

# Data Sheet FUJITSU Storage ETERNUS DX200F All Flash Array

Superior performance at reasonable cost



#### 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 enterpriseclass functionalities in the entry and midrange class and allows flexible disaster recovery concepts for the different model sizes, thus decreasing investment costs.

#### FTFRNUS DX200F

The ETERNUS DX200F is the ideal choice for application scenarios with demanding data and performance requirements. Unlike purpose-built expensive all-flash arrays based on special architectures, it features the standard highperformance architecture of the ETERNUS DX series. The system delivers impressive IOPS performance with lowest latency even at full load. Thus it offers a solution that resolves all performance issues in critical applications - such as real-time business analytics or VDI environments - without requiring any complicated tuning. Flexible and scalable ready-torun configurations, priced substantially lower than customized flash systems, makes both acquisition and installation affordable, quick and easy.









## Features & Benefits

Main Features	Benefits
Based on ETERNUS DX standard architecture	
	■ Performance optimized design
	■ Proven and mature technology
	<ul> <li>Substantially less expensive than purpose-built flash storage systems</li> </ul>
	Can be managed together with all other ETERNUS DX systems via central management console
Flexible SSD-based system	
	<ul> <li>Immediately solves the performance problems of business critical applications</li> </ul>
	No complicated tuning measures required
	■ Scalable in capacity and connectivity
Quality-of-Service and Thin Provisioning	
Convincing performance	<ul> <li>Control of applications priorities according to business needs.</li> <li>Capacity optimization consisting of over-provisioning and the new space reclamation feature returning deleted capacity back to the disk pool.</li> </ul>
convincing performance	■ Sufficient performance for all applications requiring high data rates
	and low response times
	Random access performance: Max. over at 400,000 iops at 4KB Block size
	<ul><li>Sequential access performance:</li><li>12GB/s at 128KB Block size</li></ul>
	■ Latency:
	Lower than 0.5ms at 4KB Block size
Quality-of-Service and Thin Provisioning  Convincing performance	<ul> <li>Capacity optimization consisting of over-provisioning and the new space reclamation feature returning deleted capacity back to the disk pool.</li> <li>Sufficient performance for all applications requiring high data rates and low response times</li> <li>Random access performance:         <ul> <li>Max. over at 400,000 iops at 4KB Block size</li> </ul> </li> <li>Sequential access performance:         <ul> <li>12GB/s at 128KB Block size</li> </ul> </li> <li>Latency:</li> </ul>

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## Technical details

General system information	
No. of controllers	2
No. of host interfaces	8 ports
Max. cache capacity	16 GB
Max. no. of drives	24
Redundancies	RAID Controller
	Power supply
	Fan
Supported RAID levels	0, 1, 1+0, 5, 5+0, 6
Host interfaces	Fibre Channel (16 Gbit/s)
	iSCSI (10 Gbit/s)
Max. no. of hosts	1,024
Max. storage capacity - physical	38.4 TB
Drive Type	2.5-inch, SSD (800 GB / 1.6 TB)
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	1,536
Thin Provisioning	Yes
Quality of Service	Yes
Business Continuity Features	
No. of snapshots - max.	1,536
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
Security features	HTTPS (SSL), One Time Password, RADIUS, SSH
Options	
Reporting function	Yes
Note	Options can be activated via ETERNUS SF Software
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
Supported OS for ETERNUS SF Express	
Operation Management Server	Windows Server® 2012 R2 Datacenter
	Windows Server® 2012 R2 Standard
	Windows Server® 2012 Datacenter
	Windows Server® 2012 Standard
	Windows Server® 2008 R2 Datacenter
	Windows Server® 2008 R2 Enterprise
	Windows Server® 2008 R2 Standard
	Windows Server® 2008 Datacenter Windows Server® 2008 Enterprise

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Supported OS for ETERNUS SF Expres	
Operation Management Client	Windows 7® Home Premium
- F	Windows 7® Professional
	Windows 7® Ultimate
	Windows Vista® Home Basic
	Windows Vista® Home Premium
	Windows Vista® Business
	Windows Vista® Enterprise
	Windows Vista® Ultimate
	Windows® XP Home Edition
	Windows® XP Professional Windows Server® 2008 Standard
	Windows Server® 2008 Enterprise
	Windows Server® 2008 Datacenter
	Windows Server® 2012 Standard
	Windows Server® 2012 Datacenter
	Windows Server® 2012 R2 Standard
	Windows Server® 2012 R2 Datacenter
Note	See the ETERNUS SF datasheet for further options
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/dx200/#Tab0-4
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: 790 W (800 VA)
Maximum Power Consumption	AC 200 - 240 V: 790 W (800 VA)
Power phase	Single
Dimensions (W x D x H)	482 x 645 x 88 mm
	19 x 25.4 x 3.5 inch
	2 U
Weight	35 kg (77 lb)
Environmental	
Maximum Heat Generation	AC 100 - 120 V: 2,900: kJ/h
	AC 200 - 240 V: 2,900 : kJ/h
Temperature (operating)	10 - 40 °C
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)	6.5B
Sound pressure (LpAm)	47dB(A)
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=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
CL CCIUIICAUOII	2007110015C, 200013315C, 201110315C

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Compliance	
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  Maintenance and Support Services	www.fujitsu.com/support - 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

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## Fujitsu OPTIMIZATION Services

In addition to Fujitsu ETERNUS DX200F, 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 DX200F, 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/qlobal/about/environment/



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