VECTOR DATA™

Vault E5500

PRODUCT OVERVIEW

The Vector Data Vault E5500 is a NEBS Level 3 and ETSI certified performance efficient storage system that meets demanding performance and capacity requirements without sacrificing simplicity and efficiency. Designed to address a broad range of solution requirements, the E5500 is equally adept at supporting high IOPS mixed workloads and databases, high-performance file systems, and bandwidth-intensive streaming applications. And its fully redundant I/O paths, advanced protection features, and extensive diagnostic capabilities deliver the highest levels of availability, integrity, and security, resulting in a simple-to-deploy, simple-to-manage storage solution.

The Vault E5500 offers full support for OpenStack, VMware and other leading virtualization platforms, it is the perfect foundation for SDN and the network of the future.

Thin Provisioning: Improve Storage Efficiency by Up to 33%
Thin Provisioning eliminates overprovisioning of storage, resulting in reduced storage TCO (capex and opex) by reducing initial acquisition capacity and improving utilization.

The key tenets of Thin Provisioning are:

- No more guessing how much storage an application really needs
- Elimination of initial storage purchases based on inflated estimate usages
- Eliminations of error-prone emergency out-of-space activities
- Significantly improved storage utilization rates, up to 33%
- Easy one-time single-click management at volume creation
- Autogrow to take care of usage expansion up to the maximum

SANtricity Remote Mirroring: Proven Data Replication and Disaster Recovery Protection
With NetApp SANtricity Remote Mirroring, customers now have a proven and efficient disaster recovery schema for maintaining access to business-critical data in the event of site outages. Available for both FC and IP networks, SANtricity Remote Mirroring provides highly available data storage across campus, across the state, or around the world and simplifies the management of data replication to meet the application service levels of both virtual and traditional environments.

Modular Flexibility
The Vault E5500 offers multiple form factors and drive technology options to best meet requirements. Its 24-drive shelf combines low power consumption and exceptional performance density with its cost-effective 2.5" drives, and the 12-drive shelf is a great fit for cost-conscious organizations that need to deploy both performance and capacity drives. Both shelves support E5500 controllers or can be used for expansion, enabling optimized configurations that best meet performance, capacity, or cost requirements. The performance efficiency of the Vault E5500 brings together massive bandwidth performance, high IOPS, and extreme density to create a system perfectly suited for data-intensive solutions.

KEY FEATURES

Performance Efficiency The Vault E5500 brings together massive bandwidth performance, high IOPS, and extreme density to create a system perfectly suited for data-intensive solutions. Combine this with intelligent cache tiering using SSD Cache, and the results are optimal performance and flexibility.
Modular Flexibility Two distinct disk drive/controller shelves, multiple drive types, and a complete selection of interfaces allow custom configurations optimized to meet performance and capacity requirements. Use SSD drives for performance or hybrid arrays of both SSD and rotating drives for mixed or tiered environments.
SANtricity Features to Enable Worry-Free Technology With SANtricity® and innovative Dynamic Disk Pools (DDP), the E5500 greatly simplifies storage and data management, protection, and utilization while removing the complexity of configuring RAID groups and hot spares.

VECTOR DATA™

TECHNICAL SPECIFICATIONS

	E5512	E5524
Maximum Raw Capacity	48TB w/expansion 1.54PB using 4TB drives	28.8TB w/expansion 1.47PB using 1.2TB and 4TB drives
Maximum Disk Drives	192 using only 12 shelves 384 using other expansion shelves (SSDs in other shelves)	384 drives 120 SSDs
Form Factor	2U/12 drives	2U/24 drives
Drive Types Supported	2/3/4TB 7.2K NL-SAS FDE/non-FDE	600/900GB 1.2TB SAS 10k FDE/non-FDE 800GB SSD non-FDE
System memory	24GB	
Additional ports for host I/O	Eight 6Gb SAS, Eight 10Gb iSCSI, Eight 16Gb FC, Four 40Gb InfiniBand	
Expansion Disk Shelves	DE5600 (2U/24 drives): 600/900GB,1.2TB SAS 10k FDE/non-FDE 800GB SSD non-FDE DE1600 (2U/12 drives): 2/3/4TB NL-SAS 7.2k FDE/non-FDE	
Operating System	SANtricity	
High-Availability Features	Dual-active controller with automated I/O path failover Supports Dynamic Disk Pools and RAID levels 0, 1, 3, 5, 6, and 10, simultaneously Redundant, hot-swappable storage controllers, disk drives, power supplies, and cooling fans Dynamic Disk Pools dynamic rebalancing for change in drive counts up or down Automatic RAID rebuild following a drive failure Mirrored data cache with battery backup and destage to flash SANtricity Proactive Drive Health monitoring identifies problem drives before they create issues 99.999% availability (with appropriate configuration and service plans)	
Operating Systems Supported	Microsoft® Windows®, Red Hat Enterprise Linux®, Novell SUSE Linux Enterprise Server, Apple® Mac® OS, IBM AIX, Solaris, HP-UX, VMware®	
Software Features	**Standard** SANtricity Remote Mirroring SANtricity Snapshot™ Dynamic volume expansion Dynamic RAID-level migration Event monitoring Nondisruptive firmware upgrades SANtricity SSD Cache	SANtricity Volume Copy Dynamic Disk Pools Dynamic capacity expansion Dynamic segment-size migration Proactive drive health monitoring Media scan with autoparity check and correction SANtricity Thin Provisioning Data Assurance (T10P1)
		Optional licensed software SANtricity Drive Encryption
SANtricity 11.10 maximums	Host/partitions: 512 Snapshot copies: 2,048	Volumes: 2,048 Mirrors: 128
Open Management	SANtricity OpenStack Cinder SANtricity Web Services Proxy (REST and SYMbol Web) SANtricity PowerShell Toolkit	

*All models are capable of reaching 384 disk drives when configured with intermixed drive shelves. Maximum disk drives limited to 240 when using InfiniBand interface option.

VECTOR DATA™

TECHNICAL SPECIFICATIONS

Dimensions and Weight	E5512 System Shelf DE1600 Disk Shelf	E5524 System Shelf DE5600 Disk Shelf
Height	3.4" (8.64 cm)	3.47" (8.81 cm)
Width	19" (48.26 cm)	19" (48.26 cm)
Depth	21.75" (55.25 cm)	19.6" (49.78 cm)
Weight	59.52 lb (27 kg)	57.32 lb (26 kg)

	E5512 System Shelf		E5524 System Shelf	
	Typical	**Maximum**	**Typical**	**Maximum**
KVA	.433	.583	.487	.637
Watts	429	.577	482	630
BTU	1464	1970	1644	2150

	DE1600 Disk Shelf		DE5600 Disk Shelf	
	Typical	**Maximum**	**Typical**	**Maximum**
KVA	.172	.322	.225	.375
Watts	170	318	223	371
BTU	580	1086	761	1267

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