



# Dell PowerVault RD1000 and 114X RD1000

Removable disk drive combines the speed of a hard disk with the portability of optical media for quick, easy, affordable backups with continuous data protection.

### Removable disk drive for backup

Dell<sup>™</sup> PowerVault<sup>™</sup> RD1000 removable disk drive lets you quickly protect all your important information and take it with you. Designed as a sensible, affordable alternative to tape and CD/ DVD backup, the PowerVault RD1000 is fast, user-friendly, and reliable. Symantec Backup Exec<sup>™</sup> QuickStart is included with every PowerVault RD1000 for Backup and Recovery protection. The PowerVault RD1000 is available in capacities up to 1TB, and the media cartridge weighs about as much as a cell phone. 114X RD1000 is a rack mounted solution configured with up to four RD1000 USB drives and supported on Dell<sup>™</sup> PowerEdge<sup>™</sup> servers using USB 2.0 connections.

## Rugged. Removable. Ready

At the heart of the PowerVault RD1000 is the removable disk media that combines a tough exterior design and an internal shock absorber — all rigorously tested to the highest standards. It's faster and easier than tape or CD/DVD to back up large amounts of information. Simply pop in the removable disk media, select the files or folders you want to protect, then drag-and-drop them into the directory folder. To restore files, just reverse the process. Drag-and-drop capability gives you random access for much quicker restoration of the files you need most. The PowerVault RD1000 comes with everything you need to protect data quickly and easily: dock unit, removable disk cartridge, and Symantec Backup Exec QuickStart software.

## Sensible and affordable alternative

When comparing the PowerVault RD1000 to other backup methods, it's easy to see why a removable disk drive offers an affordable alternative to tape-based systems, a sensible substitute for CD or DVD optical media, and a better alternative than USB based hard drives.

Entry-level tape-based systems have lower storage capacities than a removable disk drive, and can be significantly more expensive per gigabyte stored. CD and DVD optical media — while very inexpensive — are slower and less durable when compared to removable disk media. Plus it can be difficult to manage and find data later on CD and DVD media. USB-based hard drive storage systems offer larger storage capacities than tape or CD/DVD, but don't offer the portability, durability, continuous data protection or easy expendability of the PowerVault RD1000 with removable disk cartridges in capacities up to 1TB.

## Flexible capacity and configuration

Select an external USB-connected RD drive dock or an internal SATA-connected RD drive dock that fits into a standard workstation or server bay. The PowerVault RD1000 is available in 160GB, 320GB, 500GB, and 1TB disk cartridge capacities. Removable disk media of all capacities are interchangeable, designed for transportability, and fit in both internal and external configurations so you can easily share information between systems. Designed to be forward-compatible with future planned expanded-capacity removable disk media, the PowerVault RD1000 removable disk drive lets you protect your investment as your storage needs grow.

Designed to address the technology challenges you face today. Designed for IT professionals like you, Dell ProSupport<sup>1</sup> for IT provides 7x24 direct access to Dell Expert Centers, fast-track dispatch of parts and labor without phone troubleshooting when desired for Dell-certified technicians, and escalation management through Dell's Global Command Centers. In addition, Dell ProSupport Options align with the way you use technology by providing rapid response to your needs, protecting your investment, productivity, and sensitive data, and enhancing proactive support services to reduce the risk and complexity of managing your infrastructure.

#### Speed of Response

With the Mission Critical<sup>2</sup> option, you get priority response for server and storage environments where avoiding unplanned downtime and reducing recovery time are critical. Includes priority 4-hour On-Site service or optional 2-hour response with 6-hour hardware repair, Dell's proven Critical Situation process, and emergency dispatch.

#### Protection

With Keep your Hard Drive<sup>3</sup> you retain control of your sensitive data and comply with data privacy regulations (to help mitigate regulatory and civil liability risks) by keeping your hard drive.

#### Premium Proactive

With the Enterprise-Wide Contract option, you get enhanced, proactive capabilities via a designated Service Delivery Manager, performance benchmarking and custom reporting, and planning and assessments. Our Proactive Maintenance option proactively maximizes the availability and stability of your infrastructure. Includes a detailed system assessment and implementation of driver or firmware updates and upgrades for your server or storage systems. Remote Advisory Options provides telephone and Internet access to technical expertise for specialized applications and solutions such as Microsoft<sup>®</sup> Exchange, Virtualization, and more.

#### Comprehensive Storage Training and Certification

Provides expertise for integrating Dell storage into an existing IT infrastructure. For company compliance, an advanced Certification path is available for validating or maintaining skill sets.

#### Backup and Recovery

Solutions that help ensure adequate procedures are in place to minimize or avoid data loss.

#### Storage Consolidation

Our storage experts can analyze your existing infrastructure, operational practices, and technical readiness and develop a detailed consolidation deployment plan that includes a validated and refined solution design.

