VECTOR DATA™ ▶

Vault DD-Series

Deduplication Storage Systems

Consolidate more of your backup, archive, and disaster recovery on the NEBS Level 3 and ETSI certified Vault DD-Series deduplication storage systems. Get high performance and high capacity for data protection of enterprise workloads including file servers, server virtualization, email, content management, and databases. DD-Series systems offer the industry's fastest inline deduplication, which gives you better data protection for a lower total cost of ownership. Replace tape backup and save money with deduplication storage that reduces capacity needs by 10 to 30 times. Fast throughput lets you complete jobs on schedule and meet your service level agreements.

SECURE ENCRYPTION OF DATA-AT-REST

DD-Series systems enhance data security using industry-standard RSA® BSAFE FIPS 140-2 validated cryptographic libraries. With DD Encryption, backup and archive data is stored on a DD-Series system with encryption and compression performed inline—before the data is written to disk. DD Encryption supports internal encryption key management on each DD-Series system or external key management through RSA Data Protection Manager, which delivers a robust encryption key lifecycle management solution for the entire enterprise.

LONG-TERM RETENTION OF BACKUP DATA

DD-Series systems provide internal tiering for costeffective, long-term retention of backup data to minimize reliance on tape. DD Extended Retention software provides a transparent separation of backup data with short-term and long-term retention requirements by storing it in different tiers on DD-Series systems – the active and retention tier. Long-term data access and recoverability is ensured through fault isolation. Specifically, when the retention tier reaches full capacity it will be sealed and becomes a self-contained unit to ensure long-term data preservation. As a result, in the event of a failure or catastrophe, the system continues to operate with all unaffected components.

CENTRALIZED MANAGEMENT FOR LARGE ENVIRONMENTS

The DD-Series management center is a scalable virtual appliance that streamlines management and reporting in large DD-Series environments, enabling aggregate management of multiple systems through a single interface. Customizable dashboards provide visibility into aggregate status and the ability to drill-down to system-level details. Role based access allows different levels of access via assigned user roles for various levels of expertise within the organization.

Product Highlights

High-Speed, Scalable Deduplication

- Up to 58.7 TB/hr performance
- Reduces requirements for backup storage by 10 to 30x and archive storage by up to 5x
- CPU-centric scalability

Data Invulnerability Architecture

- Inline write/read verification, continuous fault detection and healing
- Dual disk parity RAID 6

Seamless Integration

- Supports leading enterprise backup and archive applications

Backup and Archive Consolidation

- Efficiently protect backup and/or archive data
- Meets governance policies and compliance regulations for archive data

Cloud-Ready

- Secure multi-tenancy provides logical isolation of user data

Fast, Efficient and Scalable Disaster Recovery

- Reduce bandwidth requirements by up to 99 percent
- Replicate from up to 540 remote sites into a single system

Operational Simplicity

- Lower administrative costs
- Automatic call-home reporting
- Reduced footprint

VECTOR DATA™ ▶

TECHNICAL SPECIFICATIONS

DD-SERIES CONTROLLER PERFORMANCE AND CAPACITY

	DD2200	DD2500	DD4200	DD4500	DD7200	DD9500
Maximum Throughput (Other)	3.8 TB/hr	5.6 TB/hr	10.6 TB/hr	10.6 TB/hr	12.6 TB/hr	27.7 TB/hr
Maximum Throughput (DD Boost)	4.7 TB/hr	13.4 TB/hr	25.6 TB/hr	25.6 TB/hr	28.3 TB/hr	58.7 TB/hr
Logical Capacity*	40-860 TB	1.3–6.6 PB	1.8-9.4 PB	2.8-14.2 PB	4.2-21.4 PB	8.6-43.2 PB
Logical Capacity w/ DD Extended Retention*			3.7 - 18.9 PB	5.7 - 28.5 PB	8.5 - 42.8 PB	17.2-86.4 PB
Max Usable	Up to 17.2 TB	Up to 133 TB	Up to 189 TB	Up to 285 TB	Up to 428 TB	Up to 864 TB
Max Usable Capacity w/ DD Extended			Up to 378 TB	Up to 570 TB	Up to 856 TB	Up to 1.7 PB
ES30 Shelves		2 TB, 3 TB	2 TB, 3 TB	2 TB, 3 TB	2 TB, 3 TB	2 TB, 3 TB
Drive Type	SAS	SAS	SAS, SATA	SAS, SATA	SAS, SATA	SAS, SATA
Built-in Networking	1x Mgm't 4x 1GbE 2x 10GbE	1x Mgm't 4x 1GbE	1x Mgm't	1x Mgm't	1x Mgm't	1x Mgm't 4x 1GbE
Optional Networking with I/O Cards (maximum)	8x1GbE 4x10GbE 8x10Base-T 4x8Gb FC	16x1GbE 10Gbe 8x8Gb FC	16x1GbE 8x10GbE 16x10base-T 8x8Gb FC	16x1GbE 8x10GbE 16x10base-T 8x8Gb FC	16x1GbE 8x10GbE 16x10base-T 6x8Gb FC	16x1GbE 16x10GbE 8x16GB FC

