ETERNUS JX Storage Subsystems
As capacity requirements often exceed the storage capacity that servers can offer, a passive extension of server storage is a good option. The Fujitsu Storage ETERNUS JX storage subsystems, which are directly attached to a server, support mixed disk drive configurations with easy handling and low investment costs. When extending storage capacity, they are the perfect choice for environments with only one server or with two servers for high availability in clustered configurations. ETERNUS JX systems offer basic data protection with built-in resilience and they can be managed using standard Fujitsu ServerView software.

ETERNUS JX60
A passive subsystem extension is a cost-effective solution as capacity requirements often exceed the internal storage capacity of a server. However, data growth is outpacing the increase in disk capacity and thus more disks are needed requiring more rack space. This is why the Fujitsu Storage subsystem ETERNUS JX60 provides high disk capacity in a minimum space. Up to 60 low-cost 3.5 inch Nearline SAS hard disk drives can be hosted in an enclosure of only four rack height units. A total capacity of 480 Terabytes can be delivered by attaching up to 2 enclosures directly to a server with a small, space-saving footprint.
## Features & Benefits

<table>
<thead>
<tr>
<th>Main Features</th>
<th>Benefits</th>
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<tr>
<td><strong>Quality and reliability</strong></td>
<td></td>
</tr>
<tr>
<td>Direct Attached Storage (DAS) for Intel-based servers with 6 Gbit/s SAS connection</td>
<td>Reliable storage capacity for biggest data volume</td>
</tr>
<tr>
<td>Up to 120 large capacity Nearline SAS disk drives enlarge storage capacity by up to 480 Terabyte</td>
<td></td>
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<tr>
<td><strong>Innovation and flexibility</strong></td>
<td></td>
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<tr>
<td>Components like hot plug disk drives and power supply modules can be replaced while the server is running</td>
<td>Continuous operation during flexible drive replacements</td>
</tr>
<tr>
<td>The redundant hot-plug power supply units can be connected with phase redundancy via separate power lines.</td>
<td>Mix and match of disk drives</td>
</tr>
<tr>
<td>Optimum and secure cooling of the drives is ensured by two independent fans in each power supply unit and in the fan expander module</td>
<td></td>
</tr>
<tr>
<td><strong>Ease of use</strong></td>
<td></td>
</tr>
<tr>
<td>Status of the components is signalized by LED displays and light-emitting diodes</td>
<td>Easy installation and control of the subsystem</td>
</tr>
<tr>
<td>Drive extension is completely managed by the server and can be used in all usage scenarios with certified PRIMERGY servers</td>
<td></td>
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<tr>
<td>The subsystem can be integrated in the standard Fujitsu server management ServerView Suite</td>
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</tr>
</tbody>
</table>
Technical details

General system information

<table>
<thead>
<tr>
<th>Maximum Disk Drives</th>
<th>120</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. no. of drive enclosures</td>
<td>2</td>
</tr>
<tr>
<td>Supported RAID levels</td>
<td>0, 1, 1+0, 5, 5+0, 6, 6+0</td>
</tr>
<tr>
<td>Host Interfaces</td>
<td>SAS 3.0 I/O-module (expander)</td>
</tr>
<tr>
<td>Connector Type</td>
<td>1 Port MiniSAS HD (SFF-8644)</td>
</tr>
<tr>
<td>Supported PRIMERGY server controller</td>
<td>LSI MegaRAID SAS9286CV-8e SAS RAID 5/6 controller</td>
</tr>
<tr>
<td></td>
<td>LSI SAS9200-8e 6Gb/s Bext PCIe FH/LP SAS Controller</td>
</tr>
<tr>
<td></td>
<td>Fujitsu PSAS CP400e SAS Controller</td>
</tr>
<tr>
<td>Maximum Storage Capacity</td>
<td>480 TB</td>
</tr>
<tr>
<td>Drive Type</td>
<td>3.5-inch, Nearline SAS, 7,200 rpm (4 TB / 3 TB / 2 TB)</td>
</tr>
<tr>
<td>Drive interface</td>
<td>Serial Attached SCSI (6 Gbit/s)</td>
</tr>
</tbody>
</table>

Management

Administration

Web-based graphical user interface

Supported configurations

All major host operating systems, servers and business applications

Detailed support matrix:
http://ts.fujitsu.com/matrixep

Hardware certification

Windows 2012R2 x64 Storage Spaces Enclosure

Installation specification

19" rackmount

Yes

Dimension - per rack (W x D x H)

482 x 980 x 176 mm

19 x 38.6 x 6.9 inch

Height Unit standard

4 U

Height Unit Maximum

8 U

Weight

max. 95 kg (209 lb) with hard disk drives

Service Area

Front: 800 mm (31.5 inch) or more

Rear: 800 mm (31.5 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: 1300 W (1320 VA)

AC 200 - 240 V: 1300 W (1320 VA)

Power phase

Single (phase redundancy possible)

Environment

Maximum Heat Generation

AC 100 - 120 V: 4750: kJ/h

AC 200 - 240 V: 4750: kJ/h

Temperature (operating)

10 - 40 °C (50 - 104 °F)

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)

43.5 dB(A)

Sound power (LWAd; 1B = 10dB)

6.0 B

Noise notes

measured according to ISO7779 and declared according to ISO9296

Operating environment

FTS 04230 – Guideline for Data Center (installation specification)

Operating environment link

### 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 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**

**Approvals**
- CB, CE, C-Tick, EAC, FCC, 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](https://sp.ts.fujitsu.com/sites/certificates)

### Warranty

**Warranty period**
- 3 years

**Warranty type**
- Onsite warranty

**Warranty Terms & Conditions**
- [www.fujitsu.com/support](http://www.fujitsu.com/support)

**Product Related Services - the perfect extension**

**Support Pack Options**
- X - 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**
- X - 24x7, Onsite Response Time: 4h

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

**Service Weblink**
Fujitsu products, solutions & services
In addition to FUJITSU ETERNUS JX60, 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 JX60, 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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