Data Sheet FUJITSU Storage ETERNUS DX200 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 virtualization, e-mail, databases and business 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 enterpriseclass 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 DX200 S3

The scalable and unified Fujitsu Storage ETERNUS DX200 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 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
Vast performance and scalability in the entry-class	
	 Substantial 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	
	 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
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 as well as direct server connections Unified architecture allows flexible combinations of 2.5" and 3.5" disk types
Selective use of deduplication / compression	Decide on volume label whether to use it or not
	Capacity savings in hybrid and disk configurations

Technical details

General system information						
No. of controllers	2.5-inch Controller Enclosure 3.5-inch Controller Enclosure 1/2					
No. of host interfaces						
Maximum System Memory	2/4/8 ports [FC, iSCSI, FCoE, SAS, Ethernet(10Gbit/s)], 4/8/16 ports [Ethernet(1Gbit/s)]					
Extreme Cache Pool	64GB					
	800 GB					
Maximum Disk Drives	264					
Max. no. of drive enclosures						
Note	10 with 2.5" or 3.5" DE, 4 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	4,055 TB					
Drive Type	2.5-inch, SAS, 15,000 rpm (600 GB / 300 GB*)					
Dive type	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)					
Note	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*) 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					
Note	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*) 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.					
Note	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*) 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.					
	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*) 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. * Not Available in EMEIA region					
Max. no. of SSDs	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*) 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. * Not Available in EMEIA region unlimited					
	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*) 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. * Not Available in EMEIA region unlimited					
Max. no. of SSDs Mixed 2.5 inch/ 3.5 inch drive enclosures	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*) 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. * Not Available in EMEIA region unlimited Yes					
Max. no. of SSDs Mixed 2.5 inch/ 3.5 inch drive enclosures Drive interface	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*) 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. * Not Available in EMEIA region unlimited Yes Serial Attached SCSI (12 Gbit/s)					
Max. no. of SSDs Mixed 2.5 inch/ 3.5 inch drive enclosures Drive interface Back-end disk connectivity	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*) 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. * Not Available in EMEIA region unlimited Yes Serial Attached SCSI (12 Gbit/s) 1 pair of four-lane x 12 Gbit/s Serial Attached SCSI buses (SAS 3.0 wide)					
Max. no. of SSDs Mixed 2.5 inch/ 3.5 inch drive enclosures Drive interface Back-end disk connectivity Max. no. of LUNs	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*) 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. * Not Available in EMEIA region unlimited Yes Serial Attached SCSI (12 Gbit/s) 1 pair of four-lane x 12 Gbit/s Serial Attached SCSI buses (SAS 3.0 wide) 8,192					
Max. no. of SSDs Mixed 2.5 inch/ 3.5 inch drive enclosures Drive interface Back-end disk connectivity Max. no. of LUNs Max. LUN capacity	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*) 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. * Not Available in EMEIA region unlimited Yes Serial Attached SCSI (12 Gbit/s) 1 pair of four-lane x 12 Gbit/s Serial Attached SCSI buses (SAS 3.0 wide) 8,192 128 TB					
Max. no. of SSDs Mixed 2.5 inch/ 3.5 inch drive enclosures Drive interface Back-end disk connectivity Max. no. of LUNs Max. LUN capacity No. of snapshots - max.	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*) 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. * Not Available in EMEIA region unlimited Yes Serial Attached SCSI (12 Gbit/s) 1 pair of four-lane x 12 Gbit/s Serial Attached SCSI buses (SAS 3.0 wide) 8,192 2,048					
Max. no. of SSDs Mixed 2.5 inch/ 3.5 inch drive enclosures Drive interface Back-end disk connectivity Max. no. of LUNs Max. LUN capacity No. of snapshots - max. Max. no. of copy generations	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*) 2.5-inch drives are available only for 3.5-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. * Not Available in EMEIA region unlimited Yes Serial Attached SCSI (12 Gbit/s) 1 pair of four-lane x 12 Gbit/s Serial Attached SCSI buses (SAS 3.0 wide) 8,192 128 TB 2,048					
Max. no. of SSDs Mixed 2.5 inch/ 3.5 inch drive enclosures Drive interface Back-end disk connectivity Max. no. of LUNs Max. LUN capacity No. of snapshots - max. Max. no. of copy generations Eco-mode	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*) 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. * Not Available in EMEIA region Unlimited Yes Serial Attached SCSI (12 Gbit/s) 1 pair of four-lane x 12 Gbit/s Serial Attached SCSI buses (SAS 3.0 wide) 8,192 128 TB 2,048 512 Yes					
Max. no. of SSDs Mixed 2.5 inch/ 3.5 inch drive enclosures Drive interface Back-end disk connectivity Max. no. of LUNs Max. LUN capacity No. of snapshots - max. Max. no. of copy generations Eco-mode Deduplication Compression	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*) 2.5-inch drives are available only for 3.5-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. * Not Available in EMEIA region unlimited Yes Serial Attached SCSI (12 Gbit/s) 1 pair of four-lane x 12 Gbit/s Serial Attached SCSI buses (SAS 3.0 wide) 8,192 2,048 512 Yes for block					
Max. no. of SSDs Mixed 2.5 inch/ 3.5 inch drive enclosures Drive interface Back-end disk connectivity Max. no. of LUNs Max. LUN capacity No. of snapshots - max. Max. no. of copy generations Eco-mode Deduplication	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*) 2.5-inch drives are available only for 3.5-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. * Not Available in EMEIA region unlimited Yes Serial Attached SCSI (12 Gbit/s) 1 pair of four-lane x 12 Gbit/s Serial Attached SCSI buses (SAS 3.0 wide) 8,192 2,048 512 Yes for block					

