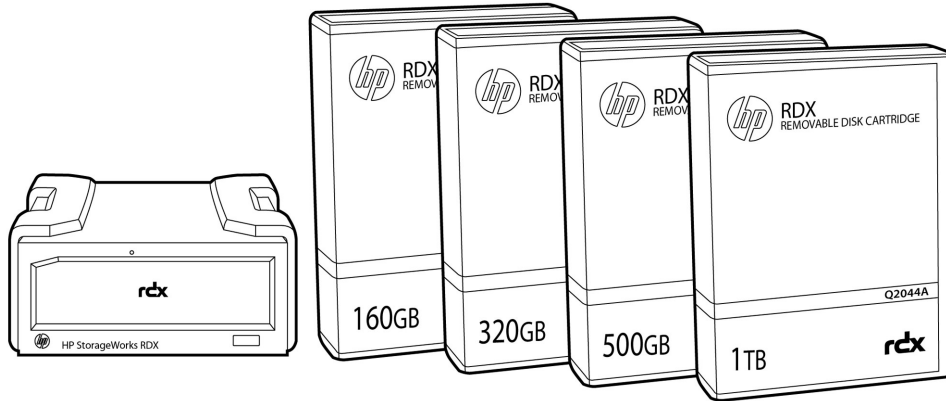


Overview

HP RDX Removable Disk Cartridges are removable hard disk drive (RHDD) based cartridges that combine the best features of disk and tape storage for small business customers. HP RDX Removable Disk Cartridges are rugged, portable, removable, easy to implement and affordable.



What's New

- RDX 1TB Removable Disk Cartridge

Models	RDX 160GB Removable Disk Cartridge	Q2040A
	RDX 320GB Removable Disk Cartridge	Q2041A
	RDX 500GB Removable Disk Cartridge	Q2042A
	RDX 1TB Removable Disk Cartridge	Q2044A

Key Features & Benefits

- Choice of 160GB, 320GB, 500GB, or 1TB GB capacity removable disk cartridges
- Drag and drop file backup and restore
- Compatible with leading Continuous Data Protection (CDP) and Independent Software Vendor (ISV) software applications
- Up to 108 GB/hour transfer rate (uncompressed data)
- Fast disk based random access file retrieval
- Disk cartridges designed for long usage life - over 5,000 load/unload insertions
- Portable, durable and shock proof cartridges
- Broad compatibility with a wide range of servers and operating systems, using HP RDX Removable Disk Backup System (internal or external)
- Cartridges are interchangeable in any HP StorageWorks RDX Removable Disk Backup System

Product Highlights

Combines the best of tape and disk The HP RDX Removable Disk Cartridge is based on removable disk technology that handles and operates like traditional tape media, yet has all of the advantages of disk backup. The HP RDX Removable Disk Cartridge allows for backups to be accomplished with standard Independent Software Vendor (ISV) or Continuous Data Protection (CDP) software. The HP StorageWorks RDX Removable Backup System is offered free with "hands free" HP RDX Continuous Data Protection Software. If no software solution exists, data can also be dragged and dropped directly to the rugged removable cartridge. To the host computer, the HP RDX Removable Disk Cartridge appears as a drive letter.

Easy to implement and use

Installation is an easy and quick process of connecting the industry standard form factor HP StorageWorks RDX Removable Disk Backup System either internally or externally to a server or workstation. Backing up is a simple matter of inserting an HP RDX Removable Disk Cartridge into the docking station. The cartridge will automatically show up as a drive letter to the host computer with no extra formatting or extra steps required. Simply select the files that need to be protected and drag and drop them onto the removable cartridge. To restore files, just reverse the process.

For more advanced automated backup, simple scheduled or "hands free" continuous data backup can be performed through support for HP RDX Continuous Data Protection Software (when used with an HP StorageWorks RDX Removable Disk Backup System) or other standard ISV and CDP software applications.

Fast backup and restore

The HP RDX Removable Disk Cartridge and Backup System provide a complete backup solution that backs up and retrieves data quickly and reliably thus optimizing application availability and staff productivity. Data can be backed up to HP RDX Removable Cartridges at hard drive speeds (up to 108 GB/hour). HP RDX Removable Cartridges are randomly accessed and read, so critical single files and selected file stores can be restored in seconds instead of hours.

Affordable cost of ownership

The HP RDX Removable Disk Cartridge provides for low initial acquisition costs and low on-going media and upgrade costs.

