

*Easy, scalable, affordable and reliable IP networked-attached storage for a wide range of businesses*



## IBM System Storage DS3300



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### Highlights

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- **1 Gbps iSCSI connection to a host**
- **Two 3 Gbps SAS interfaces for capacity expansion (one per controller)**
- **Based upon 12-drive, 2U, SAS enclosure**
- **Direct or SAN-attached configurations**
- **Affordable, reliable IP networked-attached storage**
- **Solution for IBM System x™ and BladeCenter® and select third party servers**

With the proliferation of servers and the influx of data growth in today's IT environments, organizations from the SMB to the enterprise understand the value that networking plays in managing applications and businesses data. Today, the connectivity of storage devices must enable substantially higher scalability, availability and manageability than possible with direct attached storage (DAS). To leverage data to its fullest extent, it must be accessible to those who need it. Consolidating data by means of a network is the best way to achieve this.

IBM expertise in external storage system development was the intellectual ground work for the IBM System Storage™ DS3300—providing cutting-edge technology and high reliability.

The DS3300 is designed to meet the availability and consolidation needs for a wide range of users. The DS3300 is designed to provide organizations an affordable, reliable and scalable storage solution that leverages their current IP infrastructure equipment and in-house expertise.

Select configurations of the IBM DS3300 are part of the IBM Express Portfolio™ and are designed and priced to address the needs of a wide range of businesses. The Express models combine the DS3300 storage system with the IBM iSCSI offload HBAs and Ethernet cables for quick and simple set-up and administration.

#### **Easy to deploy and manage**

The IBM System Storage DS3000 Storage Manager software is designed to provide a friendly user interface from set-up to administration. This intuitive software leverages generations of IBM software development to provide trusted and reliable data management.

Its task-based management interface helps significantly reduce the complexity of installation, configuration and management. The DS3000 Storage Manager approach is designed to enable even non-storage administrators to quickly set up and deploy their storage solution.

The DS3300 leverages iSCSI interface technology. As a mature technology with a broad range of proven management tools, iSCSI usually can be easily administered in-house as networking expertise is common throughout many companies today. This can help organizations capitalize on their existing IT skill sets and avoid having to learn a new networking protocol, which can include extensive, and sometimes, expensive training. When used in conjunction with the DS3300 storage system, transitioning DAS configurations to an IP SAN is a simple task for even the most inexperienced full-time administrator.

#### **Extensive reach**

The reach of a SAN throughout the organization is most often limited by the distance restriction of the fabric. As a routable transport with virtually no distance limitations, the DS3300 can be located almost anywhere. iSCSI helps avoid distance limitations and extends its scope well beyond the corporate data center to remote locations as well.

#### **Expand with multiple EXP3000s**

The scalability of the DS3300 helps IT managers respond to their constantly changing storage environment. By starting small, the DS3300 allows users to make additional investments in their infrastructure only when their data growth necessitates it. Organizations can easily increase capacity and storage capabilities. The DS3300 capacity is increased by either adding hard disk drives or by expanding the configuration and adding EXP3000 expansion units. Both these operations can be done without having to shut down the DS3300.

### Flexible approach to storage

The DS3300 is a comprehensive storage solution for IBM System x and BladeCenter and select third-party servers. This flexibility helps free organizations from server barriers by offering a single storage solution in a mixed vendor environment. And because functionality is not sacrificed for affordability, the DS3300 disk storage system

can deliver powerful capabilities that further help protect data. The disk storage system enables optional copy and disaster recovery features such as IBM FlashCopy® and VolumeCopy that can be enabled when an application necessitates it.

### Reduce IT expenditures

The DS3300 was designed to be an affordable system that can also leverage iSCSI host connectivity.

By configuring an IP SAN, a user can avoid the investment of completely retro-fitting their existing network allowing organizations to capitalize on their existing IP network equipment. And when existing equipment is not available, the cost of new IP components is generally relatively low helping keep future networked storage growth costs affordable.

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## IBM System Storage DS3300 at a glance

<b>Models</b>	1726-31X—single controller 1726-32X—dual controller 1726-31E—single controller Express 1726-32E—dual controller Express
<b>RAID controller</b>	Dual active
<b>Cache per controller</b>	512 MB battery-backed cache with 1 GB upgrade option
<b>Host interface</b>	Two host ports per controller, 1-Gbps iSCSI
<b>Drive interface</b>	Serial Attached SCSI (SAS)
<b>Supported drives</b>	Supports 3 Gbps SAS drives at 10,000 rpm and 15,000 rpm speeds
<b>RAID levels</b>	RAID 0, 1, 3, 5, 10
<b>Storage partitions</b>	2, 16
<b>Maximum drives supported</b>	48 SAS drives (using three EXP3000 expansion units)
<b>Fans and power supplies</b>	Dual-redundant, hot-swappable
<b>Rack support</b>	19" industry-standard rack
<b>Management software</b>	IBM System Storage DS3000 Storage Manager
<b>Warranty<sup>1</sup></b>	Three-year parts and labor
<b>Size</b>	Height: 8.7 cm (3.4 in.) Depth: 55.0 cm (21.6 in.) Width: 44.7 cm (17.6 in.) Weight: approximately 17.2 kg (38.0 lb) for a standard unit; when fully configured, 29.2 kg (64.5 lb)

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## IBM System Storage DS3300 at a glance



<b>Environment</b>	Air temperature: – DS3300 on: 10° to 35°C (50.0° to 95°F); altitude: 30.5 m (100 ft) below to 3000 m (9840 ft) above sea level; temperature change: 10°C (18°F) per hour – DS3300 off: 10° to 50°C (14.0° to 120.0°F); maximum altitude: 3000 m (9840 ft); temperature change: 15°C (27.0°F) per hour Humidity: – DS3300 on: 20% to 80% – DS3300 off: 10% to 90% – Maximum dew point: 26°C (79°F) – Maximum humidity gradient: 10% per hour
<b>Heat output</b>	Approximate heat output in British thermal units (Btu) per hour: – Minimum configuration: 205 Btu (60 watts) – Maximum configuration: 1235 Btu (361 watts)
<b>Supported systems</b>	For a list of currently supported servers, operating systems, host bus adapters, clustering applications, SAN switches and directors, refer to the DS3000 series Interoperability matrix available at <a href="http://ibm.com/systems/storage/disk/ds3000/DS3300/">ibm.com/systems/storage/disk/ds3000/DS3300/</a>

### For more information

Contact your IBM representative or IBM Business Partner or visit:

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