



## VTrak D5000 Data Sheet



### Features

- ▶ Simplify Your Storage Environment
  - Consolidate SAN and/or NAS workload on the same storage solution
  - Hybrid interfaces allow Concurrent FC & ISCSI connections for SAN as well as NAS protocols
- ▶ Eliminate Downtime
  - Fully redundant design for enterprise
  - Active-Active Dual Controller with ALUA support for access flexibility
  - Upgrade & expand without downtime
- ▶ Realize Superior Value
  - Accelerate enterprise applications
  - Reduce latency and speed operations with up to 50% higher performance
  - As low as \$60 per terabyte
- ▶ Proactive & Predictive Analytics
  - Background data integrity scrub with parity
  - Predictive Data Migration (PDM) to minimize maintenance rebuild
- ▶ Consolidate Infrastructure
  - Massively scale up to 512 drives
  - Flexible 10GbE and optional 8/16G FC, with 6G SAS/SATA<sup>1</sup> and 12G SAS interfaces
  - Integrate into existing Open Directory and Active Directory environments
- ▶ Applications
  - Video Compressed Workflow
  - General IT Infrastructure
  - Virtualized Applications
  - High Bandwidth Applications
  - Backup and DR target

### VTrak D5000 Unified Storage System

VTrak D5000 series unified storage systems deliver uncompromising scalability, flexibility, and affordability for the mid-tier while providing simplicity and efficiency for minimizing total cost of ownership. Customers can respond more quickly to changing storage capacity and performance requirement needs.

### Accelerate Business with VTrak D5000

VTrak D5000 enables data driven business with an integrated combination of high-performance hardware, adaptive storage software, flexible protocols and application dependent front and backend connectivity at an affordable price.

### Unlock Power of Flash Cache at Affordable Price

Flash Cache accelerated VTrak D5000 storage systems deliver impressive performance, boosting throughput and lowering latency. User has option to add Flash Cache for read and write acceleration. PROMISE intelligent data caching automatically promotes hot data to cache in real time, so you get the full benefit of flash performance.

### Not just for IT, Optimized for video application environments

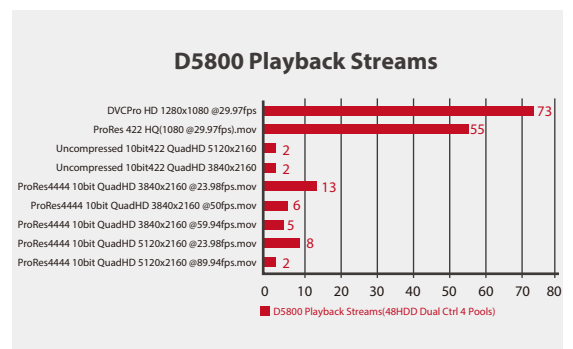
The Promise VTrak D5000 is optimized for 10Gb Ethernet via SMB/NFS protocols for large file data ingesting, streaming, or processing between the VTrak D5000 NAS storage appliance and its clients.

Data can also be directly transferred between the VTrak D5000 appliance and clients over the SAN via iSCSI/Fibre Channel network. This means higher bandwidth performance and lower latency data transfers, perfect for Media & Entertainment, HPC applications, and other video-centric environments.

In addition the VTrak D5000 supports Open Directory and Active Directory making it fully integrateable into your existing networking environment.

### Edit & play back compressed video faster

A faster processor, 10Gb Ethernet ports, and more memory is just the beginning. Enhanced cached mirroring design, auto-regeneration of data to mitigate frame drops and optimized disk access all add up to blazing performance for broadcast and editing environments. The VTrak D5000 Series optimizes performance to enable media professionals to increase productivity by allowing efficient processing of compressed video, delivering best-in-class performance and reliability.



### Scalable, reliable and cost-efficient

With VTrak D5000 you can “pay as you grow” from 64 Tera Bytes to Peta Bytes for long-term storage investment protection. Perfect not only for compressed video workflow environments but ideal for low cost backup/archive applications. Additionally, VTrak D5000 series comes with high-availability dual controllers, hot-swappable modular disk array, and a 3 year 24x7 technical support, with next business day on-site parts replacement warranty. Expansion units can start from 2u24 small form factor to large form factor 2u12, 3u16, 4U24 and up to the high density 4u60 JBOD expansion options, scale up to 512 drives.

The VTrak D5000 is the most affordable Enterprise storage solution starting as low as \$60 per terabytes plus additional savings from less cooling, less rack space and energy costs.

