID TEC™, RAID DP®		RAID DP®	Helix RAID-less

<sup>1</sup> Maximum raw capacity depends on available SSD types | <sup>2</sup> Calculation based on deduplication/compression factor of five | <sup>3</sup> planned | <sup>4</sup> Higher numbers of nodes on special release | <sup>5</sup> Higher capacities on special request  
<sup>6</sup> Effective capacity is based on 5:1 storage efficiency ratios with the maximum number of SSDs installed. The actual ratio can be higher depending on workloads and use cases.

# Data Protection and Services



## Tape Systems



Model	LTO Desktop Drive	ETERNUS LT20 S2 / LT40 S2 / LT60 S2	ETERNUS LT260	Quantum Scalar i500 / i6000	Oracle SL150 / SL3000* / SL8500*
Type	LTO-5 / LTO-6	LTO-5 / LTO-6 / LTO-7	LTO-5 / LTO-6 / LTO-7	LTO-5 / LTO-6 / LTO-7	LTO-6 / LTO-7
Max. Capacity (native)	1.5 / 2.5 TB	12 - 48 TB / 36 - 144 TB / 72 - 288 TB	3,360 TB	2.4 PB / 72 PB	1.8 PB / 35.5 PB / 605 PB
Cartridges (max.)	1	8 / 24 / 48	560	409 / 12,006	300 / 5,925 / 100,880
Drives (max.)	1 HH	1 / 2 / 4	42	18 / 192	20 / 56 / 640
Interfaces	SAS	SAS, FC	SAS, FC	FC, SAS / FC	SAS, FC / FC / FC
Note	-	-	-	-	*also available with enterprise drive type T10000

## ETERNUS CS200c



Model	ETERNUS CS200c S3	
	Entry	Scale
Type	Integrated Backup Appliance Powered by Commvault®	
Capacity	1 - 24 TB	6 - 165 TB
Ethernet Ports	4 x 1 Gbps + 2 x 10 Gbps	
FC Ports	0 - 2 x 16 Gbps	2 x 16 Gbps
Tapeout	FC, SAS and USB-3	
Scalability	Yes - capacity upgrades & parallel operation of appliances up to PBytes of capacity	
Database performance	SSD	
Data protection functions	Backup & recovery, deduplication, archiving, encryption, application support, snapshot, replication, tape attachment, cloud backup	
Supported environments	Physical, virtual and NAS / NDMP systems	

## ETERNUS CS800



Model	ETERNUS CS800 S6	
	Entry	Scale
Type	Backup appliance	
Capacity (net usable)	8 - 24 TB, 8 - 120 TB	32 - 352 TB
Capacity (logical)	Up to 1.2 PB, up to 6 PB	Up to 17.6 PB
Ethernet Ports (fixed)	5 x 1 GbE	3 x 1 GbE
Ethernet Ports (optional)	2 x 10 GbE	8 x 1 GbE or 4 x 10 GbE
Fibre Channel Ports (optional)	2 x 8 GbFC	4 x 8 GbFC
Hot Spare Option	No	Yes
NAS - supported protocols	CIFS, NFS	CIFS, NFS
NAS Shares (max.)	128	128
Partitions (max.)	64	64
Virtual Tape Cartridges (per partition)	9,000	9,000
Virtual Tape Drives (max.)	80	160
Tape Drive Emulations	DLT7000, LTO-1, LTO-2, LTO-3, LTO-4, LTO-5, SDLT 320, SDLT 600, SLT-S4	
Libraries Emulations	Quantum Scalar 24, Scalar 100, Scalar i2000, Scalar i500, Scalar i6000	
Performance	Up to 5.5 TB/h	Up to 10.6 TB/h
Performance (max. SPEED mode)	Up to 13.4 TB/h	Up to 22.0 TB/h
Standard software included	Deduplication, Replication, Path-to-Tape, OST	

## ETERNUS CS8000



Model	ETERNUS CS8000 V6.1			
	CS8050	CS8200	CS8400	CS8800
Type	Datacenter storage solution for backup automation			
Architecture Type	Branch-office	Scale-up System	Scale-out-single-site	Scale-out-split-site
Host Connectivity Options	VTL, VTL with Dedup	VTL, VTL with Dedup, NAS	VTL, VTL with Dedup, NAS	
VTL Front-end Ports	4 FC 16 GB	4 to 8 FC 16 Gb / FICON 8 Gb	4 to 40 FC 16 Gb / FICON 8 Gb	
Virtual Tape Drives	max. 32	32 to 64	32 to 2,540	
NAS Front-end Ports	-	4 to 8 x 1 GbE or 2 to 8 x 10 GbE	4 to 40 x 1 GbE or 2 to 40 x 10 GbE	
Sustained Performance (max.)	1.4 TB/h	30 TB/h	150 TB/h	
Internal RAID Capacity	14 TB	7 TB to 1,392 TB	7 TB to 22,272 TB	
Internal VTL Deduplication Store Option (raw)	7 TB - 14 TB	1 to 960 TB	1 to 4,800 TB	
Virtual Tape Volumes (max.)	20,000	300,000	1,500,000	3,000,000
NAS Shares (max.)	-	2,048	2,048	
Number of Files (max.)	-	2 Billion	2 Billion	
VTL Back-end Ports Option	4 FC 14 GB	4 to 8 FC 16 Gb	4 to 40 FC 16 Gb	
NAS Back-end Ports Option	-	-(no HSM)	2 to 8 active FC 16 Gb 2 to 8 passive FC 16 Gb	
Physical Tape Volumes (max.)	500	50,000	50,000	
Physical Tape Libraries (max.)	1	10	10	

## Storage Software

- Commvault software: By leveraging a single unified code base and platform, Commvault 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.

More information about our software portfolio is available on: [fujitsu.com/fts/products/computing/storage/software](http://fujitsu.com/fts/products/computing/storage/software)

## Services

In addition to cutting-edge products, Fujitsu delivers world-wide Maintenance and Support Services: Warranty comes standard with our products; the ServicePack / Contract Hardware, ServicePack / Contract Software and the SolutionPack are the perfect extension on top of the standard warranty. The InstallationPack ensures smooth IT operation right from the start while intern IT specialist can concentrate on their core business.

For more information regarding services please visit: [fujitsu.com/fts/products/product-support-services](http://fujitsu.com/fts/products/product-support-services)