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 enterprise-class 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 DX60 S3
Delivering reliable operation at an affordable price makes ETERNUS DX60 S3 an ideal disk storage system for small and medium-sized IT environments. Management software, included at no extra cost, reduces administration effort and provides functionality to ensure data protection. Flexible support for different network connections and disk types enables choice in cost and performance optimization. Designed for smaller environments it provides remarkable scalability in storage capacity offering good headroom for future growth. The perfect storage solution for consolidation of distributed data and for smaller server virtualization projects.
## Features & Benefits

<table>
<thead>
<tr>
<th>Main Features</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliable operation at an affordable price</td>
<td>- Affordability</td>
</tr>
<tr>
<td></td>
<td>- Leading performance for the entry-level</td>
</tr>
<tr>
<td></td>
<td>- Rich data safety functionality</td>
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<tr>
<td></td>
<td>- Enterprise proven capabilities already in entry-level storage</td>
</tr>
<tr>
<td>Ideal for small and medium-sized IT environments</td>
<td>- Easy to install, configure, operate and maintain</td>
</tr>
<tr>
<td></td>
<td>- Perfect fit for storage consolidation starters &amp; virtualization</td>
</tr>
<tr>
<td></td>
<td>newcomers with medium capacity requirements and predictable growth rates</td>
</tr>
<tr>
<td>Free-of-charge ETERNUS SF Express Storage Management</td>
<td>- Free-of-charge, richly featured management suite</td>
</tr>
<tr>
<td></td>
<td>- Single point administration</td>
</tr>
<tr>
<td></td>
<td>- Easy and efficient operation</td>
</tr>
</tbody>
</table>
# Technical details

## General system information

<table>
<thead>
<tr>
<th></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 ports</td>
<td></td>
</tr>
<tr>
<td>Maximum System Memory</td>
<td>4 GB</td>
<td></td>
</tr>
<tr>
<td>Maximum Disk Drives</td>
<td>96</td>
<td>48</td>
</tr>
<tr>
<td>Max. no. of drive enclosures</td>
<td>3</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 (8 Gbit/s, 4 Gbit/s)
- iSCSI (10 Gbit/s [10GBase-T], 1 Gbit/s)
- SAS (6 Gbit/s)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. no. of hosts</td>
<td>128</td>
</tr>
<tr>
<td>Maximum Storage Capacity</td>
<td>480 TB</td>
</tr>
</tbody>
</table>

**Drive Type**
- 2.5-inch, SAS, 15,000 rpm (600 GB / 300 GB*)
- 2.5-inch, SAS, 10,000 rpm (1.8 TB / 1.2 TB / 900 GB / 600 GB / 300 GB*)
- 2.5-inch, Nearline SAS, 7,200 rpm (2 TB / 1 TB)
- 2.5-inch, SSD, MLC (1.6 TB* / 800 GB* / 400 GB )
- 3.5-inch, SAS, 10,000 rpm (1.8 TB / 1.2 TB / 900 GB)
- 3.5-inch, Nearline SAS, 7,200 rpm (10 TB / 8 TB / 6 TB / 4 TB / 2 TB)
- 3.5-inch, SSD (1.6 TB* / 800 GB* / 400 GB)

**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.
- 6 TB/ 8 TB Nearline SAS and 1.8 TB SAS drives are Advanced Format drives.
- * Not Available in EMEIA region

## Mixed 2.5 inch/ 3.5 inch drive enclosures

<table>
<thead>
<tr>
<th>Drive interface</th>
<th>Serial Attached SCSI (6 Gbit/s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. no. of LUNs</td>
<td>1,024</td>
</tr>
<tr>
<td>Max. LUN capacity</td>
<td>128 TB</td>
</tr>
<tr>
<td>No. of snapshots - max.</td>
<td>1,024</td>
</tr>
<tr>
<td>Max. no. of copy generations</td>
<td>512</td>
</tr>
</tbody>
</table>

**Eco-mode**
- Yes

## Performance management

- Wide striping: Yes

## Information security management

**Data confidentiality**
- 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
- 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

<table>
<thead>
<tr>
<th>Interfaces</th>
<th>Ethernet (1000 Base-T / 100 Base-TX / 10 Base-T)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supported protocols</td>
<td>SNMP (version 1, 2C, 3), SMI-S 1.6</td>
</tr>
<tr>
<td>Administration</td>
<td>Web-based graphical user interface, CLI (Command Line Interface), ETERNUS SF</td>
</tr>
<tr>
<td>Remote Support</td>
<td>Event notification (E-mail / SNMP / Syslog), Remote maintenance</td>
</tr>
</tbody>
</table>

### 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 2012, 2012 R2
- 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

### Installation specification

<table>
<thead>
<tr>
<th>19&quot; rackmount</th>
<th>Yes</th>
</tr>
</thead>
</table>
| 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: 1,900 W (1,940 VA)  
AC 200 - 240 V: 1,890 W (1,930 VA) |
| Power phase    | Single |
| Dimensions (W x D x H) | 2.5-inch Controller Enclosure | 3.5-inch Controller Enclosure | 2.5-inch Drive Enclosure | 3.5-inch Drive Enclosure |
| Weight         | 35 kg (77 lb)  
35 kg (77 lb)  
35 kg (77 lb)  
35 kg (77 lb) |
| Maximum Power Consumption (AC 100 - 120 V) | 610 W (620 VA)  
530 W (540 VA)  
430 W (440 VA)  
340 W (350 VA) |
| Maximum Power Consumption (AC 200 - 240 V) | 600 W (610 VA)  
530 W (540 VA)  
430 W (440 VA)  
340 W (350 VA) |

### Environment

| Maximum Heat Generation | AC 100 - 120 V: 7,000: kJ/h  
AC 200 - 240 V: 7,000: 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 |
### Environment

**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=589915e9-1b68-40f7-8ba4-7cac9371f2f0

### 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, IECES 003 Class A, EN 55022 Class A, VCCI Class A, AS/NZS CISPR 22 Class A

**Electromagnetic Immunity**  
EN 55024

**CE certification**  

**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/warranty

**Product Support Services - the perfect extension**

**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 Response Time: 4h

**Service Lifecycle**  
5 years after end of product life

**Service Weblink**  
www.fujitsu.com/services/product-services
In addition to FUJITSU ETERNUS DX60 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 DX60 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

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