Performance management				
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 Solaris® 11 (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 2016 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-configrations			
Installation specification				
19″ rackmount	Yes			

Installation specification							
Service Area	Front: 850 mm (33.5	inch) or more					
	Rear: 850 mm (33.5 i	Rear: 850 mm (33.5 inch) or more					
Power voltage	AC 100 - 120 V / AC 20	00 - 240 V					
Power frequency	50 / 60 Hz						
Power supply efficiency	92 % (80 PLUS gold)						
Maximum Power Consumption	AC 100 - 120 V: 6,670	W (6,800 VA)					
Maximum Power Consumption	AC 200 - 240 V: 6,670 W (6,800 VA)						
Power phase	Single						
	2.5-inch Drive Enclosure	3.5-inch Drive Enclosure	High-Density Drive Enclosure	2.5-inch Controller Enclosure	3.5-inch Controller Enclosure		
Dimensions (W x D x H)	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	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		
Weight	35 kg (77 lb)	35 kg (77 lb)	95 kg (209 lb)	35 kg (77 lb)	35 kg (77 lb)		
Maximum Power Consumption (AC 100 - 120 V)	430 W (440 VA)	340 W (350 VA)	1,300 W (1,320 VA)	830 W (840 VA)	730 W (740 VA)		
Maximum Power Consumption (AC 200 - 240 V)	430 W (440 VA)	340 W (350 VA)	1,300 W (1,320 VA)	830 W (840 VA)	730 W (740 VA)		
Environment							
Maximum Heat Generation	AC 100 - 120 V: 24,60	0: kJ/h					
	AC 200 - 240 V: 24,600: kJ/h						
Temperature (not operating)	0 - 50 °C						
Humidity (operating)	20 - 80 % (relative hu	midity, non-condensing)				
lumidity (not operating)	8 - 80 % (relative hum	nidity, 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 a	ccording to ISO 9296			
Operating environment	FTS 04230 – Guideline	e for Data Center (instal	lation specification)				
Operating environment link	http://docs.ts.fujitsu.c	om/dl.aspx?id=5899156	e9-1bf8-40f7-8ba4-7cac	9371f2f0			
Туре	2.5-inch Controller En	closure	3.5-inch Controller Enclosure				
Compliance							
Product safety			50-1, IEC 60950-1, GOST-				
Electromagnetic Compatibility	CNS 13438, FCC CFR 4	7 class A , ICES 003 Clas	s A, EN 55022 Class A, V	CCI Class A, AS/NZS CISP	R 22 Class A		
Electromagnetic Immunity	EN 55024	EN 55024					
CE certification	2004/108/EC, 2006/95	2004/108/EC, 2006/95/EC, 2011/65/EC					
Approvals	CB, CE, C-Tick, FCC, EA	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.co	m/sites/certificates					
Warranty							
Warranty period	3 years						
Warranty type	Onsite warranty						
Warranty Terms & Conditions Product Related Services - the perfect 6	www.fujitsu.com/supp extension	port					
Support Pack Options	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	24x7, Onsite Respons		12				

Warranty	
Service Lifecycle	5 years after end of product life
Spare Parts availability	5 years
Service Weblink	http://www.fujitsu.com/support

Fujitsu products, solutions & services

In addition to FUJITSU ETERNUS DX200 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 DX200 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



Copyrights

All rights reserved, including intellectual property rights. Designations may be trademarks and/or copyrights of the respective owner, the use of which by third parties for their own purposes may infringe the rights of such owner. For further information see http:// www.fujitsu.com/fts/resources/navigation/ terms-of-use.html

Copyright 2019 FUJITSU LIMITED

Disclaimer

Technical data is subject to modification and delivery subject to availability. Any liability that the data and illustrations are complete, actual or correct is excluded. Designations may be trademarks and/or copyrights of the respective owner, the use of which by third parties for their own purposes may infringe the rights of such owner.

Contact FUJITSU LIMITED Website: www.fujitsu.com/eternus 2019-02-21 WW-EN