IBM 7226 Multimedia Storage Enclosure

Optimize storage devices and protect data

For organizations with rack-mount servers, IBM 7226 Multimedia Storage Enclosure provides reliable and flexible data backup and security in the data center. With high-speed SAS, USB and Fibre Channel interface options, as well as compatibility with a range of storage devices, 7226 Multimedia Storage Enclosure can help protect data on critical IBM Power Systems™, POWER, BladeCenter, PureFlex and other compatible OEM systems. High-density applications using half-high LTO Ultrium 6 and LTO Ultrium 5 SAS tape drives are available on IBM POWER7 Systems™.

The 7226 system is a rack-mounted enclosure that features two drive bays that can hold one or two tape drives, one or two RDX removable disk drives, and up to four slim-design DVD-RAM drives. These drives can be mixed in any combination of any available drive technology or electronic interface in a single 7226 Multimedia Storage Enclosure.

To help connect 7226 Multimedia Storage Enclosure to POWER7 systems, the SAS drive requires the Peripheral Component Interconnect eXtended (PCI-X) double data rate (DDR) Dual-x4 SAS Adapter (Features 5278, 5900, 5901 and 5912). High-density applications require POWER7 SAS Adapter Feature EJOX. Up to two 7226 enclosures can be attached to this adapter. Each 7226 SAS device can be attached individually to a server host bus adapter (HBA) port, or the Quad External SAS Cable (Feature 5544) allows up to four SAS drives to attach to a single HBA port. USB drive features can also attach to standard USB ports on the system or to the four-port USB adapter (Feature 2728). Half-high LTO Ultrium 6 and 5 Fibre Channel tape drives can also attach to most POWER7 servers through a Fibre Channel external adapter (Feature 5753).
POWER servers require the PCI-X DDR Dual SAS Adapter (Features 5278, 5900, 5901 and 5912) to attach 7226 SAS devices. POWER7 high-density applications require adapter Feature EJOX.

POWER blade servers require the 3 GB SAS Expansion Adapter (Feature 8246) and attach to 7226 Multimedia Storage Enclosure through BladeCenter. RDX removable hard drive storage devices can also attach to BladeCenter.

PureFlex Systems require a Fibre Channel external adapter (Feature 1764) to attach the half-high LTO Ultrium 6 and 5 tape drives. RDX removable hard drive storage devices can also attach to PureFlex Systems.

Includes broad choice of features

Drive options on 7226 Multimedia Storage Enclosure include:

- **Tape drive features:**
  - DAT160 SAS and USB tape drives: Storage capacity of up to 160 GB with a data transfer rate of up to 12 MBps (assumes 2:1 compression)
  - Read/write compatibility of the DAT160 drive with DAT160 and IBM DDS-4 media formats: Availability of both the SAS and USB electronic interface expands the attach capability of DAT160 on various Power Systems
  - Half-high LTO Ultrium 6 SAS and Fibre Channel tape drives: Storage capacity of up to 6.25 TB with a data transfer rate of up to 320 MBps (assumes 2.5:1 compression); read/write compatibility of the half-high LTO Ultrium 6 drive with LTO Ultrium 6 and 5 media, and read-only compatibility with LTO Ultrium 4 media
  - Half-high LTO Ultrium 5 SAS and Fibre Channel tape drives: Storage capacity of up to 3 TB with a data transfer rate of up to 280 MBps (assumes 2:1 compression); read/write compatibility of the half-high LTO Ultrium 5 drive with LTO Ultrium 5 and 4 media, and read-only compatibility with LTO Ultrium 3 media
  - Availability of both the SAS and Fibre Channel electronic interfaces on half-high LTO Ultrium 6 and 5: Ability to expand the attach capability on POWER and PureFlex Systems; high-density applications are available on POWER7 Systems using the half-high LTO Ultrium 6 or 5 SAS tape drive features offered on 7226 Multimedia Storage Enclosure

- **DVD optical drive features:**
  - DVD-RAM SAS and USB drives: Native capacity of up to 9.4 GB with a data transfer rate of 2.77 MBps
  - These DVD-RAM drives attach to an IBM server from the rear port of the 7226 enclosure. With a typical 3:1 compression, a single disk can read and write up to 28 GB of data. The DVD-RAM drive is mounted in the DVD sled feature, which has space for a second DVD-RAM drive in each 7226 drive bay. The DVD-RAM drive can read CD-recordable, CD-RW and CD-ROM media. DVD-RAM drives use bare media and support both synchronous and asynchronous data transfers. The DVD drives are compatible with 2.6 GB, 4.7 GB, 5.2 GB and 9.4 GB media. The availability of both the SAS and USB electronic interfaces expands the attach capability of DVD drives on various Power Systems.1
  - The DVD-RAM USB drive is also available for IBM PureFlex Systems with the USB port located on the front bezel of the DVD drive sled.

