Easy, scalable, flexible and affordable external storage solution for small and medium businesses (SMBs)

IBM

IBM System Storage DS3200

Highlights

- **3 Gigabits per second (Gbps) Serial Attached SCSI (SAS) interface technology**

- **Easy to deploy and manage with the DS3000 Storage Manager**

- **Scalable to 3.6 TB of storage capacity with 300 GB hot-swappable SAS disks**

- **Expandable by attaching up to three EXP3000s, a total of 14.4 TB of storage capacity**

- **Affordable for the SMB budgets**

- **Telco model supports -48v DC power supplies**

- **Network equipment building system (NEBS) and European telecommunication standards institute (ETSI) Compliance for AC and DC models.**

One clear message heard from SMBs is that their data is as valuable to their organisations as data is to the enterprise customer. In fact, small businesses are experiencing even faster data growth and are discovering that their storage and data protection requirements have more similarities than differences, relative to large enterprises.

Small businesses can take an overburdened internal storage infrastructure to a new level by using the flexible and affordable IBM System Storage DS3200 storage system. By moving storage outside the server, small businesses can increase the capacity and reliability of the data solution well beyond the initial storage investment.

Select configurations of the DS3200 are part of the IBM Express Portfolio, designed and priced to meet the needs of mid-sized businesses. The Express models combine the DS3200 storage system with the IBM SAS Host Bus

Adapter (HBA) Controllers and SAS cables to help you get started with storage quickly.

Easy to deploy and manage

With many small business IT departments having one or a part-time administrator and limited time to spend on data management, the DS3200 can be easily installed without extensive knowledge or effort.

The DS3000 Storage Manager software was designed for easy implementation for an unseasoned administrator. The task-oriented management interface of the DS3000 Storage Manager presents tasks to the administrator first and then asks which object to perform the task on. This contrasts to an object-oriented interface of a typical system in which the object is first selected, then the task and requires a higher depth of storage networking expertise. The DS3000 Storage Manager approach enables even non-Storage administrators to quickly set up and deploy the storage solution. The management application's task-oriented interface removes the resistance that many organisations have with their limited in-house expertise.

Expand with multiple EXP3000s

The scalability of the DS3200 allows IT managers to respond to their constantly changing storage environment. By starting small, the DS3200 allows users to make additional investments in their infrastructure only when their data growth necessitates it; thus organisations can easily increase capacity and storage capabilities with minimal cost and effort. The DS3200 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 DS3200. This means 'zero-impact' to your environment and gives users control of their data storage as they expand capacity on an as-needed basis.

Flexible approach to storage

The DS3200 is a comprehensive storage solution for IBM System x and select third-party servers. This flexibility allows you to break free of server barriers and use a single storage solution in a mixed vendor environment. And because you do not have to sacrifice functionality for affordability, the

DS3200 disk storage system can deliver powerful dynamic capabilities that help you protect data. The disk storage system enables copy and disaster recovery features such as FlashCopy and VolumeCopy that can be enabled when required by your application.

Telco Options

The IBM System Storage DS3200 includes a dc powered model that is especially suited for Telco industry environments. The IBM System Storage DS3200 Model 22T, a NEBS-3 and ETSI compliant disk system and the IBM System Storage EXP3000 Model 02T storage expansion unit are both designed to be powered from a -48 V dc Telco industry-standard power supply.

Priced right for small business

With the functionality and availability features that come standard and a price-point that does not strain the budget, the DS3200 is the simple choice for the SMBs. Other storage products require the purchase of expensive options for basic storage configurations. The DS3200 is an out-of-the-box solution that will satisfy the majority of storage needs.

IBM System Storage DS3200 at a glance

Models	1726-21X – single controller 1726-22X – dual controller 1726-22T 1726-21E – single controller Express 1726-22E – dual controller Express
RAID controller	Dual active
Cache per controller	512 MB battery-backed cache with 1 GB upgrade option
Host interface	1 or 3 host ports per controller, SAS 3 Gbps
Drive interface	SAS
Supported drives	Supports 3 Gbps SAS drives at 10,000 revolutions per minute (rpm) and 15,000rpm speeds
RAID levels	RAID-0, -1, -3, -5, -10
Storage partitions	4, 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
Warranty[1]	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)
Environment	Air temperature: – DS3400 on: 10° to 35°C (50.0° to 95°F); altitude: 30.5 (100 ft) below to 3000 m (9840 ft) above sea level; temperature change: 10°C (18°F) per hour – DS3400 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: – DS3400 on: 20% to 80% – DS3400 off: 10% to 90% – Maximum dew point: 26°C (79°F) – Maximum humidity gradient: 10% per hour
Heat output	Approximate heat output in British thermal units (Btu) per hour: – Minimum configuration: 205 Btu (60 watts) – Maximum configuration 1235 Btu (361 watts)
Supported systems	For a list of currently supported servers, operating systems (OS), HBAs, clustering applications, Storage Area Network (SAN) switches and directors, refer to the DS3000 series Interoperability matrix available at **ibm.com**/systems/storage/disk/ds3000/ds3200/

For more information

Contact your IBM representative or
IBM Business Partner (BP) or visit:

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

The IBM home page can be found at **ibm.com**