JetStor® SAS 516iS

HIGH PERFORMANCE SAS/SATAII-to-iSCSI RAID

Combining the deployment convenience of iSCSI with outstanding JetStor performance, the JetStor SAS 516iS 16 bay RAID array reliably delivers full quad gigabit Ethernet throughput to 16 terabytes of storage. This remarkable performance eliminates bottlenecks in your most demanding applications, diminishing response times for increased productivity. A high performance 64 bit Intel Xscale dual-core processor with hardware-embedded RAID 5 and RAID 6 optimization achieves up to 12 GB/sec internal bandwidth. Designed for mission critical applications, the JetStor's data protection is backed by high availability features such proactive event monitoring software, on-line RAID set integrity verification, and a cableless intelligent backplane that enables hot-swapping of redundant power supplies, power connections and cooling fans.

NON-STOP ADS AVAILABILITY

JetStor storage systems are engineered for non-stop operations. Capacity can be increased and drives replaced as data remains on-line. Multiple drives may be designated as hot-spares, allowing the JetStor to transparently move data to a spare should an error be detected. RAID 6 with Advanced Data Sentry technology allows for continuous operations even with two simultaneous drive failures. Considering that RAID 6 ADS provides 1,000 times greater data protection than RAID 5, why trust your data to an older technology?

ADVANCED iSCSI SUPPORT

The JetStor SAS 516iS implements all IP SAN standard and advanced features, including volume sharing with up to 16 hosts, host access control and CHAP. Full dual-channel capabilities include 802.3ad port trunking, multi-homing, active/passive LACP and Microsoft MPIO. The iSCSI offload engine further features updatable firmware to support future protocol changes.

FEATURES

- **Up to 600 MB/sec performance** full-duplex quad-channel 1Gb Ethernet to support your most demanding applications.

- **Complete advanced iSCSI support** including volume sharing, host access control and CHAP.

- **RAID Manager browser based GUI** management and monitoring software allows you to remotely configure and manage all JetStor systems with e-mail event notification.

- **Integrated Snapshot** allows for automatic scheduled or ad hoc backups.

- **Supports all Operating Systems**, both single and clustered.

- **Field-replaceable major components** allow for maximum convenience, uptime and configuration flexibility.

- **Outstanding Warranty** of five years on disk drives and three years on all other components. Optional advanced replacement program ships drive replacements within 24 hours. Optional on-site service also available.

- **Free telephone & email support** is provided for the life of the unit.
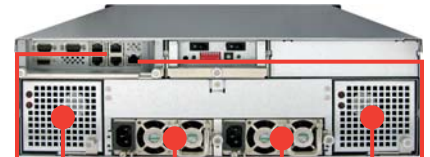
A&NC

www.raid.com
800-213-2667

JetStor

HIGH PERFORMANCE SAS/SATAII-to-iSCSI RAID STORAGE

RAID 6 ADS TECHNOLOGY

JetStor SAS 516iS

SPECIFICATIONS

Number of Bays / Size Maximum Capacity[1]	16 SAS/SATA bays / 3U 16TB	iSCSI Acceleration and Advanced Functionality	Optimally integrated as tasks performed by the powerful dual-core processor. Load balancing, 802.3ad trunking, failover, LACP
Expansion	SAS port for up to 3 JBODs totaling 64TB		
Processor	64-bit Intel Xscale IOP342 Dual-core Storage Processor	NetWork Controller	TCP Offload Engine (TOE)
		Management Ports	Two DB9 RS/232 RJ45 Ethernet
Backplane Interface	133 MHz PCI-X		
Internal Bandwidth	Up to 1.6 Gb/s	Power Supplies	Two Redundant 460W Two Power Connections
Disk Bus Interface	Sixteen 3 Gb SAS/SATA II channels 48-bit addressing	Cooling Blowers	Dual Redundant Hot-Swappable
Cache (ECC supported)	1 or 2 GB (1 DDR333 EDD SDRAM)	Battery Backup	Optional, 72 Hour

OPERATING SYSTEMS

Windows Server 2003, Linux, Sun/Solaris (Sparc/x86), MAC OS X Leopard, Virtual Iron, Fedora, Xen, VMWare ESX Server, AIX 3.5, and others to be announced

[1]Maximum storage capacities are calculated with 1TB SATA drives. Drive support not limited to drive capacities listed, all future drive capacities supported when available.
All features, hardware and software performance specifications are subject to change without notice.

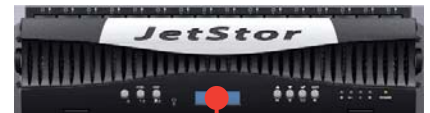Ergonomically designed drive trays allow for safe on-line replacement or expansion with any SATA disk drive.

Redundant, hot-swappable power supplies with integrated cooling and two power connections.

Redundant hot-swappable cooling fans, independent of the power supplies.

Ethernet port for Web GUI, remote monitoring, configuration and email event notification.
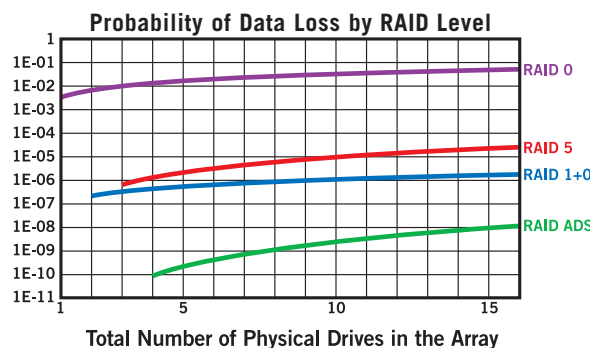
Four gigabit Ethernet ports for 600MB/s bandwidth or clustered shared storage.

FEATURES:

- Extensive configuration options allow one or many User Data Volume (UDV) assignments to one or many specific Ethernet ports, and specific or shared cache settings for each UDV

- Supports RAID levels 0, 1, 0+1, 3, 5, *6* **with ADS**, 10, 30, 50 and 60, JBOD, global hot spares and automatic online rebuild

- Array roaming allows you to easily transfer complete RAID sets with their configuration data to another RAID system

- Allows online migration and capacity expansion within the enclosure

- Local audible event notification alarm

- Built-in ethernet port for remote event notification, Web GUI, configuration and management

- Four host channels support clustered environments, MPIO

- Tagged command queuing for 255 commands allows for overlapping data streams

- RAID Advanced Data Sentry (ADS) provides the highest level of data protection by tolerating multiple simultaneous drive failures without downtime or data loss

- RAID ADS probability of data loss is 1/1,000 that of an equivalent RAID 5 array

Front panel display and controls allow for complete unit configuration, as well as instant visual system status.

Probability of Data Loss by RAID Level

RAID 0	
RAID 5	
RAID 1+0	
RAID ADS	

y-axis: 1, 1E-01, 1E-02, 1E-03, 1E-04, 1E-05, 1E-06, 1E-07, 1E-08, 1E-09, 1E-10, 1E-11
x-axis: 5, 10, 15

Total Number of Physical Drives in the Array

AC&NC

www.raid.com
800-213-2667

ADVANCED COMPUTER & NETWORK CORPORATION
5001 Baum Boulevard, Suite 680 • Pittsburgh, PA 15213
tel: 800.213.2667 • 412.683.9010 • fax: 412.683.9070
TECHNICAL SUPPORT: 888.686.2262
EUROPE:+44 (0)1628 891616
GSA Schedule GS-35F-0694J • CMAS# 3-00-70-1230A