Snap Server™ 520

Storage performance with flexible capacity expansion

Features

Best-In-Class Price/Performance

Capacities Ranging from 1TB to 66TB

Instant Capacity Expansion™ (I.C.E.)

Cross-Platform Support Right out of the Box

Unified Block and File Support

Hot-Swappable Disk Drives

Integrated CA eTrust Antivirus Software

Active Directory Service (ADS) Integration

Integrated BakBone NetVault Software with an Upgrade to a 500GB Virtual Tape Library

Backup Agent and NDMP Agent Support

Snapshot Technology

Optional Snap EDR Enterprise-Class Data Replication, Management, and Protection

Optional StorAssure Personal Edition Client Backup Software

The Snap Server 520 by Adaptec combines best-in-class performance with optional capacity expansion that helps you maximize your storage budget. With legendary Snap Server ease of use and operation, an integrated suite of data protection software, and scalability to 66TB, it is ideal for any size company that needs cost-effective, yet scalable data storage for its growing business.

Best-in-class performance

The Snap Server 520 is built on a 64-bit system architecture with AMD Opteron™ technology and 512MB of memory for fast throughput. It provides cost-effective Serial ATA II (SATA II) disk drives and with GuardianOS™ software it beats the competition with the fastest random data access speeds.

Availability

The Snap Server 520 integrates availability features rarely found in a value-based storage solution, including Ethernet teaming failover, (combining two Ethernet ports on a single address, which allows a path to fail without taking down the network), hot-swappable drives, and the ability to boot from any drive. Two other rarely found features are support for both four drives and dual power supplies in a 1U system.

High scalability

The Snap Server 520 easily grows as your data grows. Start with your choice of a 1TB, 2TB, or 3TB unit, and as needs change add up to seven SANbloc S50 JBOD arrays by Adaptec, to a maximum of 66TB. With Instant Capacity Expansion (I.C.E.) the new capacity is instantly available, without the traditional RAID re-configuration downtime.

Block and file data storage

iSCSI target support built into the latest version of the award-winning GuardianOS platform allows you to store database, email, and other block data on the same server where you store file data. GuardianOS also provides automatic cross-platform file sharing, Unicode support, global hot spare support, and enhanced quota management.

Integrated data protection

The Snap Server 520 includes a complete suite of data protection software. It integrates a WorkGroup Edition of BakBone NetVault Server, which includes a free upgrade to a 500GB Virtual Tape Library; CA eTrust Antivirus Software, and support for third-party backup agents. Optional Snap Enterprise Data Replicator software by Adaptec provides advanced data protection, movement, and management for any business. Optional StorAssure Personal Edition software by Adaptec provides automated, easy-to-use, client backup for desktop and laptop systems.

Centralized management

Simple installation and browser-based management make Snap Servers ideal for sites with little or no IT support staff. Snap Server Manager software consolidates the management of multiple units into a single console.

Snap Server 520 Specifications

POWERED BY:
AMD 64 Opteron

Physical

- Width: 17.5 in (444.5 mm)
- Height: 1.75 in (44.45 mm) 1U
- Depth: 29.25 in (743 mm)
- Weight: 40 lbs (18.2 kg)

Note: 47 lbs (21.3 kg) is the shipping weight including shipping carton and accessories

Mounting

- Custom 19" rack mount slide rails included
- Minimum rack depth 32" (812.8mm)

Agency Certifications

- UL, cUL, CE, FCC Class A, Nemko, TuV

Processor

- AMD Opteron processor, with 1MB L2 cache and 1000MHz HyperTransport™

Memory

- 512MB DDR 1 400 ECC RAM standard
- 4 DIMM sockets supporting up to 4GB DDR 1 400 ECC RAM

Drive Configuration

- 4 x 250GB 7200 RPM hot-swappable SATA drives (1TB raw capacity)
- 4 x 500GB 7200 RPM hot-swappable SATA drives (2TB raw capacity)
- 4 x 750GB 7200 RPM hot-swappable SATA drives (3TB raw capacity)

Standard LCD Display

- Backlit, 2 line, 16 character with system ID, IP address

Network Interface

- Dual-Gigabit Ethernet Ports (autosensing 10/100/1000Base-T, dual RJ-45 network connections)
- Support for stand-alone, failover, and load balancing modes

Expansion Array Interface

- Requires optional Serial Attached SCSI host bus adapter for expansion
- Supports up to 7 SANbloc S50 JBOD expansion arrays

PCI-X Expansion Card Support

- Supports an additional full-height PCI-X expansion card

Local Backup Interface

- Ultra320 SCSI 68-pin VHDCI (integrated) Power
- Power Supply: Single 400W supply; add a second hot-swappable 400W power supply for redundant failover
- Power Rating: 400W 100-240 VAC, 50-60Hz, autosensing
- Input Current: 3.4A peak for 115VAC, 1.7A peak for 230VAC
- Power Consumption: 390W peak
- Heat Dissipation: 1057 BTUs/hr avg.

