



## 300 GB 2.5-inch 10K rpm SATA HDDs provide highest capacity and performance for storage in BladeCenter systems

### Table of contents

2	<a href="#">Key prerequisites</a>	2	<a href="#">Product number</a>
2	<a href="#">Planned availability date</a>	6	<a href="#">Prices</a>
2	<a href="#">Description</a>		

### At a glance

IBM® BladeCenter® introduces the new 300 GB 10K SATA 2.5-inch HDDs.

These 300 GB SATA drives are available as a non-hot-swap (NHS) or a slim-HS type.

The 300 GB 10K SATA 2.5-inch HDDs are the newest storage solution for servers that need large storage capacity for data backup and mission-critical applications.

For technical support:

- Call the IBM Support Center at 800-IBM-SERV (426-7378)  
or
- Request technical information via the Web site at  
<http://www.ibm.com/support>

### Overview

The 300 GB 10K rpm SATA 2.5-inch NHS and Slim-HS HDDs provide 2.5-inch form factor options that can be used as hot-swap or non-hot-swap drives. The addition of a 10K rpm offering to the IBM BladeCenter blade family of 2.5-inch SATA HDDs will offer the highest-performing SFF options and a wider selection of choices to satisfy the range of potential applications. These new drives are positioned at the top of our SATA SFF HDD line based on increased performance. Key features and benefits include:

- 10,000 rpm speed to optimize performance
- Superior reliability that enables operation in RAID environments without compromising application performance or availability

#### Performance

300 GB performance characteristics include:

- Formatted capacity: 300,000 MB
- Drive to host interface that supports 3.0 Gb/s burst rate
- Drive media to buffer interface that supports sustained interface data transfers of up to 120 MB/s average
- Spindle speed of 10,000 rpm
- Average latency of 3.0 ms
- Average seek on reads of less than 4.2 ms
- Hot-swap capability
- SATA interface

## Reliability

- SATA compliance enables HDDs to connect directly into BladeCenter systems.
- S.M.A.R.T Technology allows software utilities to alert you of impending drive failures so replacements can be made before a problem occurs.
- Rigorous testing through the ServerProven® program instills confidence that your storage subsystem is compatible and will function reliably.

**Warranty:** One-year, customer replaceable unit (CRU), limited warranty<sup>1</sup>

The IBM 300 GB 10K SATA HDDs are supported on HS21, HS21 XM, and HS12 blade servers.

<sup>1</sup> For information on the IBM Statement of Limited Warranty, visit

[http://www.ibm.com/servers/support/machine\\_warranties/](http://www.ibm.com/servers/support/machine_warranties/)

Alternatively, this information is also available by contacting your IBM representative or reseller. Copies are available upon request.

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## Key prerequisites

Supported on IBM BladeCenter systems with a 2.5-inch bay

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## Planned availability date

October 31, 2008

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## Description

SATA hard drives are supported with all major operating systems, including Microsoft® Windows® and Linux®.

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### Investment protection and ease of use

300 GB 10K HDDs are supported for internal HDD attachment in hot-swap and non-hot-swap SATA models of BladeCenter systems HS21, HS21XM, and HS12.

With rigorous testing by IBM through the ServerProven program, you can maintain a high degree of confidence that your BladeCenter storage subsystem is compatible and will function reliably.

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### Compatibility

- Support for popular network operating systems.
- ServerProven testing: Verifies servers, HDDs.
- IBM high-speed SATA cables.
- 43W7666 is supported on blade servers HS21 and HS21XM.
- 43W7670 is supported on the blade server HS12.

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## Product number

Options SE0s

Description

SEO  
number

300GB 10K SATA 2.5-inch NHS HDD	43W7666
300GB 10K SATA 2.5-inch Slim-HS HDD	43W7670

The following is a newly announced feature on the specified models of the IBM Systems 7901, 7902, 7995, and 8853 Models AC1 and MC1.

Description	Feature
300GB 10K SATA 2.5-inch NHS HDD	5596

The following is a newly announced feature on the specified model of the IBM System 8028 AC1 and MC1 models.

