

VTrak x30 Series RAID Subsystem

High Performance 8G Fibre Channel SAN Storage

PROMISE
TECHNOLOGY, INC.



VTrak x30 Series Advantages

- Quad 8Gbps FC ports per controller
- Delivers up four times more performance than previous generation
- High-availability design
- Out-of-the box support with zero software install required
- Scale up to 7 Expansion Chassis for a total of 136 drives
- PerfectFlash enables software updates without requiring downtime
- Administer access control through Open Directory & LDAP
- Energy Efficient Power Supplies offering up to 85% power efficiency
- Qualified Solution for Mac OS X, Xsan and Final Cut Pro
- Certified for Windows, Linux and StorNext

Tomorrow's Performance, Today.

The PROMISE VTrak x30 Series RAID subsystem is a high performance, massively scalable 8G Fibre Channel storage subsystem designed to provide 24/7, 365 enterprise-class availability. Optimized to work within a Mac OS X environment, the VTrak x30 Series offers up to four times more performance than the previous generation delivering up to 5.5 GB/s for reads and 2.2 GB/s for writes.

The VTrak x30 Series RAID solution was developed to meet the mission critical needs of today's demanding video workflows. At the heart of the PROMISE VTrak x30 Series RAID subsystem is an advanced, high-performance RAID engine developed over the course of two decades. Powered by next-generation processing power from Intel, the Xeon C3500 Series processors, the VTrak x30 unleashes tomorrow's performance, today.

Edit & Playback Video Faster than Ever.

Faster processor, more memory, faster FC ports is just the beginning. Enhanced cached mirroring design, auto-regeneration of data to mitigate frame drops and optimized disk access all add up to more performance for broadcast and editing environments.

Redesigned WebPAM PROe Management Suite.

Designed with simplicity in mind, the all-new WebPAM PROe takes VTrak storage management to a new level. Included are automatic configurations tuned for common applications, non-disruptive software updates, power savings scheduler, performance and power monitoring statistics, drag-and-drop LUN mapping/masking and more. Every thing you need is built in, just login through Safari.

Heterogeneous Environments. Always.

PROMISE has a long history of supporting multiple platforms. The VTrak x30 Series supports Mac OS, Windows and Linux. Extensively tested and qualified across diverse OS and SAN environments such as Xsan and StorNext, the VTrak x30 is built for your enterprise workload.

VTrak x30 Series Configurations

	16TB RAID Subsystem	32TB RAID Subsystem	48TB RAID Subsystem	32TB Expansion Chassis
Form Factor	3U Rack Mount - 16 Drive Bays	3U Rack Mount - 16 Drive Bays	4U Rack Mount - 24 Drive Bays	3U Rack Mount - 16 Drive Bays
Controller Number	Single	Dual	Dual	Dual
Controller Specification (per system)	Four 8Gbps FC ports 4GB Cache	Eight 8Gbps FC ports 8GB Cache	Eight 8Gbps FC ports 8GB Cache	Two x4 6Gbps SAS host ports Two x4 6Gbps SAS expansion ports
Drive Modules	Eight 2TB 7,200 RPM SATA	Sixteen 2TB 7,200 RPM SATA	Twenty-four 2TB 7,200 RPM SATA	Sixteen 2TB 7,200 RPM SATA
Expansion Support	Up to 7 Expansion Chassis	Up to 7 Expansion Chassis	Up to 7 Expansion Chassis	N/A
Service & Warranty	3-year Next Business Day PROMISE ServicePlus	3-year Next Business Day PROMISE ServicePlus	3-year Next Business Day PROMISE ServicePlus	3-year Next Business Day PROMISE ServicePlus
Apple Part Number	H4945LL/A	H4946LL/A	H4947LL/A	H4948LL/A