* Mix of typical enterprise backup data (file systems, databases, email, developer files). The low end of capacity range represents a full backup weekly or monthly, incremental backup daily or weekly, to system capacity. The top end of the range represents full backup daily, to system capacity. All capacity values are calculated using Base10 (i.e., 1TB = 1,000,000,000,000 bytes).

PHYSICAL SPECIFICATIONS AND ENVIRONMENTALS

	DD2200	DD2500	DD4200	DD4500	DD7200	DD9500
Weight	7 HD: 65 lbs 12 HD: 73 lbs	7 HD: 57 lbs 12 HD: 65 lbs	80 lbs	80 lbs	80 lbs	117 lbs
Dimensions	2U (19" x 29" x 3.5")	2U (19" x 29" x 3.5")	4U (19" x 35.5" x 7")	4U (19" x 35.5" x 7")	4U (19" x 35.5" x 7")	4U (19" x 27.7" x 6.8")
Power 100-120/200-240V AC, 50/60 Hz -48V DC (-40 to -72 VDC)	7 HD: 406VA 12 HD: 502VA	7 HD: 451VA 12 HD: 526VA	800VA (200-240V Only)	800VA (200-240V Only)	800VA (200-240V Only)	1,887VA (200-240V Only)
Thermal Rating (Watts)	7 HD: 1,344 BTU/hr 12HD: 1,662 BTU/hr	7 HD: 1,462 BTU/hr 12HD: 1,705 BTU/hr	2,593 BTU/hr	2,593 BTU/hr	2,593 BTU/hr	6,118 BTU/hr
Thermal Rating (BTU/hr)	7 HD: 1,344 BTU/hr 12HD: 1,662 BTU/hr	7 HD: 1,462 BTU/hr 12HD: 1,705 BTU/hr	2,593 BTU/hr	2,593 BTU/hr	2,593 BTU/hr	6,118 BTU/hr
Operating Temperature/Altitude	-5C to 55C / Up to 3960m (13,000ft)					
Operating Humidity	5% to 90%					
Operation Acoustic Noise (Sound Power)	7.52 bels	7.52 bels	7.52 bels	7.2 bels	7.2 bels	7.2 bels
Operation Acoustic Noise (Sound Pressure)	65 db	58.4 db	58.4 db	56.4 db	56.4 db	56.4 db

VECTOR DATA™ ➤

	DD2200	DD2500	DD4200	DD4500	DD7200	DD9500
Safety	UL 60950-1, CSA 60950-1, EN 60950-1, IEC 60950-1, GS, SABS, GOST, IRAM					
Emissions	FCC Class A, EN 55022, CISPR 22, VCCI, BSMI, MIC, ICES-003					
Immunity	EN 55024, CISPR 24					
Power Line Harmonis	EN 61000-3-2					

Software

SOFTWARE FEATURES

Global Compression™, Data Invulnerability Architecture including inline verification and integrated dual disk parity RAID 6, snapshots, telnet, FTP, SSH, email alerts, scheduled capacity reclamation, Ethernet failover and aggregation, Link Aggregation Control Protocol (LACP), VLAN tagging, IP aliasing, Boost, Encryption, Extended Retention (DD4200, DD4500, DD7200, DD9500 only), Replicator, Retention Lock optional software and Virtual Tape Library (for open systems and IBM i operating environments)

SYSTEM MANAGEMENT

Management Center, System Manager, SNMP, and command line management interface

DATA MANAGEMENT

NFS v3 over TCP, CIFS and DD Boost over 1 GbE or 10 GbE or Fibre Channel, tape library emulation (VTL) over Fibre Channel, and NDMP Tape Server

ABOUT US

Vector Data builds ruggedized and custom computing platforms including DC Power, NEBS Certified, ATT-TP, ETSI, and MIL-STD for telecom, aerospace, military, oil & gas, and other demanding industries that cannot deploy standard COTS products.

For more information, please contact your Vector Data account manager.