DATA SHEET

ETERNUS CS
Intelligent Data Protection

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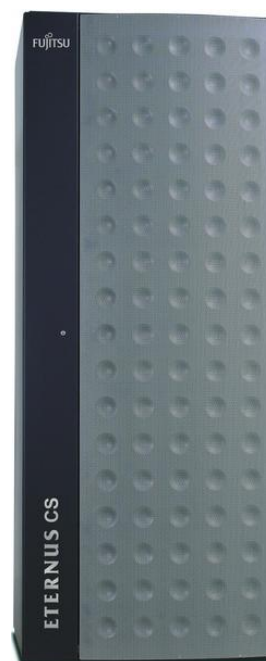### Virtual tape for dynamic infrastructures

The ETERNUS CS virtual tape solution provides intelligent data protection for the entire enterprise backup. This unique dual target storage solution exploits the best of disk and tape in a seamless manner by storing all protected data policy-based and autonomously on various storage media. ETERNUS CS shortens backup windows with disk performance to a minimum and fulfils all recovery time objectives for each business critical environment. Thus making tape fit for ILM (Information Lifecycle Management), enterprises data protection can be flexible aligned at different service level agreements.

ETERNUS CS offers superior connectivity with True Tape Virtualization which supports the widest range of mainframes, open systems, NAS devices and industry-leading backup applications. Such consolidated data centers simplifies companies' administration efforts and lowers the total cost of storage also enabling efficient use of the most cost effective technologies and increasing energy efficiency.

The powerful ETERNUS CS Grid Architecture features unmatched scalability and leverages unmatched disaster resiliency for protection against site outages. Its high level of redundancy is also the basis for non-disruptive upgrades and provides data availability anytime to ensure business continuity for each class of data center.

Learn more

Talk to your Fujitsu representative or visit the web page: ts.fujitsu.com/eternus_cs
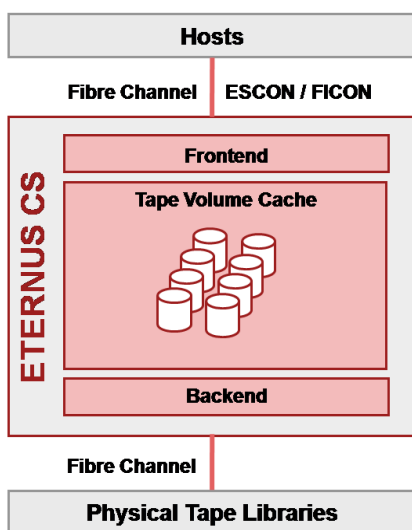
Main features	Benefits
ETERNUS CS makes tape fit for ILM (Information Lifecycle Management)	■ Backup windows are minimized ■ Dual target with disk and tape storage options ■ Alignment at different service level agreements (SLA) ■ Data compression and optional encryption
True Tape Virtualization	■ Superior connectivity ■ Workload adaptive provisioning of tape storage resources ■ Consolidation of physical backup storage devices ■ Outstanding TCO reductions
ETERNUS CS Grid Architecture	■ Unmatched scalability ■ Unmatched disaster resiliency ■ Non-disruptive upgrades ■ Live monitoring and health check

SPECIFICATIONS

ETERNUS CS

System components

Hosts
- Mainframes, Open Systems and NAS devices
- Mixed heterogeneous connectivity

ETERNUS CS systems
- Virtual Tape Controller: Customized packages for entry solutions.
- Disk Library Editions: Disk-only appliance with options for physical tape storage.
- Virtual Tape Appliances: Scalable for each class of midrange up to enterprise environments.