Total cost of ownership is minimized by the fact that HP RDX Removable Disk Cartridges are specified for 5,000 insertion/removal cycles, so they will not wear out (and therefore need to be replaced) over the typical life cycle of the solution. Upgrade and obsolescence costs are also reduced and investment protection guaranteed by the fact that HP StorageWorks RDX Backup Systems are compatible with all current and future higher capacity HP RDX Removable Disk Cartridges. Customers will not need to purchase a new backup system when next generation, higher capacity HP RDX Removable Disk Cartridges are released. Today's HP RDX Removable Disk Cartridges are compatible with all current and future HP StorageWorks RDX Removable Disk Backup Systems.

Removability and portability

The HP RDX Removable Disk Cartridge enables on-site backup data to be removed, stored and rotated off-site in an easy, safe and secure way.

HP RDX Removable Cartridges are portable, durable (2.5" drive features include ramp loading heads, fluid dynamic bearings, inactive state spin down) and rugged (designed and proven to withstand a 3 feet (one meter drop) onto concrete). The robust HP RDX Removable Disk Cartridge is also designed to protect data from potentially damaging Electrostatic Discharge (ESD) and as well as prolonged exposure to heat, dust and other environmental contaminants.



Product Highlights

Easy scalability and expandability

Adding cartridge capacity is a simple matter of adding cartridges to an existing HP StorageWorks RDX Removable Disk Backup System. The RDX Removable Disk Backup System will work with all current as well future higher capacity HP RDX Removable Disk Cartridges as they are introduced. The product roadmap leverages the industry standard mobile 2.5" hard disk drive roadmaps with new higher capacity cartridges expected to be introduced on an annual basis.

Compatibility

HP has an extensive compatibility testing program that verifies the HP RDX Removable Disk Cartridge and HP StorageWorks RDX Removable Disk Backup System work with leading servers, operating systems, and backup software applications. For the latest list of servers, workstations, operating systems, and backup software that support the HP RDX Removable Disk Cartridge, please check the HP RDX compatibility pages at: <http://www.hp.com/go/connect>.

HP RDX Removable Disk Cartridges are also compatible with other branded RDX backup systems.

HP Server and Workstation Compatibility

The HP RDX Removable Disk Cartridge and HP StorageWorks RDX Removable Disk Backup System are compatible with HP ProLiant servers and HP workstations. HP RDX Removable Disk Backup Cartridge and HP StorageWorks RDX Removable Disk Backup System are supported on the following classes of HP systems:

- HP ProLiant DL servers
- HP ProLiant ML servers
- HP Personal Workstations

For details of which HP RDX Removable Disk Cartridges work with which systems, including third-party systems, visit: <http://www.hp.com/go/connect> for the latest hardware compatibility information.

NOTE: HP recommends that no more than one HP StorageWorks RDX Removable Disk Backup System be connected to a system at a time.

OS Support

Microsoft® Windows®, Linux (various distributions)

NOTE: Please visit: <http://www.hp.com/go/connect> for the latest operating system compatibility information.

Backup Software Support

HP RDX Continuous Data Protection Software, HP Data Protector Express Software, CA BrightStor ARCserve Backup, Symantec Backup Exec and other backup applications that support removable disk media.

NOTE: Please visit: <http://www.hp.com/go/connect> for the latest compatibility information.

Warranty

Hewlett-Packard provides a 1 year, next-day, parts exchange, limited warranty for the HP RDX Removable Disk Cartridge, plus 9x5 phone support for the duration of the warranty.

For more information about the HP RDX Removable Disk Cartridge limited warranty, visit: <http://h20000.www2.hp.com/bizsupport/techsupport/document.jsp?objectid=c01423593>

For more information about HP's Global Limited Warranty and Technical Support, please visit: <http://h20000.www2.hp.com/bizsupport/techsupport/document.jsp?objectid=c01423593>



Technical Specifications

Related Hardware Options

NOTE: This is a list of related options. Some may be discontinued.