Description	Feature
300GB 10K SATA 2.5-inch Slim-HS HDD	5595

### **300 GB 10K SATA 2.5-inch HDDs (43W7666, 43W7670)**

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#### **Product names**

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- 300GB 10K SATA 2.5-inch NHS HDD (43W7666)
- 300GB 10K SATA 2.5-inch Slim-HS HDD (43W7670)

#### **Technical information**

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##### ***Performance specifications***

##### **300 GB SATA HDD**

- Formatted capacity: 300,000 MB
- Spindle speed: 10,000 rpm
- Typical average read seek time: 4.2 ms
- Data transfer rate (maximum bursting): 120 MB/s
- Average latency: 3.0 ms
- Hot-swap capability
- SATA interface
- 2.5-inch SFF form size
- Highest capacity SATA HDD

##### ***Physical specifications***

- Height: 26.1 mm (1.028 in)
- Width: 101.6 mm (4.0 in)
- Depth: 147.0 mm (5.787 in)
- Weight: 489 gms (1.08 lb)

**Note:** All measurements are approximate.

##### ***Operating environment***

- Temperature:

- 10 to 35 degrees C (50 to 95 F) at 0 to 914 m (0 to 3000 ft)
- 10 to 32 degrees C (50 to 90 F) at 914 m to 2,133 (3,000 to 7,000 ft)
- Relative humidity: 8% to 80%, noncondensing

#### **Agency approvals**

- UL
- CSA
- TUV
- CE Mark
- C-Tick Mark
- IEC
- Taiwan (BSMI Certification)
- Korea EMI

#### **Energy Star compliance**

Is this product Energy Star Compliant? No

**Note:** The Energy Star emblem does not represent EPA endorsement of any product or service.

#### **Hardware requirements**

The 43W7666 and 43W7670 are supported on the following IBM platforms:

System name	Machine type	
BladeCenter	HS21	(43W7666)
BladeCenter	HS21 XM	(43W7666)
BladeCenter	HS12	(43W7670)

#### **Software requirements**

Support for all major operating systems:

- Microsoft Windows
- Linux Red Hat
- VMware
- SUSE Linux

#### **Compatibility**

For latest compatibility information, visit

<http://www.ibm.com/servers/eserver/serverproven/compat/us/>

**Note:** Some configurations may not be compatible.

#### **Limitations**

Requires a SATA controller

#### **Planning information**

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Additional cable orders required: No

Approximate installation time: 20 minutes

#### **Packaging**

One box

*Shipment group*

- HDD
- Installation publication and warranty
- Safety flyer

**Packaging dimensions and weight**

- Height: 26.1 mm (1.03 in)
- Width: 114 mm (4.5 in)
- Depth: 152 mm (6.0 in)
- Weight: 1200 gms (2.3 lb)

**Note:** All measurements are approximate.

**Security, auditability, and control**

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This product uses the security and auditability features of the host hardware, host software, and application software.

**Terms and conditions**

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IBM Direct terms and conditions  
Features and options only

Field installable	Yes
Customer setup	Yes
Warranty period*	1 yr.
Service type (CCE/CCR/CRU)	CRU**
Maintenance agreement	No
Optional upgrade	No
Licensed programs	No

**Note:** Programs included with this product are licensed under the terms and conditions of the License Agreements that are shipped with the feature or option. All other terms and conditions are the same as those applicable to the IBM machine type in which the feature is installed.

\* To obtain copies of the IBM Statement of Limited Warranty, contact your reseller or call IBM.

\*\* This optional feature is designed as Customer Replacement Unit (CRU).

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[http://www-1.ibm.com/servers/support/machine\\_warranties/machine\\_code.html](http://www-1.ibm.com/servers/support/machine_warranties/machine_code.html)

IBM may release changes to the Machine Code. IBM plans to make the Machine Code changes available for download from the IBM System x™ technical support Web site

<http://www-304.ibm.com/systems/support/>

If the machine does not function as warranted and your problem can be resolved through your application of downloadable Machine Code, you are responsible for downloading and installing these designated Machine Code changes as IBM specifies. If you would prefer, you may request IBM to install downloadable Machine Code changes; however, you may be charged for that service.

In the United States, call 800-426-7378, or write to:

Warranty Information  
P.O. Box 12195  
Research Triangle Park, NC 27709  
Attn: Dept UF2A/B203

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### Help and service information - Features and options

During the warranty period, you can obtain technical support using IBM's online services or by calling the IBM Support Center at 800-426-7378 24 hours a day, 7 days a week, to answer any questions regarding your new IBM option. Response time will vary depending on the number and nature of calls received. If you need warranty service, return or exchange is available. In addition, if your IBM option is installed in an IBM computer, you may be entitled to service at your location. For general questions related to the use of your options, fee-based support is available. Your technical support representative can help you determine the best alternative.

### Accessing IBM online services

Visit

<http://www.ibm.com/support>

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### Placing the call to IBM

When calling IBM for technical support:

- Within the United States, call the IBM Support Center at 800-426-7378.

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## Prices

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For current System x prices, contact IBM at 888-Shop-IBM (746-7426) or visit

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

### Options SEOs

Description	SEO number
300GB 10K SATA 2.5-inch NHS HDD	43w7666
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