

# Data Sheet

## FUJITSU Storage ETERNUS DX8900 S3 Disk System

Enterprise Storage with leading scalability in capacity and performance



### ETERNUS DX - Business-centric Storage

Combining leading performance architecture with automated quality of service management the Fujitsu Storage ETERNUS DX series aligns storage resources with business priorities, thus enabling higher system utilization and delivering increased system consolidation capabilities and a faster ROI. Unified scalable entry-level and midrange systems, a seamless family concept enabling system upgrades and ETERNUS SF, the unified management suite across the product line, reduce operational and migration costs. ETERNUS SF provides enterprise-class functionalities in the entry and midrange class and allows flexible disaster recovery and business continuity concepts for the different model sizes, thus decreasing investment costs

### ETERNUS DX8900 S3

The ETERNUS DX8900 S3 disk storage system is purpose-built for biggest enterprises and ideal for the data management of business-critical core applications and the hyper-consolidation of large-scale data centers. ETERNUS DX8900 S3 provides non-disruptive capacity upgrades with up to 4608 disk drives, just by adding disks or complete drive enclosures. Performance of more than 4 million IOPS is provided by configurations based on 2 to 24 controllers and a maximum of 384 front-end ports for host connectivity. For simultaneous connection to different network types, FC, FCoE and iSCSI host interfaces can operate in mixed configurations.

Tiered storage optimization using a range of SAS, Nearline SAS and SSD drive options lowers the overall total cost of storage. The challenges of data exposure protection are addressed by self-encrypting drives (SED). Flexible and automated management across different quality of service profiles, using different drive types for each application scenario, ensures efficient assignment of system resources matched to the performance priorities of different applications. Highest availability and seamless business continuity is guaranteed by redundant interconnections to the storage array and internal redundant components and completed by transparent failover which ensures uninterrupted operation in case of an outage.



# Features & Benefits

Main Features	Benefits
Flexible scalability in capacity and performance	<ul style="list-style-type: none"><li>■ Future-oriented scale-out architecture and upgrade options meet today's and tomorrow's business requirements</li><li>■ Low cost of growth ensures investment protection</li><li>■ Superior system utilization</li><li>■ Large scale storage consolidation</li><li>■ Leading performance by design</li></ul>
Automation to manage unpredictable data growth	<ul style="list-style-type: none"><li>■ Automatically aligned storage performance with business priorities</li><li>■ Minimized manual tuning efforts</li><li>■ Optimized service level fulfillment</li></ul>
Zero downtime for business critical data	<ul style="list-style-type: none"><li>■ Predictable and reliable operation through end-to-end redundancy, comprehensive high-availability and disaster resilience functions</li><li>■ Multi-level disaster recovery with various snapshot concepts and remote replication between different models and generations</li><li>■ Highest business continuity by transparent failover and non-disruptive maintenance as well as upgrade capabilities</li></ul>

# Models and architecture

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## **ETERNUS DX8000 S3 Series**

- The massively scalable Fujitsu Storage ETERNUS DX8000 S3 series, the flagship systems of the ETERNUS DX family are purpose-built for behemoth data centers which require outstanding storage performance and huge capacity paired with enterprise-class resiliency and 99.9999% availability. Its automated quality of service management features guarantee maximum system utilization and contribute to a fast ROI.
- It is the perfect solution when consolidating data in OLTP and large-scale databases, file services, business-critical applications and business analytics / big data – all into one system. It provides ample headroom for any demanding virtualization environments. Extensive high-availability and disaster recovery capabilities make ETERNUS DX8000 S3 the ideal storage systems for all business-critical data and fit perfectly in private and public cloud environments of large-scale enterprises and service providers.

# Technical details

## General system information

	Frontend Enclosure
No. of controllers	2 - 24
No. of host interfaces	384 (FC), 192 (iSCSI/FCoE)
Maximum Cache Capacity	6,144 GB
Extreme Cache	67.2 TB
Extreme Cache Pool	38.4 TB
Maximum Disk Drives	4,608
Max. no. of drive enclosures	192
Redundancy	RAID Controller Power supply Fan
Supported RAID levels	0, 1, 1+0, 5, 5+0, 6
Host Interfaces	Fibre Channel (16 Gbit/s) iSCSI (10 Gbit/s, 1 Gbit/s) FCoE (10 Gbit/s)
Mixed host interfaces	Yes
Max. no. of hosts	8,192
Maximum Storage Capacity	13,824 TB
Drive Type	2.5-inch, SAS, 15,000 rpm (600 GB / 300 GB) 2.5-inch, SAS, 10,000 rpm (1.2 TB / 900 GB / 600 GB / 300 GB) 2.5-inch, SAS (self-encrypting), 10,000 rpm (1.2 TB / 900 GB) 2.5-inch, SSD (1.6 TB / 800 GB / 400 GB) 2.5-inch, SSD (self-encrypting) (800 GB) 3.5-inch, Nearline SAS, 7,200 rpm (6 TB / 4 TB / 2TB) 3.5-inch, Nearline SAS (self-encrypting), 7,200 rpm (4 TB) 3.5-inch, SSD (1.6 TB / 800 GB / 400 GB) 3.5-inch, SSD (self-encrypting) (800 GB)
Mixed 2.5 inch/ 3.5 inch drive enclosures	Yes
Drive interface	Serial Attached SCSI (12 Gbit/s)
Max. no. of LUNs	65,535
Max. LUN capacity	128 TB
Eco-mode	Yes
Thin Provisioning	Yes
Quality of Service	Yes
<b>Performance</b>	
Random access performance	4M IOPS
<b>Business Continuity Features</b>	
No. of snapshots - max.	32,768
Max. no. of copy generations	512
Remote Copy functionality	Synchronous and asynchronous
Security features	HTTPS (SSL), One Time Password, RADIUS
<b>Options</b>	
Storage Cluster	Yes
Automated QoS	Yes
Automated Storage Tiering	Yes
Reporting function	Yes
Note	Options can be activated via ETERNUS SF Software

