



IBM Storwize V7000 offers 2.5-inch 15k RPM 146 GB disk drives for models 124 and 224 of machine type 2076

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At a glance

The IBM® Storwize V7000 disk system adds a new 2.5-inch 15k RPM 146 GB disk drive option to those available for the 2076 models 124 and 224.

For ordering, contact your IBM representative, an IBM Business Partner, or IBM Call Centers.

Overview

With the introduction of 2.5-inch 15k RPM 146 GB SAS disk drives, the IBM Storwize V7000 disk system provides customers with more configuration choices and greater consolidation of workloads with different performance characteristics. This disk drive supports customer applications with even more demanding performance requirements. Storwize V7000 systems equipped with 2.5-inch 15k RPM drives can support 15 to 30 percent greater throughput than equivalent Storwize V7000 systems configured with 2.5-inch 10k RPM drives.

Key prerequisites

- Specific options for IBM Storwize V7000 must be ordered during the initial plant order for the IBM Storwize V7000 system. Refer to the [Description](#) section for details.
- Fibre Channel (FC) switch for FC host connectivity (not necessary for iSCSI host connectivity).
- IBM Power Systems™, IBM BladeCenter®, or IBM System x® servers.
- Selected Sun and HP UNIX® servers and Intel-based servers running Microsoft® Windows® 2008, Windows Server 2003, or Linux®.

Planned availability date

April 15, 2011

Description

IBM Storwize V7000 disk drives

IBM Storwize V7000 supports a specified set of disk drives for each of the 3.5-inch 12-drive bay or 2.5-inch 24-drive bay models.

The twelve 3.5-inch drive bay IBM Storwize V7000 enclosures (2076-112 and 2076-212) are available with the following disk drive:

- 2 TB 3.5-inch 7.2k Nearline SAS disk (#3302)

The twenty-four 2.5-inch drive bay IBM Storwize V7000 enclosures (2076-124 and 2076-224) are available with the following disk drives:

- 146 GB 2.5-inch 15k SAS disk (#3251)
- 300 GB 2.5-inch 10k SAS disk (#3203)
- 450 GB 2.5-inch 10k SAS disk (#3204)
- 600 GB 2.5-inch 10k SAS disk (#3206)
- 300 GB 2.5-inch E-MLC (enterprise-grade multi-level cell) SSD (#3504)

Customers may order any quantity of any drive but are responsible for providing sufficient drives in the configuration necessary for setting up the RAID configurations and spare disk drives to protect data. Bulk orders of disk drives other than SSDs are available for IBM Storwize V7000 by using the Bulk Ordering Feature Indicator feature (#5555) as a field (MES) feature order for IBM Storwize V7000.

See the [Reference information](#) section for more information about IBM Storwize V7000 software.

New disk drives

- **146 GB 2.5-inch 15K RPM SAS HDD (feature number 3251):** This is an optional feature for a single SAS 146 GB 2.5-inch disk drive with 15k RPM speed to be installed inside either a 24-bay IBM Storwize V7000 Control Enclosure (2076-124), or a 24-bay IBM Storwize V7000 Expansion Enclosure (2076-224). This feature may be ordered during an initial plant order or as a field (MES) order in any quantity from one up to the twenty-four total intermixed drives allowed within the enclosure.
- **Bulk Ordering Feature Ind. (feature number 5555):** This feature designates bulk MES ordering capability for selected features of IBM Storwize V7000. SSDs are not included with those features available using the Bulk Ordering Feature Indicator feature. Specifying this feature on MES orders will allow ordering of up to a maximum of 99 features. This bulk ordering feature is available for the following features:
 - 146 GB 2.5-inch 15k SAS disk (#3251)
 - 300 GB 2.5-inch 10k SAS disk (#3203)
 - 450 GB 2.5-inch 10k SAS disk (#3204)
 - 600 GB 2.5-inch 10k SAS disk (#3206)
 - 2 TB 3.5-inch 7.2k Nearline SAS disk (#3302)
 - 1 m Fiber Optic Cable LC-LC (#5301)
 - 5 m Fiber Optic Cable LC-LC (#5305)
 - 25 m Fiber Opt Cable LC-LC (#5325)
 - 1 m 6 Gbps external mini SAS cable (#5401)
 - 3 m 6 Gbps external mini SAS cable (#5403)
 - 6 m 6 Gbps external mini SAS cable (#5406)
 - 8 Gbps LW SFP (#5608)

Accessibility by people with disabilities

A U.S. Section 508 Voluntary Product Accessibility Template (VPAT) containing details on accessibility compliance can be requested at

http://www.ibm.com/able/product_accessibility/index.html

Reference information

Refer to Hardware Announcement [110-220](#), dated October 07, 2010, for more information on IBM Storwize V7000.

Refer to Software Announcement [210-356](#), dated October 07, 2010, for more information on IBM Storwize V7000 software.

Product number

Description	Machine type	Model number	Feature number
IBM Storwize V7000 Controller SFF 24-drive enclosure (SSDs) 146 GB 2.5-inch 15k RPM SAS HDD	2076	124	3251

Description	Machine type	Model number	Feature number
IBM Storwize V7000 Expansion SFF 24-drive enclosure (SSDs) 146 GB 2.5-inch 15k RPM SAS HDD	2076	224	3251

Business Partner information

If you are a Direct Reseller - System Reseller acquiring products from IBM, you may link directly to Business Partner information for this announcement. A PartnerWorld ID and password are required (use IBM ID).

<https://www.ibm.com/partnerworld/mem/sla.jsp?num=111-028>

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<http://www.ibm.com/servers/eserver/xseries/services.html>

Technical information

Planning information

You are responsible for downloading or obtaining from IBM, and installing designated Machine Code (microcode, basic input/output system code (called BIOS), utility programs, device drivers, and diagnostics delivered with an IBM machine) and other software updates in a timely manner from an IBM Internet Web site or from other electronic media, and following the instructions that IBM provides. You may request IBM to install Machine Code changes; however, you may be charged for that service.

Security, auditability, and control

This product uses the security and auditability features of the preloaded application software.

The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communications facilities.

Terms and conditions

MES discount applicable

No

Field installable feature

Yes

Warranty period

Three years

An IBM part or feature installed during the initial installation of an IBM machine is subject to a full warranty effective on the date of installation of the machine. An IBM part or feature which replaces a previously installed part or feature assumes the remainder of the warranty period for the replaced part or feature. An IBM part or feature added to a machine without replacing a previously installed part or feature is subject to a full warranty effective on its date of installation. Unless specified otherwise, the warranty period, type of warranty service, and service level of a part or feature is the same as the machine it is installed.

Customer setup

Yes

Machine code

No license terms apply

Pricing

Description	Machine type	Model number	Feature number
IBM Storwize V7000 Controller SFF 24-drive enclosure (SSDs) 146 GB 2.5-inch 15k RPM SAS HDD	2076	124	3251

Description	Machine type	Model number	Feature number
IBM Storwize V7000 Expansion SFF 24-drive enclosure (SSDs) 146 GB 2.5-inch 15k RPM SAS HDD	2076	224	3251

Machine Model Feature Mach/Mod/Feat	Plant/Field install	MES removal	CSU
2076/124/3251	Both	N	Y
2076/224/3251	Both	N	Y

** If field installed on a purchased machine, parts removed or replaced become the property of IBM and must be returned.

For current prices visit

<http://www-03.ibm.com/systems/p/>

You may also contact us at 1-888-Shop-IBM.

Pricing terms

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[ENUS-111-028-List_prices_2011_04_12.PDF](#)

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