Affordable Enterprise – Class Storage

The Promise VTrak E-Class RAID subsystem is a High Availability (HA) RAID solution developed to meet the needs of mission critical enterprise and creative applications. At the heart of the Promise VTrak E-Class RAID subsystem is a mature RAID engine. The hardened RAID code is the central technology that controls how user data is stored on a group of hard drives. With more than 13 years and four generations of code, the Promise RAID engine delivers cutting-edge performance and data integrity features that rival all competitors in its class.

Data Center Performance

In a data center, where a single VTrak may serve multiple host computers simultaneously, the VTrak E-Class RAID delivers up to 1400MB/sec of proven read performance and 600MB/sec of write performance. When used with Xsan, the combined solution competes favorably against all the competition. Scaling of volumes across several VTrak units improves performance while boosting performance simultaneously over the SAN.

Video Performance

VTrak E-Class truly shines in video environments by delivering consistent low latency performance without dropped frames. When used with Xsan in film and video postproduction, users can scale performance and capacity to support large-scale, uncompressed HD workflows.

Reliability

With large VTrak deployments worldwide, enterprise users have come to rely on Promise Technology to protect their valuable data. The VTrak E-Class powers many of today's hottest web based storage services. Application Service Providers using Promise VTrak E-Class offer their customer's data protection guarantees because they can trust VTrak E-Class reliability.

VTrak E-Class Advantages

- Best in class price/performance
- High availability design
- SAS/SATA drive support
- Scalability up to 80-bays

Why Promise

The Promise VTrak E-Class RAID subsystem has been designed to provide industry leading performance and reliability for mission critical environments at an affordable price. The fully redundant design provides data protection and availability even if a component should fail.

Promise offers the storage industry's best phone and email support along with a 3-Year advance replacement warranty. This provides VTrak users uninterrupted productivity for the life of the product.

No other solution provides this combination of performance, affordability and support.

Easy to install and manage

The VTrak E-Class RAID subsystem features Bonjour discovery and configuration through an embedded browser-based management interface, WebPAM PROe, eliminating the need to install additional software. Simply open your browser and click on the VTrak unit you would like to manage. An easy to use guided setup allows novice users to create and provision the storage in just a few minutes. The VTrak's rich feature set gives advance users powerful tools to rapidly deploy multiple units tuned for applications like Xsan 2 and Final Cut Studio 2.

Cross Platform Availability

The VTrak E-Class has been rigorously tested to ensure the best performance and availability for Mac, Windows and Linux platforms. While SAN storage is built on industry standards, minor variations of the specification can adversely affect interoperability from platform to platform. Promise testing assures consistent performance across the SAN.

World Class Support

Promise and Apple support organizations work together to solve problems. A shared support database allows support tickets to be escalated across organizations. Mutual service level agreements between Apple and Promise allow customers to install VTrak E-Class units with the confidence that any issues they encounter will be resolved quickly and easily.

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VTrak E-Class - Performance, Reliability and Scalability.

System and Controller Features

Controllers	Dual Active/Active, RAID Controllers with Failover/Failback
External I/O Ports (per controller)	Dual 4Gb Fibre Channel host port; One external 3Gb/s 4x wide SAS port for expansion chassis.
Data Cache	Shared 2GB predictive data cache per controller with automatic write cache de-staging and 72-hour battery backup
Command Queue Depth	1024 commands per VTrak system

Operational Features

RAID Level	RAID 0, 1, 1E, 5, 6, 10, 50, 60 Any combination of these RAID levels can exist at the same time ; Configurable RAID stripe size: 64K, 168K, 256K, 512K and 1MB stripe size per disk Background task priority tuning: adjustment of minimum I/O reserved for server use during all background tasks
Hot spares	Multiple global or dedicated hot-spare drives with revert options
Max LUNs per subsystem	256 in any combination of RAID levels and array types
Max LUNs per array	32 logical drives (LUNs); Supports LUN Carving by allowing an array to be divided into multiple logical drives; RAID level, stripe size, sector size and cache policy can be configured per LUN. Supports out of order logical drive deletion and re-creation
Max LUNs per Target ID	Up to 256, depending on host side driver and operating system
LUN Masking and Mapping	Supports multiple hosts
Operating Systems	Supports Mac OS X, Mac OS X Server, Windows 2003/2008, Fedora Core 9, Redhat Linux, Suse Linux and VMware ESX Server v3.5 Update 1

Mechanical Specification

Voltage	100-240 Vac Auto-Ranging
Current (Maximum)	8 A @ 100 Vac; 4 A @ 240 Vac (current rating with two power cords)
Power Supply	Dual 500W, 100-240 Vac auto-ranging, 50-60 Hz, dual hot swap and redundant with PFC, N+1 design
Power Consumption	108 Watts (w/o HDD), 524 Watts (under load with SAS HDD)
Operating Temperature/ Humidity	5°~40°C (-40°~60°C non operational) / Maximum 95%
Vibration	Random, 0.21 grms, 5-500Hz, X, Y, Z axis
Dimensions (H x W x D)	13.1x 44.65x 56.1 cm (5.2 x 17.6 x 22.1in)
Weight	Net weight: 38.5 kg (84.9 lbs) with 16 SATA drives
Safety	CE, FCC ClassA, VCCI, cUL, TUV, CB, BSMI, C-Tick, MIC

Apple Qualified Products and Descriptions

Apple Qualified Products and Descriptions	Apple Part #
Promise VTrak E-Class Single Controller 4x 1TB SATA RAID subsystem (4TB)	TV270VC/A
Promise VTrak E-Class 8x 1TB SATA RAID subsystem (8TB)	TV272VC/A
Promise VTrak E-Class 16x 1TB SATA RAID subsystem (16TB)	TV299VC/A
Promise VTrak E-Class 16x 450GB SAS RAID subsystem (7.2TB)	TV271VC/A
Promise VTrak J-Class 16x SATA Expansion Chassis (16TB)	TV274VC/A
Promise VTrak J-Class 16x SAS Expansion Chassis (7.2TB)	TV275VC/A
Promise 1TB SATA Drive Module	TV278LL/A
Promise 450GB SAS Drive Module	TV279LL/A
Promise VTrak Subsystem Service Parts Kit	TV276ZM/A
Promise VTrak Expansion Chassis I/O Service Parts Kit	TV277ZM/A

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