It's All About Your Data

VTrak™ J300s
SAS JBOD Storage System

Robust, high-availability, high-bandwidth dual I/O modules* JBOD storage system with three 4x SAS interface ports

Outstanding productivity and flexibility

The Promise VTrak J300s is a cost-effective JBOD storage system suitable for all three main data types: transactional, reference, and high-bandwidth. When populated with high performance, high reliability SAS drives, J300s is ideally suited for enterprise-level transactional applications such as modeling, simulation and billing. With high capacity SATA 3Gb/s drives, the VTrak J300s can be optimized for reference and high-bandwidth data applications such as disk-based backup, document imaging, video surveillance and video serving. With simultaneous SAS and SATA 3Gb/s drive support, the J300s enables organizations to employ different types of storage applications within the same system.

Affordable enterprise-level storage

The VTrak J300s delivers high performance SAS connectivity with advanced enterprise level reliability and functionality, while offering high availability and SAS/SATA 3Gb/s drive flexibility – all at a very affordable price. The three external SAS ports provide the connectivity and bandwidth for large capacity solutions requiring multiple cascaded JBOD boxes, while still providing dual server support and host port failover or aggregation. Fully redundant JBOD I/O modules*, power supplies and cooling units, combined with a cable-less system design provide exceptional levels of data availability.

High storage density for flexibility and economy

The VTrak J300s supports up to 12 off-the-shelf 3.5" SAS or SATA 3Gb/s drives per system in a standard 2U 19" rack space. Up to four J300s boxes can be cascaded to deliver over 24TB of storage to capacity-hungry applications.
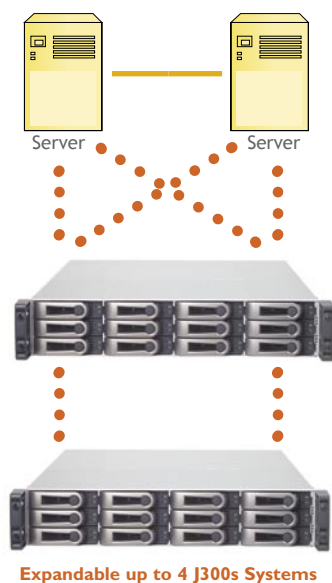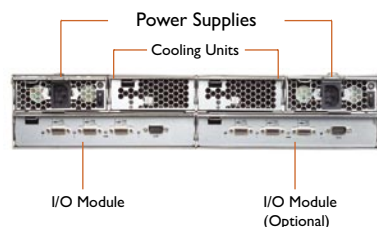
No single point of failure

With the VTrak J300s, Promise has dramatically narrowed the gap between simple fault tolerance and "No Single Point of Failure". The VTrak J300s incorporates an intelligent, enterprise-level, cable-less system design which includes fully redundant, hot-swappable I/O, power and cooling modules, which are all field replaceable. All system components are constantly monitored to ensure continuous operation in case of disk failure or an I/O module, power supply, or cooling unit malfunction. Dual active-active JBOD I/O modules* provide redundant data paths to further help ensure availability.

VTrak J300s Highlights

:: 12 hot-swappable drive bays in a robust 2U chassis

:: Supports Serial Attached SCSI (SAS) and SATA 3Gb/s drives simultaneously**

:: Dual active/active SAS JBOD I/O modules*

:: Three 3Gb/s SAS 4x external ports; two host ports and one SAS expansion port for cascading JBODs

:: Redundant, hot-swappable power and cooling modules

:: Network management through in-band SAS or out-of-band serial port

:: Compatible with leading SAS hard drives, host bus adapters and RAID controllers

**Serial
Attached
SCSI**

PROMISE® TECHNOLOGY, INC.

Power Supplies
Cooling Units

I/O Module
I/O Module (Optional)

Server   Server

Expandable up to 4 J300s Systems

VTrak J300s Specifications

JBOD I/O Module Features

I/O Modules	Single JBOD I/O module, upgradeable to dual active/active JBOD I/O modules support failover/failback
Drive Support	Up to twelve 3.5" x 1" hard drives: SAS 3Gb/s; SATA II 3Gb/s and 1.5Gb/s -- direct connect in single I/O module configuration or uses the Promise SATA MUX Adapter** in dual I/O module configuration Supports any mix of SAS and SATA II 3Gb/s or 1.5Gb/s drives simultaneously in the same system
External I/O Ports	Three 3Gb/s SAS ports using industry standard 4x wide-port SAS connectors, two for host connections and one for JBOD cascading

SAS Features

SAS Standards	ANSI T10 SAS 1.0 and 1.1 Compliant
Command and Protocol Support	SSP – Serial SCSI Protocol STP – SATA Tunneling Protocol SMP – SAS Management Protocol
PHY Capability	All ports self-configuring operation at 1.5Gb/s and 3Gb/s Automatic speed detection/negotiation Programmable output pre-emphasis Programmable input signal equalization Programmable voltage swing levels Wide port support
Expander Function	ECM – Expander Connection Manager: Table, Direct and Subtractive Routing ECR – Expander Connection Routing: Any to any port crossbar switch; Concurrent connections between host ports and target ports; Wide port configuration BPP – Broadcast Primitive Processor: Receive and forward broadcast request from source port to all other ports
Management Function	SAS Topology Discovery SMP – SAS Management Protocol; In-band access to Expander and PHY information; Statistics counters and performance monitors SES EM – SES Enclosure Management: SCSI SES command set over virtual SSP device

System Management

Supported Operating Systems	Windows 2000, Windows 2003, Linux (Red Hat, SuSE)
Management Interfaces	In-band SAS and out-of-band RS232 serial port Extensive CLI through RS232 serial port
Management Protocols	SES over SAS ports

Mechanical Specifications

Current (Maximum)	8 A @ 100 Vac; 4 A @ 200 Vac (current rating with two power cords)
Power Consumption	470 watts (under load)
Power Supply	Dual 360W, 100-240 Vac auto-ranging, 50-60 Hz, dual hot swap and redundant with PFC, N+1 design
Thermal Output	1604 BTU/hour (max current)
Operating Temperature	5°~40°C (-40°~60°C non operational)
Relative Humidity	Maximum 95%
Vibration	Random, 0.21 grms, 5-500Hz, 30Mins, X, Y, Z axis
Dimensions (H x W x D)	8.8 x 44.4 x 56.1 cm (3.5x17.5x 22.1in)
Weight	Net weight (system only): 26 kg (57 lbs) without drives, 32 kg (71 lbs) with 12 drives*** Gross weight (including carton): 29kg (64 lbs) without drives
Safety	CE, FCC Class A, VCCI, MIC, C-Tick, cUL, TUV, BSMI, CB

Warranty and Support

Warranty and Support	3 Years complete system limited warranty 24x7 worldwide telephone and email support

*Single JBOD I/O Modules standard, dual I/O modules optional
**Promise SATA Mux Adapter available first half 2006
*** Assume each hard drive = 0.5 kg
©2006 Promise Technology, Inc. Specifications subject to change without notice.
Check www.promise.com for the latest operating system, HBA, and hard disk drive compatibility.   P/N: G6130VJ3S000000-3 As of 03/06

The Leader in SATA RAID

Promise Technology is the originator of ATA RAID and worldwide leader in SATA RAID with over 14 million controllers shipped. Using Serial ATA and SCSI (SAS) technology to design and manufacture fast, reliable cost-effective data protection, Promise is the preferred choice for SATA host bus adapters, RAID controllers and SAS/SATA external storage systems.

www.promise.com