



VTrak J5000 Series

Redundant SAS/SATA JBOD for Big Data

VTrak JBOD Expansion Units for Cloud, Data Centers, Backup, & Archive

Benefits

- Support huge bandwidth with 4, 12 Gb SAS ports per IOM
- 80 PLUS GOLD certified PSUs, huge power efficiency, and Energy Star Ready
- Advanced diagnostics and reporting with persistent error log
- Auto sensing and auto optimizing for cable lengths and types
- Support massive capacity by cascading up to 9 SAS JBOD enclosures

Tech Highlights

- High-performance, highly optimized allowing more than 19 GB/s aggregate transfer rate
- SES 2 enclosure management based on ANSI T10 compliance
- Instantly accessible persistent error logging and HTML formatted service report
- Compatible with leading HBAs and RAID controller
- Work more efficiently with a modular cable-less design
- Customized OEM hardware software options

Affordable Enterprise-level Storage

- Delivers an affordable high-performance SAS solution with advanced enterprise level reliability and functionality.
- Four multipurpose SAS ports (SFF-8644) per controller for connecting upstream or downstream multiple cascaded JBODs for applications requiring huge bandwidth.
- Fully redundant I/O modules, power supplies, and cooling units providing exceptional data availability for any size business environment.
- Cable-less Storage Bridge Bay (SBB) design for Enterprise OEMs.




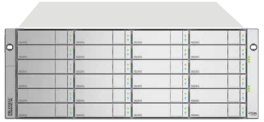
Data Center: Hybrid HDD/SSD Arrays

- Flash arrays enable optimized speed for key enterprise applications that need processing power yet power savings.
- Fully backward compatible with 6 Gb SAS/SATA devices, users have the ability to deploy 3/6/12 Gb SAS/SATA hard drives and SSDs in the J5000 Series.
- Efficient power supplies provide up to 90% power efficiency that improves TCO by conserving power, reducing heat output and improving cooling costs.
- Internal 12 Gb SAS expander-based architecture also allows for transparent access to each drive, enabling full utilization of the power management features built into modern hard drives.

Backup

- As consumers and businesses become more mobile, the need for data access, retrieval, and distribution anywhere at any time means that data must be protected.
- Data centers, hyperscale computing, and high-performance computing not only require performance and reliability, but flexibility and cost-efficiency for tiered storage management. Nearline SAS/SATA JBOD expansion units provide the versatility and scale for such demands.

VTrak J5000 Specifications

	2U/24 Bay	2U/12 Bay	3U/16 Bay	4U/24 Bay
Model and Number	 J5320s	 J5300s	 J5600s	 J5800s
Drive Support	Up to 24 2.5" drives	Up to 12 3.5" drives	Up to 16 3.5" drives	Up to 24 3.5" drives
External I/O Ports	<ul style="list-style-type: none"> • 3/6/12 Gb SAS, 3/6 Gb SATA HDD and SSD • Supports any mix of SAS and SATA drives simultaneously in the same enclosure 			
SAS Features				
Expander Management Features	<ul style="list-style-type: none"> • Self-configuring expander supports full SAS domain topology management • T-10 based zoning support • End Device Frame Buffering (aggregate bandwidth over multiple slow devices e.g. 6G and 3G) • Smart cable support to detect cable type and tune PHY automatically for maximum reliability • SMP – SAS Management Protocol • In-band access to Expander and PHY information • Statistic counters and performance monitors • SES EM – SES Enclosure Management (ANSI T10 SES 2 Compliant) • SCSI SES command set over virtual SSP device • Wake-on-SAS support, Wake-on-LAN support 			
System Management				
Management Interfaces	<ul style="list-style-type: none"> • LED status indicator support for drives, FRU and enclosure environmentals • In-band SES enclosure management alerts user to out of spec operation: thermal condition, voltage condition or component failures, protecting data and hardware • Full subsystem management CLI through out-of-band RS232 serial port 			
Enclosure Protocol and Management	ANSI T10 SES 2, SMP (SES over in-band SAS) Persistence Error Logging with NVRAM, Extensive Service Report File, VPD (Vital Product Data) on Chassis and FRUs			
Mechanical Specifications				
Voltage	100--240 Vac Auto--Ranging			
Current (Maximum)	9A @ 100 Vac; 4A @ 240 Vac			
Power Conversion Efficiency	>80% @ 110V (>20% load), >80% @ 240V (>20% load) Temperature Range			
Temperature Range	Operational: 5° to 40°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 and Emission Certification	EMC Class A: CE, FCC, VCCI, BSMI, RCM and KC Safety: IEEE CB, UL/cUL and TUV			
Environmental Standards	RoHS, GreenPC, WEEE			
Power Supply	Efficient 80PLUS GOLD Certified redundant PSU			
Dimensions (H x W x D)	88mm x 446.7mm x 420mm (3.5" x 17.6" x 16.5")	88mm x 446.7mm x 507mm (3.5" x 17.6" x 19.96")	131mm x 446.7mm x 507mm (5.2" x 17.6" x 19.96")	174.4mm x 446.7mm x 507mm (6.87" x 17.6" x 19.96")
Weight	13.8Kg(30.4lbs) w/o drives 19.2Kg (43.3 lbs) w/ drives	14.8Kg(32.6lbs) w/o drives 24.8Kg (54.7 lbs) w/ drives	25Kg(56 lbs) w/o drives 38.3Kg (84 lbs) w/ drives	29.6Kg(64 lbs) w/o drives 49.6Kg (108 lbs) w/ drives
Warranty and Support				
Warranty	3-year full system limited warranty, optional extended warranty, onsite parts replacement program			
Support	24/7 e-mail and phone support, 24/7 access to PROMISE site-drives, firmware, and compatibility list			