Environmental Limits, Operating

- Temperature: 50° F to 95° F, (10° C to 35° C)
- Non-Condensing Humidity: 20% to 80%
- Vibration: 0.1G at 10-300Hz random for up to 120 minutes
- Shock: 6 pulses of 33G for up to 2ms
- Altitude: 0 ft to 10,000 ft (0 m to 3,048 m)

Environmental Limits, Non-operating

- Temperature: 14° F to 149° F, (-10° C to 65° C)
- Non-Condensing Humidity: 5% to 95%
- Vibration: 2G at 5-500Hz for up to 90 minutes
- Altitude: 0 ft to 35,000 ft (0 m to 10,668 m)

Included with Unit

- European and US power cable
- 2 x Cat5 Ethernet cables
- Custom 19" rackmount slide rails
- GuardianOS and included features
- Evaluation licenses for optional software

GuardianOS Specifications

Network Transport Protocols
- TCP/IP
- UDP/IP
- AppleTalk

Network File Protocols
- Microsoft Networks (CIFS/SMB)
- Linux/UNIX (NFS v2/3 over TCP & UDP)
- Apple (AFP v2/v3)
- Web (HTTP 1.1/HTTPS)
- File Transport Protocol (FTP)

Network Block Protocols

iSCSI Target Support
- Supports qualified iSCSI software and hardware initiators (see details below).

iSCSI Software Initiator Support
- Windows: Microsoft iSCSI Initiator v1.03, v1.04, v1.05, v1.06, v2.02
- Solaris: Cisco SN 5400 Series iSCSI Driver v3.3.5
- Linux: RHEL 3 & 4 and SLES 9: Built-in Initiator; Redhat 7.3 & 9.0: UNH-iSCSI Initiator v1.5.3
- NetWare: NetWare Initiator 6.5 SP1
  - emboot Bootable iSCSI Software for Windows
  - VMWare ESX v3.0 in-box iSCSI Initiator

iSCSI Hardware Initiator Support
- Intel PRO/1000T IP Storage Adapter v2.0, 2.1
- Alacritech SES1001 iSCSI Adapter
- QLogic QLA4010 iSCSI Initiator

Network Client Types
- Windows: 98, Me, NT 4.0, 2000, 2003, XP
- Macintosh: OS 8.x, 9.x, 10.x
- UNIX: Solaris 7, 8, 9; HP-UX 11; AIX 4.3.3, 5.x
- Linux: Red Hat Linux 7.x, 8.x, 9.x

Server Emulation
- Windows 2000/2003
- Windows NT 4.0
- AppleShare
- NFS v2/3
- FTP

Automatic IP Address Assignment
- Supports DHCP Client or Server for automatic assignment of IP address

Network Security
- Microsoft Active Directory Service (ADS Member Server)
- Kerberos Authentication v5
- Windows NT Domain (member server)
- File and Folder Access Control List (ACL) Security for Users and Groups
- UNIX Network Information Service (NIS) Support
- UID/GID mapping between NFS & CIFS
- Secure Sockets Layer (SSL) v2/v3 128-bit Encryption
- Transport Layer Security (TLS) v1
- CHAP Authentication (iSCSI target level)

System Management
- CA *e*Trust Antivirus Software
- Browser-based User Interface for Remote Administration
- Snap Server Manager Client-Based Setup Utility (platform-independent)
- SNMP (MIB II and Host Resource MIB)
- User Disk Space Quotas for Windows, Macintosh, and UNIX/Linux
- Group Disk Space Quotas for NIS Groups
- Environmental Monitoring
- Email Notification Alerts
- Network Time Protocol Support

RAID Options

The Snap Server 520 can be configured for enhanced performance or maximum file protection. Options include:
- RAID 5 (drive striping with parity): For each array, the size of one drive is reserved for parity. Provides the best combination of performance and data protection.
- RAID 1 (drive mirroring): One or more drives duplicate one drive for maximum data protection.
- RAID 0 (drive striping): Large virtual drive with data striped across all drives of the array to provide maximum performance with no loss in usable capacity.
- Global hot spare support.
- Instant Capacity Expansion (I.C.E.) logically groups RAIDs for dynamic online scalability.
- RAID 1/5 background scanner constantly monitors for disk media errors and if it's possible to repair the error, automatically rewrites the "marginal" block.

GuardianOS Specifications (cont.)

Data Protection

- Snapshots: Snapshot technology enables immediate or scheduled point-in-time images of the file system.
- Enterprise-Class Replication: Optional Snap EDR simplifies cross-platform management and protection of distributed data.
- Continuous Data Protection: Optional StorAssure Personal Edition automatically and continuously protects data stored on desktop and laptop systems.
- Local Backup: Integrated BakBone NetVault WorkGroup Edition.

- Network Backup: Includes an upgrade to a 500GB VTL for disk-to-disk backup. Supports VERITAS NetBackup/Backup Exec, CA BrightStor ARCserve/Enterprise, Legato NetWorker, BakBone Netvault, and Microsoft Backup Software for Windows 98, Me, NT, 2000, 2003, XP. Compatible with Dantz Retrospect for Macintosh.
- UPS Support: APC brand UPS with Network Management Cards are supported for graceful system shutdown.

Models	Part Number
Snap Server 520, 1TB	2196100
Snap Server 520, 2TB	2196200
Snap Server 520, 3TB	5325302032
Software Options	
Snap EDR	5325301879
Snap EDR Advanced	5325301934
Snap EDR Express	5325301953
StorAssure Personal Edition	5325301972
Snap Server Manager license*	5325301955
Control of individual server is included, this license enables multi-server administration	
Accessories	
SAS HBA card required for expansion	2219500
512MB memory module	2229500
1GB memory module	2229600
Power supply	2209100
Fan module	2209200
Front bezel	2208900

Worldwide Warranty

Snap Server hardware and software are backed by world-class service and support to protect your investment from downtime and provide you with complete peace of mind. Standard services with the Snap Server 520 include:

- Three-year limited hardware warranty, return to depot
- 90-day software support

Optional Support Programs

Today's mission-critical environments require maximum uptime and rapid resolution should problems arise. A comprehensive suite of service and support upgrade options help you protect your business operations. Providing additional levels of technical service and support, these services extend the standard protection packages already included with Snap Servers. From extending your warranty phone support to complete same-day onsite support, you can select the options that best fit your business and resource requirements. For more information about services, please contact your distributor, or call us at 1-888-343-7627.

adaptec®

691 South Milipitas Boulevard
Milpitas, CA 95035

888.343.7627 Tel
408.262.2533 Fax