Data Sheet
FUJITSU Storage ETERNUS DX100 S5 Disk System

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



ETERNUS DX - Business-centric Storage

FUJITSU Storage ETERNUS DX series are the ideal hybrid storage for on-premise storage of business-critical data in data centers, branch offices and self-operated IT of SMBs, something every business can afford, with integrated and powerful features for business growth, efficiency and continuity. Latest capacity and performance optimization capabilities contribute to overall business efficiency, outstanding data-safe technologies and all-inclusive encryption guarantee uncompromised business continuity.

ETERNUS DX100 S5

The scalable and unified Fujitsu Storage ETERNUS DX100 S5 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 in the entry-level class. All of which contribute 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	4/8 ports [FC(32Gbit/s,16Gbit/s), iSCSI(10Gbit/s,1Gbit/s), SAS(12Gbit/s), Ethernet(10Gbit/s)], 8/16 ports [Ethernet(1Gbit/s)]	
Maximum System Memory	64 GB	
Extreme Cache Pool	1.6 TB	
Maximum Disk Drives	144	
Max. no. of drive enclosures	5	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, 32Gbit/s) iSCSI (10 Gbit/s [10GBase-SR, 10GBase-CR, 10GBase-T], 1 Gbit/s) SAS (12Gbit/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), CIFS (SMB 3.0), NFSv4, NFSv3, NFSv2, FTP, FXP	
Maximum Storage Capacity HDD	2,016 TB	
Maximum Storage Capacity SSD	4,424 TB	
Drive Type	2.5-inch, SAS, 15,000 rpm (900 GB / 600 GB / 300 GB) 2.5-inch, SAS, 10,000 rpm (2.4 TB/ 1.8 TB / 1.2 TB / 600 GB / 300 GB*) 2.5-inch, SAS (FIPS), 10,000rpm (1.2TB) 2.5-inch, SSD (30.72TB / 15.36TB / 7.68TB / 3.84TB / 1.92TB / 960GB / 800GB) 2.5-inch, SSD (FIPS) (7.68TB / 3.84TB / 1.92TB) 3.5-inch, Nearline SAS, 7,200 rpm (14TB / 12TB/ 10TB / 8TB / 6TB / 4TB) 3.5-inch, Nearline SAS (FIPS), 7,200 rpm (12TB / 8TB / 4TB) 3.5-inch, SSD (7.68TB / 3.84TB / 1.92TB / 960GB / 800GB) 3.5-inch, SSD (FIPS, self-encrypting) (3.84TB / 1.92TB) HDDE, Nearline SAS, 7,200 rpm (14TB / 12TB / 8TB / 4TB) HDDE, Nearline SAS (FIPS), 7,200 rpm (12TB / 8 TB / 4TB)	
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 RAID groups per system	72	
Max. no. of LUNs per RAID group	128	
Max. no. of LUNs	4,096	
Max. LUN capacity	128 TB	
Max. no. of copy generations	512	
Performance		
Latency	140µsec (Read), 60µsec (Write)	
Sequential access performance	11,000 MB/s (128KB Read) 4,400 MB/s (128KB Write)	
Random access performance	320,000 IOPS (8KB Read) 170,000 IOPS (8KB Write)	
Performance management		
Automated Storage Tiering	Yes	
Quality of Service	Yes	

Continuity management					
Storage Cluster	Yes				
Remote Copy functionality	Synchronous and asynchronous				
Information security management					
Data confidentiality	HTTPS (SSL), SSH, CHAP, Bidirectional CHAP				
Data integrity	Data Block Guard, Data Encryption, Cache Protection, Disk Drive Patrol, Global Hot Spare, Dedicated Hot Spare, Copy back less, Drive shield, Fast Recovery				
Availability management					
Non-disruptive firmware upgrade	Yes				
Hot part replacement	Yes				
Capacity management					
Thin Provisioning	Yes				
RAID migration	Yes				
Reporting function	Yes				
Hot part expansion	Yes				
Management					
Administration	Web-based graphical user interface, CLI (Command Line Interface), ETERNUS SF				
Supported OS for ETERNUS SF					
Operation Management Server	Microsoft® Windows Server® 2019 Microsoft® Windows Server® 2016 Microsoft Windows Server 2012, 2012 R2 Solaris® 11 (11/11 or later) Solaris® 10 (except ETERNUS SF Express) Red Hat Enterprise Linux 8 Red Hat® Enterprise Linux® 7 Red Hat® Enterprise Linux® 6 Oracle Linux 6 VMware® vSphere® 6.0, 6.5, 6.7 Microsoft Windows Server 2019 Hyper-V Microsoft Windows Server 2016 Hyper-V Microsoft Windows Server 2012 Hyper-V, 2012 R2 Hyper-V				
Operation Management Client	Microsoft Internet Explorer 10, 11 Firefox ESR 60, ESR 68 Microsoft Edge 25, 42, 44 Google Chrome 60, 75 Chrome® 47, 50 (Android®) Safari 8, 9 (iOS)				
Note	See the ETERNUS SF datasheet for further options				
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				
Power voltage	AC 100 - 120 V / AC 200 - 240 V				
Power frequency	50 / 60 Hz				
Maximum Power Consumption	AC 100 - 120 V: 4,170W (4,280VA)				
Maximum Power Consumption	AC 200 - 240 V: 4,170W (4,280VA)				
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)

Environment	
Maximum Heat Generation	AC 100 - 120 V: 15,750: kJ/h
	AC 200 - 240 V: 15,750: kJ/h
Humidity (operating)	20 - 80 %
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 60950-1, EN 60950-1, IEC 60950-1, TP TC 004/2011, CNS14336
Electromagnetic Compatibility	FCC Part-15 Class A, ICES-003 Class A, EN 55022 (2010), +AI, VCCI Class A, AS/NZS CISPR 22 Class A, CNS13438 (C6357) Class A, KN22
Electromagnetic Immunity	EN 55024
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/warranty
Product 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 (depending on country) 24x7, 4h Onsite Response Time (depending on country)
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 products, solutions & services

In addition to FUJITSU ETERNUS DX100 S5, 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 S5, 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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Contact
FUJITSU LIMITED
Website: www.fujitsu.com/eternus
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