

Easy, scalable, affordable and reliable Internet Protocol (IP) networked-attached storage (NAS) for a wide range of businesses



IBM System Storage DS3300



IBM System Storage DS3300

Highlights

- **One Gigabit per second (Gbps) IP over SCSI (iSCSI) connection to a host**
- **Two 3 Gbps Serial Attached SCSI (SAS) interfaces for capacity expansion (one per controller)**
- **Based upon 12-drive, 2U, SAS enclosure**
- **Direct or Storage Area Network (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, organisations from the Small to Medium Business (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 organisations 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 Host Business Adapters (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 organisations capitalise 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 daunting task for even the most inexperienced part-time administrator.

Extensive reach

The reach of a SAN throughout the organisation 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 centre 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. Organisations can easily increase capacity and storage capabilities. The DS3300 capacity is increased by either adding hard disk drives (HDDs) 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

organisations 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 organisations to capitalise 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.

IBM System Storage DS3300 at a glance

Models	1726-31X – single controller 1726-32X – dual controller 1726-31E – single controller Express 1726-32E – dual controller Express
Random Array of Independent Disks (RAID) controller	Dual active
Cache per controller	512 MegaByte (MB) battery-backed cache with 1 GigaByte (GB) upgrade option
Host interface	Two host ports per controller, 1-Gbps iSCSI
Drive interface	SAS
Supported drives	Supports 3 Gbps SAS drives at 10,000 revolutions per minute (rpm) and 15,000 rpm speeds
RAID levels	RAID 0, 1, 3, 5, 10
Storage partitions	2, 16
Maximum drives supported	48 SAS drives (using three EXP3000 expansion units)
Fans and power supplies	Dual-redundant, hot-swappable
Rack support	19" industry-standard rack
Management software	IBM System Storage DS3000 Storage Manager
Warranty¹	Three-year parts and labour
Size	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)

IBM System Storage DS3300 at a glance

Environment	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
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Heat output	Approximate heat output in British thermal units (Btu) per hour: – Minimum configuration: 205 Btu (60 watts) – Maximum configuration: 1235 Btu (361 watts)
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Supported systems	For a list of currently supported servers, operating systems, HBAs, clustering applications, SAN switches and directors, refer to the DS3000 series Interoperability matrix available at ibm.com/systems/storage/disk/ds3000/DS3300/
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For more information

Contact your IBM representative or IBM Business Partner or visit:

- ibm.com/systems/storage/disk
- ibm.com/systems/x
- ibm.com/systems/bladecenter



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