#### Supported Operating Systems

Windows®, Red Hat®, SUSE™ Refer to the Dell Tape Matrix for complete list. http://support.dell.com/support/edocs/stor-sys/matrix/

#### Hardware Platforms<sup>4</sup>

Int./ext models: PowerEdge T710, T610, T410, T310, T300, T110, T100 servers. Refer to the Dell Tape Matrix for complete list. http://support.dell.com/support/edocs/stor-sys/matrix/

114X RD1000: PowerEdge Dell Rack Servers with USB 2.0 connections

**Ext models**: PowerEdge Server, PowerVault products and Workstations with USB 2.0 connections. Refer to the Dell Tape Matrix for complete list.

http://support.dell.com/support/edocs/stor-sys/matrix/

#### Backup Software

Supported by Yosemite Technologies, Symantec Backup Exec, Quickstart and BESR, Computer Associate BrightStor Arcserve Refer to the Dell Tape Matrix for complete list. http://support.dell.com/support/edocs/stor-sys/matrix/

#### **ISV** Certified

Yosemite - www.yosemitetech.com

Symantec - www.symantec.com

EMC | Dantz Retrospect - www.emc.com

CA - www.ca.com

<sup>1</sup> ProSupport Technical Support: Must be purchased in conjunction with Limited Warranty. The ProSupport Queue is designed to provide 2 minutes or less average speed of answer, provided the correct, toll-free ProSupport number is called by the customer. Hold times in the ProSupport Queue may be affected by multiple variables including, but not limited to: time of day, product release cycle, product recall occurrences and total number of ProSupport customers.

<sup>2</sup> ProSupport Service Plans: Service may be provided by a third party. Technician will be dispatched if necessary in parallel with phone-based troubleshooting for severity level 1 issues on systems with ProSupport Mission Critical or Same Day Response service. Technician will be dispatched if necessary following phone-based troubleshooting for all other severity levels and on-site response service levels. Repair time is measured from dispatch time of the on-site response service. Subject to parts availability, geographical restrictions and terms of service contract. Service timing dependent upon time of day call placed to Dell. U.S. only.

<sup>3</sup> The defective hard drive must still be covered by the hardware limited warranty.

<sup>4</sup> Some models support external RD1000 drive only. Please check the Dell website for up-to-date support information at http://support.dell.com/support/edocs/stor-sys/matrix/ For ordering additional media, go to www.dell.com/RDmedia

<sup>5</sup> Using the software compression feature built into standard backup applications.

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## Simplify data backup at Dell.com/RD1000

Technical Specifications			
Height	Internal Dock: 41.4 mm (1.63°); External Dock: 51.8 mm (2.04'); RD Cartridge: 23.68 mm (0.93°) 114X:86.9 mm (3.42°)		
Width	Internal Dock (3.5'): 101.6 mm (4.00'); Internal Dock (5.25'): 146 mm (5.75'); External Dock: 109.8 mm (4.32'); RD Cartridge: 86.6 mm (3.4') 114X: 482.5 mm (19.00')		
Length (Depth)	Internal Dock (3.5'): 159.4 mm (6.28'); Internal Dock (5.25'): 171.9 mm (6.77'); External Dock: 177.5 mm (7.00'); RD Cartridge: 119.18 mm (4.69'); 114X: 480.7 mm (18.93') including bezel		
Weight	Internal Dock (3.5'): 408 g (0.90 lbs.); Internal Dock (5.25'): 635 g (1.40 lbs.) External Dock: 540 g (1.19 lbs.); RD Cartridge: 173 g (0.38 lbs.); 114X: 8300g (18.4 lbs)		
Orientation	Dock can be oriented either horizontally or vertically; 114X is supported horizontally only		
Configurations	Internal SATA connect in 3.5" or 5.25" bay; External or 114X USB 2.0 connect		
Supported Cartridge Capacities	160GB compressed capacity <sup>5</sup> (320GB) 320GB compressed capacity <sup>5</sup> (640GB) 500GB compressed capacity <sup>5</sup> (1TB) 640GB compressed capacity <sup>5</sup> (1.28TB) 1TB compressed capacity <sup>5</sup> (2TB)		
Code Updates	Supported through SATA and USB		
Interface	SATA (internal dock) 30MB/s; USB 2.0 (external dock and 114X) 25MB/s		
User Interface	Hardware status – dual color push button on front of RD dock Cartridge status – dual color LED on front of RD media System management – Windows interface		
Temperature	OPERATING: 10°C to 40°C NON-OPERATING: (-40°C to 65°C)		
Thermal Gradient	DPERATING: 10°C / hour NON-OPERATING: (20°C /hour)		
Relative Humidity	OPERATING: 20% to 80% NON-OPERATING: (10% to 90%), non-condensing		
Max Wet Bulb Temperature	OPERATING: 29°C NON-OPERATING: (38°C), non-condensing		
Altitude	OPERATING: -50 ft to 10,000 ft. NON-OPERATING: (-50 ft to 35,000 ft.)		
Vibration	OPERATING: sine vib 0.25 G peak, 3-200 Hz NON-OPERATING: (random vib 1.54 G RMS)		
Shock	OPERATING: half sine 31 G @ 2.6ms NON-OPERATING: (half sine 71 G @ 2ms)		

Power Ratings	Internal RD1000	External	114X
Voltage Tolerance	+ 5VDC ± 5%	+ 12VDC ± 10%	+ 12VDC ± 10%
Power Consumption	7.5 W / 13 W	6.6 W / 13 W	Up to 30 W / 52 W for 4 drives
(Typical / Peak) AC Adapter	N/A	Universal Adapter 100-240 VAC 50-60Hz Input	100-240 VAC