HP RDX 160GB Backup System Internal	AJ765A
160GB Internal USB Kit - RDX Internal Docking Station, installation poster, HP StorageWorks CD (containing electronic user's guide and drivers), internal USB cable, HP RDX 160GB Removable Disk Cartridge, HP RDX Continuous Data Protection Software*	
NOTE: 0D1 will appear after this part number on your sales order if factory integration is indicated.	
HP RDX 160GB Backup System External	AJ766A
160GB External USB Kit - RDX External Docking Station, installation poster, HP StorageWorks CD (containing electronic user's guide and drivers), external USB cable, power cord/supply, HP RDX 160GB Removable Disk Cartridge, HP RDX Continuous Data Protection Software*	
HP RDX 320GB Backup System Internal	AJ767A
320GB Internal USB Kit - RDX Internal Docking Station, installation poster, HP StorageWorks CD (containing electronic user's guide and drivers), internal USB cable, HP RDX 320GB Removable Disk Cartridge, HP RDX Continuous Data Protection Software*	
NOTE: 0D1 will appear after this part number on your sales order if factory integration is indicated.	
HP RDX 320GB Backup System External	AJ768A
320GB External USB Kit - RDX External Docking Station, installation poster, HP StorageWorks CD (containing electronic user's guide and drivers), external USB cable, power cord/supply, HP RDX 320GB Removable Disk Cartridge, HP RDX Continuous Data Protection Software*	
HP RDX 500GB Backup System Internal	AJ934A
500GB Internal USB Kit - RDX Internal Docking Station, installation poster, HP StorageWorks CD (containing electronic user's guide and drivers), internal USB cable, HP RDX 500GB Removable Disk Cartridge, HP RDX Continuous Data Protection Software*	
NOTE: 0D1 will appear after this part number on your sales order if factory integration is indicated.	
HP RDX 500GB Backup System External	BV849A
500GB External USB Kit - RDX External Docking Station, installation poster, HP StorageWorks CD (containing electronic user's guide and drivers), external USB cable, power cord/supply, HP RDX 500GB Removable Disk Cartridge, HP RDX Continuous Data Protection Software*	
*HP RDX Continuous Data Protection Software offered as a free web download with the purchase of an HP RDX Removable Disk Backup System	
HP RDX 1TB Backup System Internal	BV847A
1TB Internal USB Kit - RDX Internal Docking Station, installation poster, HP StorageWorks CD (containing electronic user's guide and drivers), internal USB cable, HP RDX 1TB Removable Disk Cartridge, HP RDX Continuous Data Protection Software*	
NOTE: 0D1 will appear after this part number on your sales order if factory integration is indicated.	



Technical Specifications

HP RDX 1TB Backup System External

AJ935A

1TB External USB Kit - RDX External Docking Station, installation poster, HP StorageWorks CD (containing electronic user's guide and drivers), external USB cable, power cord/supply, HP RDX 1TB Removable Disk Cartridge, HP RDX Continuous Data Protection Software*

*HP RDX Continuous Data Protection Software offered as a free web download with the purchase of an HP RDX Removable Disk Backup System