## Technical Specifications

Models and Controller Feature																							
Models	VTrak D5300 D5300x / D5300fx	VTrak D5320 D5320x / D5320fx	VTrak D5600 D5600x / D5600fx	VTrak D5800 D5800x / D5800fx																			
Form Factor	2RU	2RU	3RU	4RU																			
Drives	12 (LFF)	24 (SFF)	16 (LFF)	24 (LFF)																			
Host Connectivity	D5000xD: iSCSI and NAS Storage Sub-System, Dual HA Controller w/ 4-port 10GSFP+ D5000xS: iSCSI and NAS Sub-System, Single Controller w/ 2-port 10GSFP+ D5000fxD: FC, iSCSI and NAS Unified Storage Sub-System, Dual HA Controller w/ 4-port 10GSFP+ and 8-port 16Gb FC 24 (LFF) + 4 (SFF) D5000fxS: FC, iSCSI and NAS Unified Storage Sub-System, Single Controller w/ 2-port 10GSFP+ and 4-port 16Gb FC																						
Storage Expansion Ports	2 x 2 12Gb SAS Mini-SAS (SFF-8644) per controller																						
Management Ports	2 x RJ-45 1Gb Ethernet and 1 x RJ-11 Serial Port per controller																						
Capacity/Expansion	Online Capacity/Volume Expansion up-to 15 JBOD's ; up to 512 drives																						
Data Services and Feature																							
Max Pools/Volumes	256 volumes per pool, Max 32 pools per System; Max 512 Snapshots / 128 Clones per volume																						
Data Services	<table border="0"> <tr> <td>Default:</td> <td>• Snapshot</td> <td>• Thin/Thick Clones<sup>2</sup></td> <td>• Online Capacity Expansion</td> <td rowspan="3">Optional:</td> <td>• Pair Management</td> <td>• Cloud Backup</td> </tr> <tr> <td></td> <td>• Read/Write Cache</td> <td>• Local Replication/Migration</td> <td>• Thick/Thin Volumes</td> <td>• Remote Thickclone</td> <td>• WORM</td> </tr> <tr> <td></td> <td>• Compression</td> <td>• De-dup<sup>3</sup></td> <td></td> <td></td> <td></td> </tr> </table>				Default:	• Snapshot	• Thin/Thick Clones <sup>2</sup>	• Online Capacity Expansion	Optional:	• Pair Management	• Cloud Backup		• Read/Write Cache	• Local Replication/Migration	• Thick/Thin Volumes	• Remote Thickclone	• WORM		• Compression	• De-dup <sup>3</sup>			
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NAS Feature																							
Supported Network Protocols	SMB/CIFS (Windows, MAC), NFS (Linux/Unix), FTP, WebDAV																						
Max. NAS Share	1024 per pool																						
NAS Share Size	1PB																						
Concurrent Sessions / Memory	256 for each protocol /32GB, 128 for each protocol /16GB																						
Max. Account	10K																						
Supported Domain	Microsoft Active Directory, LDAP, Apple Open Directory																						
Max. Domain Account	100k																						
Data Management	Permission Management, Quota Management, Online Expansion																						
High Availability																							
RAID Levels/Stripe	0, 1, 5, 6, 10, 50, 60 RAID Stripe Support 64K, 128K, 256K, 512K and 1MB																						
Hot Spares	Global or Dedicated																						
Background Scrub	<table border="0"> <tr> <td>• Media Patrol &amp; Redundancy Check</td> <td>• Partial Rebuild</td> </tr> <tr> <td>• Background Synchronization</td> <td>• Task Scheduler for Background Activities</td> </tr> </table>				• Media Patrol & Redundancy Check	• Partial Rebuild	• Background Synchronization	• Task Scheduler for Background Activities															
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Ecosystem Integration																							
Supported OSs	Windows Server 2008, 2012, 2016, macOS 10.x, RHEL 6.5 to 7.2, SLES 11, 11 SP4, and 12 SP1																						
Certifications	VMware ESXi 6.5 & Citrix Server 7.3																						
Management Interface																							
Protocol	Web Based management using Web, CLI, SSH, SNMP																						
Physical/Environmental																							
Power	Voltage: 100–240Vac Auto–Ranging Max Current: 9A @ 100Vac; 4.5A @ 240Vac		Voltage: 100–240Vac Auto–Ranging Max Current: 12A @ 100Vac; 4.5A @ 240Vac																				
Power Efficiency	>80% @ 110V (>20% load), >80% @ 240V (>20% load) Temperature Range, 80Plus Certified PSU																						
Temperature Range	Operational: 5° to 35°C, Non-Operational: -40° to 60°C																						
Humidity	Operational: 20% to 80%, Non-Operational: ~ 95% (Non-Condensing)																						
Noise Levels & Shock	< 60dB, 25C, Operational: 5G, 11 ms Duration, Non-Operational: 30G, 11ms duration																						
Vibration	Operational: 0.2G, 5 to 500Hz (sine wave) ; 0.41G, 3-10-200-500Hz (Random) , Non-Operational: 1G, 5 to 500Hz (sine wave) ; 2.256G, 5-80-350-500Hz (Random)																						
Regulatory/Safety	EMC Class-A: CE, FCC, VCCI, BSMI, RCM / Safety: IEEE CB, cTUVus / Environmental: RoHS2, GreenPC, WEEE																						
Dimensions (H x W x D)	88mm x 447mm x 507mm (3.5" x 17.6" x 16.5")	88mm x 447mm x 427mm (3.5" x 17.6" x 19.96")	131mm x 446.7mm x 507mm (5.2" x 17.6" x 19.96")	174mm x 446.7mm x 507mm (6.87" x 17.6" x 19.96")																			
Weight	18.4Kg w/o drives 26.8Kg w/ drives	16.7Kg w/o drives 21.2Kg w/ drivess	22.0Kg w/o drives 33.2Kg w/ drives	26.8Kg w/o drives 43.8Kg w/ drives																			
Warranty and Support																							
Warranty	3-year full system limited warranty , optional extended warranty and PROMISE PSP(US only)																						
Support	24/7 e-mail and phone support, 24/7 access to PROMISE site-drivers and firmware upgrade																						

<sup>1</sup> SATA drives require a SAS-SATA adapter, <sup>2</sup> Thick Clones supported in SR1.1 or newer

<sup>3</sup> 128GB DDR is required for De-dup

