FUJITSU

Data Sheet
FUJITSU Storage ETERNUS DX500 S3 Disk System

Leading storage performance, automated quality of service

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 DX500 S3

The scalable, unified Fujitsu Storage ETERNUS DX500 S3 system delivers leading storage performance and automated quality of service management enabling a maximum of system utilization and contributing to a fast ROI. It is the perfect solution when consolidating data in large-scale databases, business-critical applications and business analytics / big data – all into one system. It provides ample headroom for demanding server / desktop virtualization environments and enterprise file services. Extensive high-availability and disaster recovery capabilities make ETERNUS DX500 S3 an ideal storage system for business-critical data.

Green IT

Green Policy Innovation

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

(intel) inside™ XEON®

Features & Benefits

Main Features	Benefits
Market-leading performance combined with automated performance management	- Top-class performance enables large-scale storage consolidation delivering a fast ROI - Automatically aligns storage performance with business priorities - Delivers reliable and predictable quality of service for business-critical data - Enables the operation of productive and analytical tasks in parallel on one storage system - High scalability within the system and upgrade options to higher system-class and bigger systems support high data increases at low costs of growth and ensure investment protection
Rock-solid operation	- Comprehensive high-availability, quality of service and disaster resilience functions ensure predictable and reliable operation - Flexible disaster recovery, including transparent failover, with a multitude of snapshot concepts and remote replication between different models and generations - Extensive non-disruptive maintenance and upgrade capabilities reduce planned downtimes
Truly unified architecture	- Unified SAN and NAS access drive system utilization improving ROI - Unified management functions across the entire product line result in operational efficiency - Unified connectivity supports a large range and many combinations of networking types - Unified architecture allows flexible combinations of 2.5" and 3.5" disk types

Technical details

General system information

	ETERNUS DX500 S3
No. of controllers	2
No. of host interfaces	4/8 ports [iSCSI, FCoE, Ethernet(10Gbit/s], 4-16 ports [FC], 8/16 ports [Ethernet(1Gbit/s)]
Max. cache capacity	64 GB (block) / 64 GB + 32 GB (block + file)
Extreme Cache	5,600 GB
Max. no. of drives	528
Max. no. of drive enclosures	22
Note	22 with 2.5" or 3.5" DE, 8 with HD-DE or mixture of DEs up to Max no. Drives
Redundancies	RAID Controller Fan Power supply
Supported RAID levels	0, 1, 1+0, 5, 5+0, 6
Host interfaces	Fibre Channel (16 Gbit/s, 8 Gbit/s, 4 Gbit/s) FCoE (10 Gbit/s) iSCSI (10 Gbit/s, 1 Gbit/s) Ethernet (10 Gbit/s, 1 Gbit/s)
Mixed host interfaces	Yes
Max. no. of hosts	1,024
Supported NAS protocols	CIFS (SMB 2.0), NFSv2, NFSv3, NFSv4
Max. storage capacity - physical	2112 TB
Drive Type	2.5-inch, SAS, 15,000 rpm (300 GB) 2.5-inch, SAS, 10,000 rpm (1,200 GB / 900 GB / 600 GB / 300 GB) 2.5-inch, SAS (self-encrypting), 10,000 rpm (1,200 GB / 900 GB) 2.5-inch, Nearline SAS, 7,200 rpm (1 TB) 2.5-inch, SSD (800 GB / 400 GB) 3.5-inch, Nearline SAS, 7,200 rpm (4 TB / 3 TB / 2 TB) 3.5-inch, SSD (800 GB / 400 GB) HDDE, Nearline SAS, 10,000 rpm (1.2 TB) HDDE, Nearline SAS, 7,200 rpm (4 TB / 3 TB / 2 TB)
Note	2.5-inch drives are available only for 2.5-inch drive enclosures and 3.5-inch drives are available only for 3.5-inch drive enclosures.
Max. no. of SSDs	unlimited
Mixed 2.5 inch/ 3.5 inch drive enclosures	Yes
Drive interface	Serial Attached SCSI (12 Gbit/s)
Back-end disk connectivity	2 pairs of four-lane x 12 Gbit/s Serial Attached SCSI buses (SAS 3.0 wide)
Max. no. of LUNs	16,384
Max. LUN capacity	128 TB
Eco-mode	Yes
Thin Provisioning	Yes
Quality of Service	Yes

