

# Overland Storage® Snap Server® 520

## Scalable Rackmount RAID Storage



### Features

- Capacities ranging from 1TB to 88TB
- On-the-fly scalability with Instant Capacity Expansion (I.C.E.)™
- Hot-swappable disk drives
- Can be configured for RAID 1 or 5 data protection
- Provides one of the fastest random data access speeds in its class for high-performance data protection
- Easy management and cross-platform support right out of the box; integrates seamlessly into Windows, Linux, UNIX and Apple environments
- Active Directory Service (ADS) Integration
- Unified block and file architecture enables the storage of block and file data on the same server
- Integrated CA eTrust Antivirus software
- Integrated BakBone NetVault software with upgraded 500GB virtual tape library license
- Backup agent support
- Snapshot technology
- Dual gigabit Ethernet ports with Ethernet teaming for load balancing and port failover

### Options

- Dual hot-swappable power supplies
- SAS host bus adapter card for future expansion
- Snap Enterprise Data Replicator™ (Snap EDR) software for enterprise-class data replication and disaster recovery
- StorAssure Personal Edition desktop backup software

The Overland Storage® Snap Server® 520 is ideal for growing businesses with a wide variety of storage needs. The Snap Server 520 provides outstanding performance and ease of use in a 1U rackmount network attached storage (NAS) system that is scalable and flexible, to fit an array of storage needs and budgets. It is configured with 4 SATA II drives for an initial capacity of 1, 2, 3, or 4TB and is expandable with up to 25.2TB of SAS or an additional 84TB of SATA storage. The Snap Server 520 supports RAID levels 1 and 5 to keep your data safe.

### Built for the Enterprise

Built on the award-winning GuardianOS™ platform, the Snap Server 520 includes many enterprise-class features, including the capability to be remotely monitored and managed, along with other Snap Servers, from a central seat using Snap Server Manager™ software. Running Snap Enterprise Data Replicator™ (Snap EDR) replication software, data can be continuously, securely, and efficiently moved between sites. As part of a backup to disk solution, the Snap Server 520 can be the backup server, storing backups on its hard drives, and later transferring backups to a remote site for safety, or onto tapes for long term archive.

### Availability

The Snap Server 520 was built for high availability, with features such as Ethernet teaming failover, hot-swappable drives, and the ability to boot from any drive. The Snap Server 520 also supports four drives and dual power supplies for additional availability and stability.

### Right-Sized to Fit Your Needs

With the ability to scale from 1TB to 88TB of storage capacity, you can right-size your storage environment by purchasing only what you need today, then expanding your system as your storage needs grow. With the ability to mix SAS and SATA, the Snap Server 520 also enables you to build a truly customized solution that fits your specific needs.

### Integrated data protection

The Snap Server 520 can be configured for RAID 1 or RAID 5 and is integrated with a complete suite of data protection software, including the WorkGroup Edition of BakBone NetVault Server with a 500GB Virtual Tape Library license and CA eTrust Antivirus Software. The Snap Server 520 also supports most other popular third-party backup agents, so you can tailor your data protection, backup, and disaster recovery applications to your specific business needs.

Take your solution further with disaster recovery using StorAssure Personal Edition for automated backup of desktop and laptop systems, or Snap Enterprise Data Replicator (Snap EDR) for the secure movement and management of the business-critical data that resides at your remote locations.

### Centralized management

The integrated Snap Server Manager software is ideal for businesses with limited IT staff by enabling geographically dispersed Snap Servers to be viewed and administered as local resources from one central location. A click of a mouse reveals in-depth information about storage assets and how they are being used.

## Snap Server 520 Specifications

### 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™

POWERED BY:



### Memory

- 1GB 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 II drives (1TB raw capacity)
- 4 x 500GB 7200 RPM hot-swappable SATA II drives (2TB raw capacity)
- 4 x 750GB 7200 RPM hot-swappable SATA II drives (3TB raw capacity)
- 4 x 1TB 7200 RPM hot-swappable SATA II drives (4TB 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 Snap Expansion S50 JBOD 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)

## GuardianOS Specifications (cont.)

### System Management

- CA eTrust 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.

### 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.

- Automated Desktop/Laptop Backup: Optional StorAssure Personal Edition automatically and continuously protects data stored on desktop and laptop systems.
- Local Backup: Integrated BakBone NetVault WorkGroup Edition. Includes an upgrade to a 500GB VTL for disk-to-disk backup.
- Network 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.
- 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
Snap Server 520, 4TB	5325302178
Software Options	
Snap EDR Standard	5325301879
Snap EDR Express	5325301953
StorAssure Personal Edition	5325301972
Snap Server Manager license*	5325301955
<small>*Control of individual server is included, this license enables multi-server administration</small>	
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. With Overland Storage services for Snap Servers, you have 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. Overland Storage provides a comprehensive suite of service and support upgrade options created to help you protect your business operations. Providing additional levels of technical service and support, Overland Storage services extend the standard protection packages already included with all Snap Server products. From extending your warranty phone support to complete onsite support for same day recovery, you can select the level of support that best fits your business and resource requirements. For more information about Overland Storage services, please contact your reseller, call Overland Storage at 1-800-442-7274 or visit us online at: [www.snapserver.com](http://www.snapserver.com)



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