- **RDX removable disk drive features:**
  - RDX removable disk drive cartridges capacity options: 320 GB, 500 GB, 1 TB or 1.5 TB with a data rate of up to 100 MBps.
  - RDX docking station: Easy plug and play of computer data when installed in a drive bay of 7226 Multimedia Storage Enclosure. RDX removable hard drive technology is a highly reliable save/restore backup option versus tape or DVD. Data encryption is supported through a Power Systems application.
# IBM 7226 Multimedia Storage Enclosure at a glance

## Characteristics

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of storage devices</td>
<td>Four maximum (assumes four DVD drives)</td>
</tr>
<tr>
<td>Electronics</td>
<td>Optional SAS, USB or Fibre Channel electronic bus</td>
</tr>
<tr>
<td>Typical compression</td>
<td>2:1 for tape drives and 3:1 for DVD optical drives. Compression on RDX disk drives is typically 2:1 and is supported by a Power Systems server</td>
</tr>
<tr>
<td>Color</td>
<td>Black</td>
</tr>
<tr>
<td>Service offerings</td>
<td>One-year limited warranty. Customer-replaceable unit (CRU) and 24x7 on-site service, service upgrades available</td>
</tr>
</tbody>
</table>

## Physical characteristics

<table>
<thead>
<tr>
<th>Dimension (H x W x D)</th>
<th>4.3 cm x 48 cm x 43.8 cm (1.7 in. x 18.7 in. x 17.6 in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>7.1 kg (15.6 lb) – typical configuration</td>
</tr>
</tbody>
</table>

## Operating environment

<table>
<thead>
<tr>
<th>Temperature</th>
<th>10°C – 40°C (50°F – 104°F)</th>
</tr>
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<tbody>
<tr>
<td>Relative humidity</td>
<td>20% – 80%</td>
</tr>
<tr>
<td>Wet bulb (maximum)</td>
<td>26°C (79°F)</td>
</tr>
<tr>
<td>Electrical power</td>
<td>0.047 kVA</td>
</tr>
<tr>
<td>Power requirement</td>
<td>140 watt power supply</td>
</tr>
<tr>
<td>Acoustics (maximum)</td>
<td>5.5 bels idle; 6.2 bels operating</td>
</tr>
</tbody>
</table>

## Software requirements

- **IBM AIX® v7.1**
  - All levels
  - With 6100-01 technology and Service Pack 7 or later
  - With 5300-10 technology and Service Pack 2 or later

- **IBM AIX v6.1**
  - With 6100-01 technology and Service Pack 7 or later
  - With 5300-10 technology and Service Pack 2 or later

- **IBM AIX v5.3**
  - With 6100-01 technology and Service Pack 7 or later
  - With 5300-10 technology and Service Pack 2 or later

- **IBM i (previously known as IBM OS/400®)**
  - IBM i v7.1 or later (SAS devices only)
  - IBM i v6.1.1 or later (SAS devices only)

- **Linux**
  - SUSE Linux Enterprise Server 10 SP3 for Power Systems or later
  - SUSE Linux Enterprise Server 11 SP1 for Power Systems or later
  - Red Hat Enterprise Linux for POWER v5.5 or later

- **Virtual I/O Server (VIOS) (supports SAS devices only)**
  - Assignment of devices in 7226 enclosure requires VIOS v2.2 or later

## Power Systems hardware adapter requirements

- **SAS adapters (Features 5278, 5900, 5901 and 5912)**
  - One device per HBA standard
  - SAS adapters (Features EJ0X) on POWER7 Systems using high-density applications
  - Quad Cable (Feature 5544) allows up to four devices per HBA

- **USB adapter (Feature 2728)**
  - 4-port USB adapter for RDX removable disk drive docking station, DAT160 USB tape drive and DVD-RAM USB drives

- **BladeCenter adapter (Feature 8246)**
  - For use with POWER blade systems
  - 3 GB SAS Expansion Adapter installed in BladeCenter

- **Fibre Channel adapter**
  - **POWER7 (Feature 5753)**
  - External Fibre Channel adapter for Power Systems

- **PureFlex Systems Fibre Channel adapter (Feature 1764)**
  - Fibre Channel external adapter for PureFlex Systems
Why IBM?
IBM storage solutions provide compelling capabilities with superior value for all levels of business. With storage efficiency more vital than ever and the amount of data you are required to store growing exponentially, IBM disk storage systems provide the storage efficiency and flexibility you need.

High-performance POWER7, POWER6, PureFlex and POWER blade systems provide the foundation for an enterprise infrastructure that can help businesses manage rapid change, reduce business risk and meet higher service levels—all in the most cost-effective manner. IBM storage solutions such as 7226 Multimedia Storage Enclosure provide reliable protection for the business-critical data and information that businesses rely on in their IBM-based data center environments.

For more information
To learn more about IBM 7226 Multimedia Storage Enclosure, please contact your IBM representative or IBM Business Partner, or visit: ibm.com/systems/storage/tape/7226

For a current list of host software versions and release levels that support 7226 Multimedia Enclosure, please visit: ibm.com/systems/support/storage/config/ssic/index.jsp

For more information on tape drives and to order media for tape and RDX drives, please visit: ibm.com/systems/storage/tape/entry/x.html

For information about the IBM Linear Tape File System™ feature on the half-high LTO Ultrium 5 tape drive, please visit: ibm.com/systems/storage/tape/ltfs/

For more information on the advantages of RDX removable disk drive technology, please visit: ibm.com/systems/storage/tape/rdx/index.html

This IBM 7226 Multimedia Storage Enclosure marketing information is available in a limited number of translations. For a detailed description of 7226 Storage Enclosure in several other languages, please visit: ibm.com/e-business/linkweb/publications/servlet/pbi.wss

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