Business Continuity Features

No. of snapshots - max.	8,192
Max. no. of copy generations	512
Remote Copy functionality	Synchronous and asynchronous
Data protection features	Cache Protection, Data Block Guard, Data Encryption, Dedicated Hot Spare, Disk Drive Patrol, Global Hot Spare, Fast Recovery
Security features	HTTPS (SSL), One Time Password, RADIUS, SSH

Options

Storage cluster	Yes

Options

Automated Storage Tiering	Yes
Reporting function	Yes
Note	Options can be activated via ETERNUS SF Software

Dynamic configuration

Field model upgrade	to ETERNUS DX600 S3
Non-disruptive firmware upgrade	Yes
RAID migration	Yes
LUN online expansion w/o interruption	Yes
Wide striping	Yes
Hot part replacement/ expansion	Yes

Management

Interfaces	Ethernet (1000 Base-T / 100 Base-TX / 10 Base-T)
Supported protocols	SNMP (version1, 2C, 3), SMI-S 1.6
Administration	Web-based graphical user interface, CLI (Command Line Interface), ETERNUS SF
Remote Support	Event notification (E-mail / SNMP / Syslog), Remote maintenance

Supported configurations

	All major host operating systems, servers and business applications Detailed support matrix: http://www.fujitsu.com/global/services/computing/storage/eternus/products/diskstorage/dx500/#Tab0-4
Hardware certification	

Installation specification

19" rackmount	Yes
Service Area	Front: 850 mm (33.5 inch) or more Rear: 850 mm (33.5 inch) or more
Power voltage	AC 100 - 120 V / AC 200 - 240 V
Power frequency	50 / 60 Hz
Power supply efficiency	92 % (80 PLUS gold)
Maximum Power Consumption	AC 100 - 120 V: 13,210 W (13,480 VA)
Maximum Power Consumption	AC 200 - 240 V: 13,320 W (13,590 VA)
Power phase	Single

	ETERNUS DX500 S3	2.5-inch Drive Enclosure	3.5-inch Drive Enclosure	High-Density Drive Enclosure
Dimensions (W x D x H)	482 x 805 x 133 mm 19 x 31.7 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	482 x 980 x 176 mm 19 x 38.6 x 6.9 inch 4 U
Weight	54 kg (119 lb)	35 kg (77 lb)		95 kg (209 lb)
Max. power consumption (Voltage Range 1)	650 W (660 VA)	430 W (440 VA)	340 W (350 VA)	1,300 W (1,320 VA)
Max. power consumption (Voltage Range 2)	760 W (770 VA)	430 W (440 VA)	340 W (350 VA)	1,300 W (1,320 VA)

Environmental

Maximum Heat Generation	AC 100 - 120 V: 48,800: kJ/h
	AC 200 - 240 V: 49,200: kJ/h
Temperature (operating)	10 - 40 ℃
Temperature (not operating)	0 - 50 ℃
Humidity (operating)	20 - 80 % (relative humidity, non-condensing)
Humidity (not operating)	8 - 80 % (relative humidity, non-condensing)
Altitude	3,000 m (10,000 ft.)
Sound power (LWAd; 1B = 10dB)	7.0B
Sound pressure (LpAm)	53dB(A)
Sound power (LWAd; 1B = 10dB)	7.0B
Noise notes	Measured with single enclosure according to ISO 7779 and declared according to ISO 9296
Operating environment	FTS 04230 – Guideline for Data Center (installation specification)

Environmental

Operating environment Link	http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12dbe

Compliance

Product safety	UL 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
Electromagnetic Immunity	EN 55024
CE certification	2004/108/EC, 2006/95/EC, 2011/65/EC
Approvals	CB, CE, C-Tick, FCC, GOST, GS, VCCI
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	http://globalsp.ts.fujitsu.com/sites/certificates

Warranty

Standard Warranty	3 years
Service level	Onsite Service
Warranty Terms & Conditions	www.fujitsu.com/support

Maintenance and Support Services - the perfect extension

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	www.fujitsu.com/services/product-services

Fujitsu OPTIMIZATION Services

In addition to Fujitsu ETERNUS DX500 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

Build 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 offering. This allows customers to leverage 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/services/computing/

Software

www.fujitsu.com/software/

More information

Learn more about Fujitsu ETERNUS DX500 S3, please contact your Fujitsu sales representative or 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 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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