Data Sheet

FUJITSU Storage ETERNUS DX100 S4

Hybrid 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

<table>
<thead>
<tr>
<th>Main Features</th>
<th>Benefits</th>
</tr>
</thead>
</table>
| 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

<table>
<thead>
<tr>
<th>Feature</th>
<th>2.5-inch Controller Enclosure</th>
<th>3.5-inch Controller Enclosure</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of controllers</td>
<td>1/2</td>
<td></td>
</tr>
<tr>
<td>No. of host interfaces</td>
<td>2/4/8 ports [FC, iSCSI, SAS], 16 ports [Ethernet(1Gb/s)], 4/8 ports [Ethernet(10Gb/s)]</td>
<td></td>
</tr>
<tr>
<td>Maximum System Memory</td>
<td>32GB</td>
<td></td>
</tr>
<tr>
<td>Extreme Cache Pool</td>
<td>1.6 TB</td>
<td></td>
</tr>
<tr>
<td>Maximum Disk Drives</td>
<td>144</td>
<td></td>
</tr>
<tr>
<td>Max. no. of drive enclosures</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Note</td>
<td>5 with all 2.5&quot; DE, 10 with all 3.5&quot; DE, 2 with HD-DE or mixture of DEs up to Max no. Drives</td>
<td></td>
</tr>
<tr>
<td>Supported RAID levels</td>
<td>0, 1, 1+0, 5, 5+0, 6</td>
<td></td>
</tr>
</tbody>
</table>

### Host Interfaces

- Fibre Channel (32Gb/s, 16Gb/s, 8Gb/s)
- iSCSI (10 Gb/s [10GBase-SR, 10GBase-CR, 10GBase-T], 1 Gb/s)
- Ethernet (10 Gb/s, 1 Gb/s)
- SAS (12Gb/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 HDD

- 1,728 TB

### Maximum Storage Capacity SSD

- 2,212 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 / 900 GB / 600 GB / 300 GB*)
- 2.5-inch, SAS (self-encrypting), 10,000rpm (2.4 TB / 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) (3.84 TB/1.92 TB/ 400 GB)
- 3.5-inch, Nearline SAS, 7,200 rpm (12 TB / 10 TB / 8 TB / 6 TB / 4 TB / 2 TB)
- 3.5-inch, Nearline SAS (self-encrypting), 7,200 rpm (12 TB / 8 TB / 4 TB)
- 3.5-inch, SSD (3.84TB / 1.92TB / 960GB / 400GB)
- 3.5-inch, SSD (self-encrypting) (3.84 TB/1.92 TB/ 400 GB)
- HDDE, SAS, 10,000 rpm (1.2 TB)
- HDDE, Nearline SAS, 7,200 rpm (12 TB / 10 TB / 8 TB / 6 TB / 4 TB / 2 TB)
- HDDE, SSD (3.84TB / 1.92TB)
- HDDE, Nearline SAS (self-encrypting), 7,200 rpm (12 TB / 8 TB / 4 TB)

### 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.

* Not Available in EMEIA region

### 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
- Quality of Service
- Automated QoS
- Wide striping

- Yes

- Yes

- Yes

- Yes
**Performance management**

| 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)
- Solaris® 10
- 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

**Operation Management Client**

- Internet Explorer® 9, 10, 11
- Firefox® ESR 17, 24, 31, 38, 45, 52
- Microsoft Edge® 25
- Chrome® 60
- Chrome® 47, 50 (Android®)
- Safari 8, 9 (iOS)

**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 |
## Installation specification

| Service Area       | Front: 850 mm (33.5 inch) or more  
Rear: 850 mm (33.5 inch) or more |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Power voltage</td>
<td>AC 100 - 120 V / AC 200 - 240 V</td>
</tr>
<tr>
<td>Power frequency</td>
<td>50 / 60 Hz</td>
</tr>
<tr>
<td>Power supply efficiency</td>
<td>AC 100 - 120 V (4,170 W) (4,280 VA)</td>
</tr>
<tr>
<td>Maximum Power Consumption</td>
<td>AC 200 - 240 V: 4,170 W (4,280 VA)</td>
</tr>
<tr>
<td>Power phase</td>
<td>Single</td>
</tr>
</tbody>
</table>
| Dimensions (W x D x H) | 2.5-inch Controller Enclosure  
482 x 645 x 88 mm  
19 x 25.4 x 3.5 inch  
2 U                    |
|                     | 3.5-inch Controller Enclosure  
482 x 670 x 88 mm  
19 x 26.4 x 3.5 inch  
2 U                    |
|                     | 2.5-inch Drive Enclosure  
482 x 540 x 88 mm  
19 x 21.3 x 3.5 inch  
2 U                    |
|                     | 3.5-inch Drive Enclosure  
482 x 560 x 88 mm  
19 x 22 x 3.5 inch  
2 U                    |
|                     | High-Density Drive Enclosure  
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) | 770W (780VA)  
670W (680VA)  
430W (440VA)  
340W (350VA)  
1300W (1320VA) |
| Maximum Power Consumption (AC 200 - 240 V) | 770W (780VA)  
670W (680VA)  
430W (440VA)  
340W (350VA)  
1300W (1320VA) |

## Environment

| Maximum Heat Generation | AC 100 - 120 V: 15,800: kJ/h  
AC 200 - 240 V: 15,800: kJ/h |
| Temperature (not operating) | 0 - 50 °C |
| 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 | Site Planning Guide |

## Compliance

| Product safety | UL 60950-1, CSA-C22.2 No. 60950-1, EN 60950-1, IEC 60950-1 |
| Electromagnetic Compatibility | CNS 13438, FCC Part-15 Subpart B Class A, ICES 003 Class A, ENS5032, VCCI Class A, AS/NZS CISPR 32 class A |
| Electromagnetic Immunity | EN 55024 |
| CE certification | 2014/30/EU, 2014/35/EU, 2011/65/EU |
| 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 |

## Recommended Service

| - 24x7, Onsite Response Time: 4h |
| 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) |
| Service Lifecycle | 5 years after end of product life |
Warranty

Service Weblink

www.fujitsu.com/services/product-services
Fujitsu products, solutions & 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.

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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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