<b>Dynamic configuration</b>				
Hot part replacement	Yes			
<b>Management</b>				
Administration	Web-based graphical user interface, CLI (Command Line Interface), ETERNUS SF			
<b>Supported configurations</b>				
	<b>All major host operating systems, servers and business applications</b> Detailed support matrix: <a href="http://www.fujitsu.com/global/support/products/computing/storage/disk/supported-configurations">www.fujitsu.com/global/support/products/computing/storage/disk/supported-configurations</a>			
<b>Installation specification</b>				
Power voltage	AC 200 - 240 V			
Dimensions (W x D x H)	Frontend Enclosure	Controller Enclosure	2.5-inch Drive Enclosure	3.5-inch Drive Enclosure
	482 x 795 x 222 mm 19 x 31.3 x 8.7 inch 5 U	482 x 809 x 133 mm 19 x 31.9 x 5.2 inch 3 U	482 x 540 x 88 mm 19 x 21.3 x 3.5 inch 2 U	482 x 560 x 88 mm 19 x 22 x 3.5 inch 2 U
	Weight	54 kg (119 lb)	35 kg (77 lb)	35 kg (77 lb)
Maximum Power Consumption (AC 200 - 240 V)	560 W (590 VA)	1,200 W (1,220 VA)	430 W (440 VA)	340 W (350 VA)
<b>Environment</b>				
Temperature (operating)	10 - 35 °C			
Temperature (not operating)	0 - 50 °C			
Humidity (operating)	20 - 80 %			
Humidity (not operating)	8 - 80 % (relative humidity, non-condensing)			
Type	Frontend Enclosure	Controller Enclosure	2.5-inch Drive Enclosure	3.5-inch Drive Enclosure
	Maximum Heat Generation (AC 200 - 240 V)	2,020 kJ/h	4,330 kJ/h	1,600 kJ/h
<b>Compliance</b>				
Product safety	CSA 60950-1, CSA-C22.2 No. 60950-1, EN 60950-1, IEC 60950-1, GOST-R			
Electromagnetic Compatibility	CNS 13438, FCC CFR 47 class A , ICES 003 Class A, EN 55022 Class A, VCCI Class A, AS/NZS CISPR 22 Class A, EN 55024			
CE certification	2004/108/EC, 2006/95/EC, 2011/65/EC			
Environmental compliance	RoHS compliant, WEEE compliant			
Compliance 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.			
Compliance link	<a href="http://globalsp.ts.fujitsu.com/sites/certificates">http://globalsp.ts.fujitsu.com/sites/certificates</a>			
<b>Warranty</b>				
Warranty period	3 years			
Warranty type	Onsite warranty			
Warranty Terms & Conditions	<a href="http://www.fujitsu.com/support">www.fujitsu.com/support</a>			
<b>Product Support Services - the perfect extension</b>				
Support Pack Options	Available in major business areas: 9x5, Next Business Day Onsite Response Time 9x5, 4h Onsite Response Time 24x7, 4h Onsite Response Time			
Recommended Service	24x7, Onsite Response Time: 4h			
Service Lifecycle	5 years after end of product life			
Service Weblink	<a href="http://www.fujitsu.com/services/product-services">www.fujitsu.com/services/product-services</a>			

### Fujitsu OPTIMIZATION Services

In addition to Fujitsu ETERNUS DX8900 S3, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

### Fujitsu Portfolio

Built on industry standards, Fujitsu offers a full portfolio of IT hardware and software products, services, solutions and cloud offering, ranging from clients to datacenter solutions and includes the broad stack of Business Solutions, as well as the full stack of Cloud offerings. This allows customers to select from alternative sourcing and delivery models to increase their business agility and to improve their IT operation's reliability.

### Computing Products

[www.fujitsu.com/global/products/computing/](http://www.fujitsu.com/global/products/computing/)

### Software

[www.fujitsu.com/software/](http://www.fujitsu.com/software/)

### More information

Learn more about Fujitsu ETERNUS DX8900 S3, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.  
[www.fujitsu.com/eternus](http://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 contribute to the creation of a sustainable environment for future generations through IT. Please find further information at <http://www.fujitsu.com/global/about/environment>



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