Controller Module Features		
Drive Support	<ul style="list-style-type: none"> • 3U form factor supports up to 16 total drives • 4U form factor supports up to 24 total drives • Each RAID Subsystem comes equipped with enterprise-class SATA drives 	
Controller Features	<ul style="list-style-type: none"> • Four 8Gbps Fibre Channel (supports 8Gbps/4Gbps/2Gbps operation) • One external x4 wide 6Gbps SAS port (SFF-8088) • 4GB data cache per controller protected with hot-swappable battery backup unit (BBU) • Advanced Cache Mirroring over PCIe Gen2 	
RAID Features		
RAID Levels	0, 1, 1E, 5, 6, 10, 50, 60	
RAID Stripe Size Support	64K, 128K, 256K, 512K and 1MB	
Hot Spares	Global or dedicated with revertible option	
Max LUNs per Subsystem	1024	
Max LUNs per array	32	
Capacity Expansion	Up to 7 PROMISE VTrak x30 Series JBOD Expansion Chassis for a total of 272TB (136 Drives)	
Background Activities	<ul style="list-style-type: none"> • Task scheduler for background activities • Media Patrol • Background Synchronization • Foreground Initialization • Rebuild • Redundancy Check • Disk SMART Polling • Online Capacity Expansion (OCE) • RAID Level Migration (RLM) • UPS Monitoring 	
PerfectRAID Features	<ul style="list-style-type: none"> • Predictive Data Migration (PDM) • Intelligent Bad Sector Remapping • SMART Error Handling • NVRAM Error Logging • Disk Slot Power Control • Read/Write Check Table • Write-hole Table Protection 	
GreenRAID Features	<ul style="list-style-type: none"> • Four levels of advanced power management disk drive (MAID 2.0) support • Efficient 80Plus Certified power supplies offering up to 85% power efficiency 	
Management & Monitoring		
Management Features	<ul style="list-style-type: none"> • Secure 128-bit SSL web based management using WebPAM PROe (Ethernet) • Command Line Interface (CLI) or Command Line Utility (Serial Port or Ethernet via Telnet, SSH) • PerfectFlash - Non-Disruptive System Updates • Advanced, drag-and-drop LUN Masking and Mapping • LDAP Support for central user management • Bonjour discovery • Offline Volume Copy • USB Service Log 	
Monitoring Features	<ul style="list-style-type: none"> • Statistical charts for bandwidth, latency and IOPs for each port, logical drive and physical disk • Power and cache usage monitor • E-Mail monitoring support with customizable event notification list • SNMP, CIM for third-party monitoring software • Intelligent UPS Monitoring 	
Supported Operating Systems	Mac OS X / Mac OS X Server (10.5.2 or greater), Windows 2008, Windows 2008 R2, Oracle Linux, Red Hat Linux, SuSE Linux, VMware ESX 4.x	
Mechanical Specification		
Voltage	100-240 Vac Auto-Ranging	
Current (Maximum)	10 A @ 100 Vac; 5 A @ 200 VAC	
Power Conversion Efficiency	>80% @ 110V (>20% load), >80% @ 240V (>20% load)	
Temperature Range	Operational: 5° to 35°C, Non-Operational: -40° to 60°C	
Humidity	Operational: 10% to 90% (Non-Condensing), Non-Operational: 5% to 95% (Non-Condensing)	
Acoustic Noise Levels	55 dB (Typical), 65 dB (Maximum)	
Shock	Operational: 5G, 11 ms duration, Non-Operational: 10G, 11ms duration	
Vibration	Operational: 0.3G, 5 to 500 Hz, Non-Operational: 1G, 5 to 500 Hz	
Safety	CE, FCC Class A, UL/cUL, TUV, BSMI Class A, VCCI Class A, CB, KCC, NOM, GOST-R, IRAM, C-Tick, S-Mark	
Environmental Standards	RoHS, GreenPC, WEEE	
	3U/16 Bay	4U/24 Bay
Power Supply	Dual 580W, 100-240 Vac auto-ranging, 50-60 Hz, dual hot swap and redundant with PFC, N+1 design	Dual 750W, 100-240 Vac auto-ranging, 50-60 Hz, dual hot swap and redundant with PFC, N+1 design
Dimensions (H x W x D)	13.1 x 44.7 x 50.7 cm 5.2 x 17.6 x 19.96 in	17.4 x 44.7 x 50.7 cm 6.9 x 17.6 x 19.96 in
Weight	34.5 kg / 76 lbs (H4945LL/A) 44.5 kg / 98 lbs (H4946LL/A) 41.3 kg / 91 lbs (H4948LL/A)	54.9 kg / 121 lbs (H4947LL/A)
Warranty and Support		
Warranty	Three year limited warranty with next business day PROMISE ServicePlus (onsite parts replacement) where available; optional extended warranty; optional 4-hr response PROMISE ServicePlus upgrade	
Support	24/7 e-mail and phone support (English only); 24/7 access to Promise support site-drivers, firmware and compatibility lists	