FUJITSU

Data Sheet
FUJITSU Storage ETERNUS DX100 S4 Disk System

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

ETERNUS DX - Business-centric Storage

FUJITSU Storage ETERNUS DX S4 is the perfect hybrid storage for SMB, something every business can afford, with integrated and powerful features for business growth, efficiency and continuity. Latest capacity and performance optimization capabilities contribute to comprehensive business efficiency. Outstanding data-safe technologies and all-inclusive encryption guarantee uncompromised business continuity

ETERNUS DX100 S4

The scalable and unified Fujitsu Storage ETERNUS DX100 S4 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, granular scalability and the option to upgrade to a higher system 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 and guarantees continuity and efficiency in daily operations.

Features & Benefits

Main Features	Benefits
Maximum utilization and consolidation	■ Comprehensive scalability ready for future needs ■ Outstanding benchmark results with ultra-low latency ■ Unified SAN and NAS access drive system utilization improving ROI ■ Flexible combination of flash and disk media for a broader scope of deployments ■ ETERNUS SF Express management suite included at no extra cost
Business Continuity around the clock	■ Replication and Storage Cluster to avoid planned or unplanned downtimes ■ Transparent failover for 100% data insurance and non-stop operations ■ Intelligent snapshot functionality for backup ■ System availability of 99.9999%
Automated Quality-of-Service	■ Control of applications priorities according to business needs. ■ Automation of monitoring and adjustment ■ Minimization of admin efforts ■ Guaranteed service levels

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, SAS], 8/16 ports [Ethernet(1Gbit/s)], 4/8 ports [Ethernet(10Gbit/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	Fiber Channel (16Gbit/s, 8Gbit/s) iSCSI (10 Gbit/s [10GBase-SR, 10GBase-CR, 10GBase-T], 1 Gbit/s) Ethernet (10 Gbit/s, 1 Gbit/s) SAS (12Gbit/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), 10,000rpm (1.2TB) 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 / 960GB / 400 GB) 2.5-inch, SSD (self-encrypting) (1.92 TB) 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 (3.84TB / 1.92TB / 960GB / 400GB) 3.5-inch, SSD (self-encrypting) (1.92TB) 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 (3.84TB / 1.92TB) HDDE, Nearline SAS(self-encrypting), 7,200 rpm (4TB)	
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. 2.5-inch 2TB, 3.5-inch 6TB/8TB/10TB Nearline SAS and 1.8TB SAS drives are Advanced Format drives.	
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

Continuity management

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 Red Hat Enterprise Linux 7 Red Hat Enterprise Linux 6 Red Hat Enterprise Linux 5 VMware® vSphere 6.0, 6.5 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 Oracle Linux 6
Operation Management Client	Internet Explorer 9, 10, 11 Firefox ESR 17, 24, 31, 38, 45, 52 Microsoft Edge 25 Safari 8, 9 (iOS) Chrome 47, 50 (Android)

Supported configurations

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

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: 4,170 W (4,280 VA)
Maximum Power Consumption	AC 200 - 240 V: 4,170 W (4,280 VA)

Installation specification

Power phase	Single				
	2.5-inch Controller Enclosure	3.5-inch Controller Enclosure	2.5-inch Drive Enclosure	3.5-inch Drive Enclosure	High-Density Drive Enclosure
Dimensions (W x D x H)	482 x 645 x 88 mm 19 x 25.4 x 3.5 inch 2 U	482 x 670 x 88 mm 19 x 26.4 x 3.5 inch 2 U	482 x 540 x 88 mm 19 x 21.3 x 3.5 inch 2 U	482 x 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	35 kg (77 lb)	35 kg (77 lb)	35 kg (77 lb)	35 kg (77 lb)	100 kg (220 lb)
Maximum Power Consumption (AC 100 - 120 V)	770	670	430	340	1300
Maximum Power Consumption (AC 200 - 240 V)	770	670	430	340	1300

Environment

Maximum Heat Generation	AC 100 - 120 V: 15,800: kJ/h
	AC 200 - 240 V: 15,800: 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 pressure (LpAm)	49dB(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

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 Support Services - the perfect extension

Support Pack Options	Globally 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 DX100 S4, 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 S4, 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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