

Data Sheet

FUJITSU Storage ETERNUS DX100 S3 Disk System

The all-in-one storage system for SMBs or subsidiaries



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 DX100 S3

The scalable and unified Fujitsu Storage ETERNUS DX100 S3 delivers enterprise-class functionality to small and medium-sized companies and subsidiaries with an excellent price/performance ratio. It is the perfect solution when consolidating data for server virtualization, e-mail, databases and business applications as well as centralized file services. Simple, intuitive system management, highly flexible connectivity and the option of field upgrades to higher system classes significantly reduce operational and migration costs. The ETERNUS DX family architecture lets customers benefit from software options, such as thin provisioning, automatic storage tiering, transparent failover and quality of service management even as early as the entry-level class. This all contributes to better business support.



Features & Benefits

Main Features	Benefits
Excellent price-performance in the entry-class	<ul style="list-style-type: none">■ Performance and capacity headroom enable data consolidation for server virtualization, e-mail, databases and business applications in one system■ High scalability within the system and upgrade options to bigger systems support high data increases at low costs of growth and ensure investment protection
Enterprise-class management functions in the entry class	<ul style="list-style-type: none">■ Richly featured ETERNUS SF Express management suite at no extra cost for easy and efficient operation■ System availability of 99.999%■ Flexible disaster recovery with remote replication and transparent failover■ Intelligent snapshot functionality for backup already included
Truly unified architecture	<ul style="list-style-type: none">■ 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 as well as direct server connections■ Unified architecture allows flexible combinations of 2.5" and 3.5" disk types

Technical details

General system information

	2.5-inch Controller Enclosure	3.5-inch Controller Enclosure
No. of controllers		1/2
No. of host interfaces	2/4/8 ports [FC, iSCSI, FCoE, SAS, Ethernet(10Gbit/s)], 4/8/16 ports [Ethernet(1Gbit/s)]	
Maximum System Memory	32GB	
Extreme Cache Pool	800 GB	
Maximum Disk Drives	144	
Max. no. of drive enclosures	10	
Note	5 with all 2.5" DE, 10 with all 3.5" DE, 2 with HD-DE or mixture of DEs up to Max no. Drives	
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 [10GBase-SR, 10GBase-CR, 10GBase-T], 1 Gbit/s) Ethernet (10 Gbit/s, 1 Gbit/s) SAS (6 Gbit/s)	
Mixed host interfaces	Yes	
Max. no. of hosts	1,024	
Supported NAS protocols	CIFS (SMB 2.0), CIFS (SMB 3.0), NFSv2, NFSv3, NFSv4	
Maximum Storage Capacity	2,212 TB	
Drive Type	2.5-inch, SAS, 15,000 rpm (600 GB / 300 GB) 2.5-inch, SAS, 10,000 rpm (1.8 TB / 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, Nearline SAS, 7,200 rpm (2 TB / 1 TB) 2.5-inch, SSD (15.36TB / 7.68TB / 3.84 TB / 1.92 TB / 960 GB / 1.6 TB / 800 GB / 400 GB) 2.5-inch, SSD (self-encrypting) (1.92 TB / 1.6 TB / 800 GB) 3.5-inch, Nearline SAS, 7,200 rpm (10 TB / 8 TB / 6 TB / 4 TB / 2 TB) 3.5-inch, Nearline SAS (self-encrypting), 7,200 rpm (4 TB) 3.5-inch, SSD (3.84 TB / 1.92 TB / 960 GB / 1.6 TB / 800 GB / 400 GB) 3.5-inch, SSD (self-encrypting) (1.92 TB / 1.6 TB / 800 GB) HDDE, SAS, 10,000 rpm (1.2 TB) HDDE, Nearline SAS, 7,200 rpm (10 TB / 8 TB / 6 TB / 4 TB / 2 TB) HDDE, SSD (3.84 TB / 1.92 TB / 1.6 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. 6 TB/ 8 TB Nearline SAS and 1.8 TB SAS drives are Advanced Format drives.	
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	1 pair of four-lane x 12 Gbit/s Serial Attached SCSI buses (SAS 3.0 wide)	
Max. no. of LUNs	4,096	
Max. LUN capacity	128 TB	
No. of snapshots - max.	1,024	
Max. no. of copy generations	512	
Eco-mode	Yes	
Performance management		
Automated Storage Tiering	Yes	
Quality of Service	Yes	
Automated QoS	Yes	
Wide striping	Yes	
Note	Automation options can be activated via ETERNUS SF Software	