Physical Tape Libraries
- Free technology choice and independent from tape virtualization at the frontend.
- Mixed tape libraries and tape drive technologies

Interfaces

Frontend	Fibre Channel, ESCON, FICON / also mixed
Backend	Fibre Channel

System connectivity

	Virtual Tape Controller	Disk Library Editions	Virtual Tape Appliances
Model	CS50	CS500 DL, CS1500 DL	CS500, CS1000, CS1500, CS2000, CS3000, CS4000, CS5000
Frontend ports	2 to 4	4 to 8	4 to 32
Virtual tape drives	16 to 32	32 to 256	32 to 1024 (Fibre Channel) up to 640 (ESCON,FICON)
Backend ports	2	optional	4 to 32
Physical tape drives	1 to 2	optional	2 to 112

Tape Volume Cache

Capacity (uncompressed)	1.5 TB	8 TB to 1312 TB	3.6 TB to 1301 TB
Sustained performance	Up to 200 MB/s	Up to 1.100 MB/s	Up to 4.400 MB/s
Virtual tape volumes	20,000	300,000	Up to 1,500,000
Physical tape volumes	500	optional	50.000

Physical and electrical (base configurations)

Total weight	45 kg	400 to 600 kg	400 to 1,830 kg
Apparent power	0.4 kVA	2,7 to 4,6 kVA	2,7 to 12,5 kVA
Heat dissipation	1,2 kBTU/h	8,5 to 13,8 kBTU/h	6,6 to 37,9 kBTU/h

Mechanical per rack

Height	1,825 mm
Width	700 mm
Depth	1,000 mm

Electrical per rack

	Standard EU	Standard US
Rated voltage	2 or 3 Phases of 230 V	2 supplies of 208 V (Phase to Phase)
Fuse protection	16 A per Phase (Fuses not coupled)	min 20 A per Phase
Connection type	CEE connector 1Phase, 3Phases	L6-30 Connector

Environmental

Product class	B
Room supply air	yes
Double bottom supply air	no
Temperature	+15° to +35° C
Relative humidity	20 to 80 %

Standards compliance

Safety	EN 60950 / IEC 950 VDE 0805 UL 1950 CSA 22.2 No. 950	
Radiation, RFI suppression	CE mark, FCC Class A * (EN 55022B, EN 50082-1)	* This product, together with the Fujitsu released accessory components / -material, is in compliance with the objectives of emission class A. In certain cases measures have to be taken to reduce the electromagnetic influence to other equipment.
Operating noise	< 69 db(A)	

Support

Standard warranty	2 years / 5 x 9 / On-site service
Recommended support services	SolutionContract / Link: ts.fujitsu.com/supportservice

Learn more

ETERNUS CS at a glance	Link: ts.fujitsu.com/products/storage/eternus_cs/index.html
ETERNUS CS resource library	Analyst Reports Brochure Case Studies Customer Trainings Data Sheet Manuals Press News SolutionContract Supported Environments User Group White Papers

Supported environments

Please refer to the specific support matrix for further details.

Frontend

Host operating systems

Mainframes	BS2000/OSD GCOS 8 z/OS (OS/390) i5/OS (OS/400) MSP z/VM – z/VSE VME (ICL) XSP
Open systems	AIX HP-UX Solaris LINUX (SUSE, Red Hat, z/Linux) Windows
NAS – NDMP backup	NetApp Filer EMC Celerra

Open systems backup software

Atempo	Time Navigator
BridgeHead Software	HyperTape Backup
CommVault	Galaxy Qinetix
Computer Associates	BrightStor ARCserve Backup
EMC	NetWorker, DiskXtender
Fujitsu	NetWorker
HP OpenView	Data Protector
IBM	Tivoli Storage Manager
Seven Ten Storage	StorFirst Altus
Symantec/Veritas	Backup Exec, NetBackup

Backend

Tape libraries

Fujitsu	ETERNUS LT40/60, LT130, LT160, LT270 Scalar 100, SL500, 9084-221, 3560, TX24/48
IBM	3494, 3584, TS3500
Quantum	Scalar 100, Scalar i500, Scalar 1000, Scalar i2000, Scalar 10K, AML/J /E /2
Spectra Logic	T50, T120, T950
Sun StorageTek	L180, L700 /E, L5500, SL500, SL1400, SL3000, SL8500 Powderhorn 9310, TimberWolf 9740