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

• HP RDX 1TB Removable Disk Cartridge

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

Key Features & Benefits

- Choice of 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 360 GB/hour transfer rate (uncompressed data) with USB 3.0
- 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 360 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 Including the HP ProLiant DL380/385 G6/G7 servers for all HP RDX Disk Systems with the exception of the new RDX 1TB USB 3.0 Gen8 DL Server Module (B7B70A) which integrates only with the HP ProLiant DL380p/DL385p Gen8 rack-optimized 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.



Product Highlights

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 320GB Backup Sy	stem Internal			B7B62A
	320GB Internal USB Kit - RDX Internal Do StorageWorks CD (containing electronic of RDX 320GB Removable Disk Cartridge, HI NOTE: 0D1 will appear after this part nur indicated.	user's guide and drivers), internal L P RDX Continuous Data Protection	JSB cable, HP Software*	
HP RDX 320GB Backup Sy	HP RDX 320GB Backup System External			B7B63A
	320GB External USB Kit - RDX External D StorageWorks CD (containing electronic u power cord/supply, HP RDX 320GB Remo Protection Software*	iser's guide and drivers), external l	USB cable,	
HP RDX 500GB Backup Sy	stem Internal			B7B64A
	500GB Internal USB Kit - RDX Internal Do StorageWorks CD (containing electronic of RDX 500GB Removable Disk Cartridge, HI NOTE: 0D1 will appear after this part nur indicated.	user's guide and drivers), internal L P RDX Continuous Data Protection	JSB cable, HP Software*	
HP RDX 500GB Backup System External			B7B66A	
	500GB External USB Kit - RDX External D StorageWorks CD (containing electronic of power cord/supply, HP RDX 500GB Remo Protection Software* *HP RDX Continuous Data Protection Sof purchase of an HP RDX Removable Disk B	iser's guide and drivers), external l vable Disk Cartridge, HP RDX Cont tware offered as a free web downl	USB cable, inuous Data	
HP RDX 1TB Backup Syste				B7B67A
	1TB Internal USB Kit - RDX Internal Docki StorageWorks CD (containing electronic of RDX 1TB Removable Disk Cartridge, HP R NOTE: 0D1 will appear after this part nur indicated.	iser's guide and drivers), internal L DX Continuous Data Protection So	ftware*	
HP RDX 1TB Backup System External			B7B69A	
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		USB cable, Ious Data		
General Characteristics	RDX 320GB Cartridge	RDX 500GB Cartridge	RDX 1TB Cartridge	
Native Capacity	320GB	500GB	1TB	



Technical Specifications			
Compressed Capacity (assumes 2:1 application based data compression)	640GB	I TB	2 TB
Average Sustained Transfer Rate, Native	100MBs	100MBs	100MBs
Average Sustained Transfer Rate, Compressed	200MBs	200MBs	200MBs
(assumes 2:1 application based data compression)			
Burst Transfer Rate (USB)	600 MBs	600 MBs	600 MBs
Data Access Time	12 milliseconds	12 milliseconds	12 milliseconds
Supported File Systems	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)
MTBF	500,000 hours @ 100% duty	500,000 hours @ 100% duty	500,000 hours @ 100% duty
	cycle	cycle	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
Disk Speed (rpm)	5400	5400	5400
Disk Form Factor	2.5 inches	2.5 inches	2.5 inches
Dimensions - Out Of Box (HxWxD)	0.92 x 3.39 x 4.68 in	0.92 x 3.39 x 4.68 inches	0.92 x 3.39 x 4.68 inches
	2.34 x 8.66 x 11.9 cm	2.34 x 8.66 x 11.9 cm	2.34 x 8.66 x 11.9 cm
Dimensions - Shipping (HxWxD)	3.35 x 5.32 x 7.99 in	3.35 x 5.32 x 7.99 inches	3.35 x 5.32 x 7.99 inches
	8.50 x 13.5 x 20.3 cm	8.50 x 13.5 x 20.3 cm	8.50 x 13.5 x 20.3 cm
Weight - Out Of Box	0.38 lb (173g)	0.41 lb (188g)	0.41 lb (188g)
Weight - Shipping	0.77 lb (349g)	0.81 lb (367g)	0.81 lb (367g)
Temperature Range	5 to 45° C; 41 to 113° F	5 to 45° C; 41 to 113° F	5 to 45° C; 41 to 113° F
	(operating),	(operating),	(operating),
	-40 to 65° C; -40 to 149° F (non		
Relative Humidity	operating) 20 to 80%, non condensing	operating) 20 to 80%, non condensing	operating) 20 to 80%, non condensing
Relative mullinuity	(operating)	(operating)	(operating)
	• •		10 to 90%, non-condensing (non
	operating)	operating)	operating)
Altitude	-50 ft to 10,000 ft (operational)	•	-50 ft to 10,000 ft (operational)
	-50 ft to 35,000 ft (non operational)	-50 ft to 35,000 ft (non operational)	-50 ft to 35,000 ft (non operational)
Vibration	random vib(operational):	random vib(operational):	random vib(operational):
	0.30Grms 5Hz to 500Hz, sine	0.30Grms 5Hz to 500Hz, sine	0.30Grms 5Hz to 500Hz, sine
	vib(non-op): 0.75g (0-peak) 5Hz		
	to 500Hz, random(non-op):	to 500Hz, random(non-op):	to 500Hz, random(non-op):
	2.41Grms 5Hz to 500Hz	2.41Grms 5Hz to 500Hz	2.41Grms 5Hz to 500Hz
	half sine 31G @2.6ms (operational), half sine 71G @	half sine 31G @2.6ms (operational), half sine 71G @	half sine 31G @2.6ms (operational), half sine 71G @
	2m (non operational)	2m (non operational)	2m (non operational)
Shock (non operating)	3 feet (1 m; 39.4 in) drop to tile	•	2.16 feet (0.66 m; 25.98 in.) drop
	over concrete floor	over concrete floor	to tile over concrete floor



Technical Specifications

Activity LED	Green - cartridge is ready	Green - cartridge is ready	Green – cartridge is ready
	Blinking Green - Activity	Blinking Green - Activity (reading, I	Blinking Green – Activity (reading,
	(reading, writing, seeking)	writing, seeking)	writing, seeking)
	Amber - Fault detected	Amber - Fault detected	Amber - Fault detected
Warranty	1 Year	1 Year	1 Year

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