Continuity management

Storage Cluster	Yes
Remote Copy functionality	Synchronous and asynchronous
Note	Options can be activated via ETERNUS SF Software

Information security management

Data confidentiality	Self-Encrypting Disk, Controller based Encryption, HTTPS (SSL), One Time Password, RADIUS, SSH
Data integrity	Cache Protection, Data Block Guard, Disk Drive Patrol

Availability management

Fast Recovery	Yes
Non-disruptive maintenance	Dedicated Hot Spare, Global Hot Spare
Non-disruptive firmware upgrade	Yes
Redundancy	RAID Controller (in 2-controller configuration), Fan, Power supply
Hot part replacement	Yes

Capacity management

Thin Provisioning	Yes
RAID migration	Yes
LUN online expansion w/o interruption	Yes
Reporting function	Yes
Hot part 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 OS for ETERNUS SF Express

Operation Management Server	Microsoft Windows Server 2016 Microsoft Windows Server 2012, 2012 R2 Microsoft Windows Server 2008, 2008 R2 Solaris11 (11/11 or later) Red Hat Enterprise Linux 7 Red Hat Enterprise Linux 6 Red Hat Enterprise Linux 5 VMware® vSphere 6 VMware® vSphere 5/ 5.1/ 5.5 Microsoft Windows Server 2016 Hyper-V Microsoft Windows Server 2012 Hyper-V, 2012 R2 Hyper-V Microsoft Windows Server 2008 Hyper-V, 2008 R2 Hyper-V Hyper-V 2.0
Operation Management Client	Internet Explorer 9, 10, 11 Firefox ESR 17, 24, 31, 38, 45 Microsoft Edge (Windows 10) Safari 8, 9 (iOS) Chrome 47, 50 (Android)

Supported configurations

All major host operating systems, servers and business applications
Detailed support matrix:
www.fujitsu.com/global/support/products/computing/storage/disk/supported-configurations

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)

Installation specification

Maximum Power Consumption	AC 100 - 120 V: 4,170 W (4,280 VA)				
Maximum Power Consumption	AC 200 - 240 V: 4,170 W (4,280 VA)				
Power phase	Single				
	High-Density Drive Enclosure	2.5-inch Controller Enclosure	2.5-inch Drive Enclosure	3.5-inch Controller Enclosure	3.5-inch Drive Enclosure
Dimensions (W x D x H)	482 x 980 x 176 mm 19 x 38.6 x 6.9 inch 4 U	482 x 645 x 88 mm 19 x 25.4 x 3.5 inch 2 U	482 x 540 x 88 mm 19 x 21.3 x 3.5 inch 2 U	482 x 670 x 88 mm 19 x 26.4 x 3.5 inch 2 U	482 x 560 x 88 mm 19 x 22 x 3.5 inch 2 U
Weight	95 kg (209 lb)	35 kg (77 lb)	35 kg (77 lb)	35 kg (77 lb)	35 kg (77 lb)
Maximum Power Consumption (AC 100 - 120 V)	1,300 W (1,320 VA)	770 W (780 VA)	430 W (440 VA)	670 W (680 VA)	340 W (350 VA)
Maximum Power Consumption (AC 200 - 240 V)	1,300 W (1,320 VA)	770 W (780 VA)	430 W (440 VA)	670 W (680 VA)	340 W (350 VA)

Environment

Maximum Heat Generation	AC 100 - 120 V: 15,800: kJ/h AC 200 - 240 V: 15,800: kJ/h
Temperature (operating)	10 - 40 °C
Temperature (not operating)	0 - 50 °C
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 pressure (LpAm)	46dB(A)
Sound power (LWAd; 1B = 10dB)	6.7B
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)
Operating environment link	http://docs.ts.fujitsu.com/dl.aspx?id=589915e9-1bf8-40f7-8ba4-7cac9371f2f0
Type	2.5-inch Controller Enclosure 2.5-inch Drive Enclosure 3.5-inch Controller Enclosure 3.5-inch Drive Enclosure

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, EAC, 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	https://sp.ts.fujitsu.com/sites/certificates

Warranty

Warranty period	3 years
Warranty type	Onsite warranty
Warranty Terms & Conditions	www.fujitsu.com/support

Product Related Services - the perfect extension

Support Pack Options	X - Globally available in major business areas: 9x5, Next Business Day Onsite Response Time 9x5, 4h Onsite Response Time (depending on country) 24x7, 4h Onsite Response Time (depending on country)
Recommended Service	X - 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 DX100 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/

Software

www.fujitsu.com/software/

More information

Learn more about Fujitsu ETERNUS DX100 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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