General Characteristics	RDX 160GB Cartridge	RDX 320GB Cartridge	RDX 500GB Cartridge	RDX 1TB Cartridge
Native Capacity	160GB	320GB	500GB	1TB
Compressed Capacity (assumes 2:1 application based data compression)	320GB	640GB	1 TB	2 TB
Average Sustained Transfer Rate, Native	30MB/s	30MB/s	30MB/s	30MB/s
Average Sustained Transfer Rate, Compressed (assumes 2:1 application based data compression)	60MB/s	60MB/s	60MB/s	60MB/s
Burst Transfer Rate (USB)	480MB/s	480MB/s	480MB/s	480MB/s
Data Access Time	15 milliseconds	15 milliseconds	15 milliseconds	15 milliseconds
Supported File Systems	FAT32, NTFS, ext2, ext3	FAT32, NTFS, ext2, ext3	FAT32, NTFS, ext2, ext3	FAT32, NTFS, ext2, ext3
Cartridge Load/Unload Cycles	5,000 (minimum)	5,000 (minimum)	5,000 (minimum)	5,000 (minimum)
MTBF	500,000 hours @ 100% duty cycle	500,000 hours @ 100% duty cycle	500,000 hours @ 100% duty cycle	500,000 hours @ 100% duty cycle
Uncorrected Error Rate	1 error per 10 ¹⁴ bits read	1 error per 10 ¹⁴ bits read	1 error per 10 ¹⁴ bits read	1 error per 10 ¹⁴ bits read
Disk Speed (rpm)	5400	5400	5400	5400
Disk Form Factor	2.5 inches	2.5 inches	2.5 inches	2.5 inches
Dimensions - Out Of Box (HxWxD)	0.92 x 3.39 x 4.68 in 2.34 x 8.66 x 11.9 cm	0.92 x 3.39 x 4.68 in 2.34 x 8.66 x 11.9 cm	0.92 x 3.39 x 4.68 inches 2.34 x 8.66 x 11.9 cm	0.92 x 3.39 x 4.68 inches 2.34 x 8.66 x 11.9 cm
Dimensions - Shipping (HxWxD)	3.35 x 5.32 x 7.99 in 8.50 x 13.5 x 20.3 cm	3.35 x 5.32 x 7.99 in 8.50 x 13.5 x 20.3 cm	3.35 x 5.32 x 7.99 inches 8.50 x 13.5 x 20.3 cm	3.35 x 5.32 x 7.99 inches 8.50 x 13.5 x 20.3 cm
Weight - Out Of Box	0.38 lb (173g)	0.38 lb (173g)	0.41 lb (188g)	0.41 lb (188g)
Weight - Shipping	0.76 lb (345g)	0.77 lb (349g)	0.81 lb (367g)	0.81 lb (367g)
Temperature Range	5 to 45° C; 41 to 113° F (operating), -40 to 65° C; -40 to 149° F (non operating)	5 to 45° C; 41 to 113° F (operating), -40 to 65° C; -40 to 149° F (non operating)	5 to 45° C; 41 to 113° F (operating), -40 to 65° C; -40 to 149° F (non operating)	5 to 45° C; 41 to 113° F (operating), -40 to 65° C; -40 to 149° F (non operating)
Relative Humidity	20 to 80%, non condensing (operating) 10 to 90%, non- condensing (non operating)	20 to 80%, non condensing (operating) 10 to 90%, non- condensing (non operating)	20 to 80%, non condensing (operating) 10 to 90%, non- condensing (non operating)	20 to 80%, non condensing (operating) 10 to 90%, non- condensing (non operating)



Technical Specifications

Altitude	-50 ft to 10,000 ft (operational) -50 ft to 35,000 ft (non operational)	-50 ft to 10,000 ft (operational) -50 ft to 35,000 ft (non operational)	-50 ft to 10,000 ft (operational) -50 ft to 35,000 ft (non operational)	-50 ft to 10,000 ft (operational) -50 ft to 35,000 ft (non operational)
Vibration	random vib(operational): 0.30Grms 5Hz to 500Hz, sine vib(non-op): 0.75g (0-peak) 5Hz to 500Hz, random(non-op): 2.41Grms 5Hz to 500Hz half sine 31G @2.6ms (operational), half sine 71G @ 2m (non operational)	random vib(operational): 0.30Grms 5Hz to 500Hz, sine vib(non-op): 0.75g (0-peak) 5Hz to 500Hz, random(non-op): 2.41Grms 5Hz to 500Hz half sine 31G @2.6ms (operational), half sine 71G @ 2m (non operational)	random vib(operational): 0.30Grms 5Hz to 500Hz, sine vib(non-op): 0.75g (0-peak) 5Hz to 500Hz, random(non-op): 2.41Grms 5Hz to 500Hz half sine 31G @2.6ms (operational), half sine 71G @ 2m (non operational)	random vib(operational): 0.30Grms 5Hz to 500Hz, sine vib(non-op): 0.75g (0-peak) 5Hz to 500Hz, random(non-op): 2.41Grms 5Hz to 500Hz half sine 31G @2.6ms (operational), half sine 71G @ 2m (non operational)
Shock (non operating)	3 feet (1 m; 39.4 in) drop to tile over concrete floor	3 feet (1 m; 39.4 in) drop to tile over concrete floor	3 feet (1 m; 39.4 in.) drop to tile over concrete floor	2.16 feet (0.66 m; 25.98 in.) drop to tile over concrete floor
Activity LED	Green - Cartridge is ready Blinking Green - Activity (reading, writing, seeking) Amber - Fault detected	Green - cartridge is ready Blinking Green - Activity (reading, writing, seeking) Amber - Fault detected	Green - cartridge is ready Blinking Green - Activity (reading, writing, seeking) Amber - Fault detected	Green - cartridge is ready Blinking Green - Activity (reading, writing, seeking) Amber - Fault detected
Warranty	1 Year	1 Year	1 Year	1 Year

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The information contained herein is subject to change without notice.

The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

For HR RDX drives and media, 1GB = 1 billion bytes. Actual formatted capacity may be less.

