

Data Sheet

FUJITSU Storage ETERNUS DX900 S5 Disk System

Enterprise-grade, midrange hybrid storage system



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 DX900 S5

Fujitsu Storage ETERNUS DX900 S5 is an Enterprise-grade, midrange hybrid storage system that offers modular scalability, leading performance headroom and relentless business continuity capabilities. Latest data reduction technologies and fully automated quality-of-service functions make ETERNUS DX900 S5 ideal for the data management of business-critical core applications as well as of large and fast-growing amounts of unstructured data. Various types of disk and flash drives can be combined flexibly to balance capacity, data access speed and cost for specific business needs.



Features & Benefits

Main Features	Benefits
Flexible scalability in capacity and performance	<ul style="list-style-type: none">■ Future-proof scale-out architecture and upgrade options meet current and future business requirements■ Flexible combination of flash and disk media for different workloads of deployments■ Data center storage consolidation■ Superior performance by design■ Turbocharge performance via NVMe cache
Relentless Business continuity	<ul style="list-style-type: none">■ 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■ Non-disruptive migration■ System availability of 99.9999%
Automated Management of Data Service Levels	<ul style="list-style-type: none">■ Manage data service levels by business objective■ Automation of monitoring and adjustment■ Guaranteed service levels■ Data compression without performance impact
Transition to a Full Flash Data Center	<ul style="list-style-type: none">■ Flash-optimized data center storage system■ Complete management compatibility using ETERNUS SF Management software

Technical details

General system information

ETERNUS DX900 S5	
No. of controllers	2 / 4
No. of host interfaces	4-64 ports [FC(32Gbit/s,16Gbit/s)], 4-32 ports [iSCSI(10Gbit/s,1Gbit/s)]
Maximum System Memory	3 TB
Extreme Cache	51.2 TB
Maximum Disk Drives	2,304
Max. no. of drive enclosures	94
Note	94 with 2.5" or 3.5" DE, 32 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 (10Gbit/s [10GBASE-SR, 10GBASE-CR]) iSCSI (1 Gbit/s)
Mixed host interfaces	Yes
Max. no. of hosts	8,192
Maximum Storage Capacity HDD	31,699 TB
Maximum Storage Capacity SSD	70,778 TB
Drive Type	2.5-inch, SAS, 15,000 rpm (900 GB / 600 GB / 300 GB) 2.5-inch, SAS, 10,000 rpm (2.4TB / 1.8TB / 1.2TB / 600GB) 2.5-inch, SAS (FIPS), 10,000rpm (1.2TB) 2.5-inch, SSD (30.72TB / 15.36TB / 7.68TB / 3.84TB / 1.92TB / 960GB) 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) 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	4 pair of four-lane x 12 Gbits Serial Attached SCSI buses (SAS3.0 wide) / Controller Enclosure
Max. no. of RAID groups per system	528
Max. no. of LUNs per RAID group	128
Max. no. of LUNs	16,384
Max. LUN capacity	128 TB
Max. no. of copy generations	512
Compression	Yes

Performance

Latency	140µsec (Read), 60µsec (Write)
Sequential access performance	44,000 MB/s (128KB Read) 22,000 MB/s (128KB Write)
Random access performance	1,800,000 IOPS (8KB Read) 870,000 IOPS (8KB Write)

Performance management

Automated Storage Tiering	Yes
Quality of Service	Yes
Note	Automation options can be activated via ETERNUS SF Software

Continuity management

Storage Cluster	Yes
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Continuity management

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-configurations**Installation specification**

19" rackmount Yes

Power voltage AC 200 - 240 V

Power frequency 50 / 60 Hz

Maximum Power Consumption AC 200 - 240 V: 57,680W (58,910VA)

Power phase Single

	ETERNUS DX900 S5	Controller Enclosure	2.5-inch Drive Enclosure	3.5-inch Drive Enclosure	High-Density Drive Enclosure
Dimensions (W x D x H)	482 x 816 x 218 mm 19 x 32.1 x 8.6 inch 5 U	482 x 788 x 133 mm 19 x 31 x 5.2 inch 3 U	482 x 540 x 88 mm 19 x 21.3 x 3.5 inch 2 U	482 x 580 x 88 mm 19 x 22.8 x 3.5 inch 2 U	482 x 980 x 176 mm 19 x 38.6 x 6.9 inch 4 U
Weight	64 kg (141 lb)	58 kg (128 lb)	35 kg (77 lb)	35 kg (77 lb)	100 kg (220 lb)

Environment

Maximum Heat Generation AC 200 - 240 V: 213,310: kJ/h

Environment

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 DX900 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 DX900 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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