Modular Expansion for Overland Storage® Scalable Snap Server® Storage Systems

SNAPserver® Expansion S50

The Overland Storage® Snap Expansion S50 provides cost-effective, flexible expansion for scalable Adaptec Snap Server™ storage systems. The Snap Expansion S50 comes as an unpopulated JBOD chassis, which can be filled with up to 12 SAS or SATA drives for a customized mix of price and performance that fits your specific storage needs. Use the Snap Expansion S50 to add storage to the Adaptec Snap Server 520 or 650 systems.

Rapid Throughput

The Snap Expansion S50 is ideal for data and transaction-intensive applications. Dual SAS host connections transfer terabytes of data at speeds up to 1200MB/s each, for an aggregate bandwidth of 2400MB/s.

Flexibility to Meet Your Needs

Each Snap Expansion S50 enables you to add between 300GB and 3.6TB SAS, or 250GB and 12TB SATA storage, so you can right-size your environment by purchasing only the storage you need. Scalable Snap Servers can support up to seven Snap Expansion S50 JBOD arrays, as well as a mix SAS and SATA drives, so you can easily add storage as your needs grow, while building a truly customized solution.

Reliability and Fault Tolerance

Hot-swappable drives and redundant, hot-swappable power and cooling are standard with the Snap Expansion S50. Plus, each disk drive has its own dedicated 3Gb SAS channel and point-to-point connection. This means that unlike traditional SCSI where all your drives were connected on a common bus and the failure of any drive could hang the entire bus, now a drive failure is isolated to that drive, without spreading to any other connections.

Real-Time Monitoring

Adaptec Advanced Enclosure Diagnostics continually monitors every component—power supplies, fans, disk drives, controllers—and shows you the status on a visual display. Each disk drive module also displays drive status and activity level with LEDs.

Universal Snap Server Expansion

The Snap Expansion S50 JBOD provides easy scalability for the Overland Storage Snap Server 520 and 650 storage systems. The Snap Server 520 and 650 can employ the Instant Capacity Expansion (I.C.E.) feature built into GuardianOS™, which enables the new capacity to be instantly available without disruption to users or applications.

- Supports SAS or SATA drives for a customized blend of price and performance to fit your specific storage needs
- Enables administrators easily add storage to Snap Servers as their needs grow – up to 84TB
- Provides point-to-point connectivity to isolate drive failures, thereby maximizing reliability and performance

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SNAP EXPANSION S50 JBOD SPECIFICATIONS

CONNECTIVITY	One SAS I/O module supports two SAS One SAS port for host connection and the other SAS connection as expansion to additional Snap Expansion S50 JBOD arrays Note: Snap Servers support daisy-chaining of up to 7 Snap Expansion S50 JBOD arrays. Expansion of Snap Server 520, 18000 and 4500 requires an optional Snap Server SAS HBA. For expanding Snap Server 700i Series or for DAS using the Adaptec 4800SAS or 4805SAS controllers, up to 8 Snap Expansion S50 JBOD arrays can be connected. Each SAS connection supports up to 1,200MB/s
DISK DRIVE INTERFACE	Twelve independent 300MB/s point-to-point connections to each SAS or SATA disk drive with dual port access and failover by each controller to each drive
MEASURED PERFORMANCE	Up to 750MB/s (sustained reads)
I/O MODULE FEATURES	Single controller SAS and SATA support Auto-negotiate speeds Inband and out-of-band management SMP and SSP command/protocol support Redundant cable support
CAPACITY	SATA: Up to 12 drives (12TB) capacity per 2U enclosure SAS: Up to 12 drives (3.6TB) capacity per 2U enclosure
REDUNDANT, HOT-SWAPPABLE COMPONENTS	Two advanced power and cooling modules (APC) Two independent AC power inlets Enclosure services Up to 12 drives No active components on data path
MAXIMUM SAS CABLE LENGTH	Up to 3m
RACKMOUNT ENCLOSURE DIMENSIONS	3.5in H x 17.6in W x 19.5in D (8.9cm H x 44.7cm W x 49.53cm D) Weight with drives: 60 lbs (27 kg) max
MONITORING	Temperature, advanced power and cooling modules including fan speed control, disk drives, and I/O module, as well as error rates and quality of service on each SAS
DISK DRIVES	Capacity: Up to 1TB Rotational velocity: 7200 RPM, 15k RPM Interface: 3Gb SAS; 3Gb/1.5Gb SATA II Form factor: 3.5in. form factor, 1.0 in. height Supported disk drives: Only Snap Server disk drives are supported
AC POWER	Input voltage: Autoaranging, 85-264 VAC Input frequency: 47-63 Hz Power factor correction: Per EN61000-3-2 Input current: 100-240 VAC @ 4-2.5 A Output power: 491 W peak, 430 W Heat Dissipation: 1467 BTUs/Hr. average for a fully populated system
OPERATING ENVIRONMENT	Temperature: 0° to 40° C Temperature gradient: 20° C per hour Relative humidity: 5 to 95 percent (noncondensing) Altitude: -200 to 10,000 ft Shock: 5G @ 11ms, 1/2 sine wave pulse Vibration: 0.2G @ 5Hz to 350Hz
ELECTROMAGNETIC EMISSIONS STANDARDS	CE Mark, EN55022 Class A, EN61000 Class A, FCC Class A, Canadian DOC Class A, VCCI Class A
SAFETY STANDARDS	UL 1950, CSA 22.2-950, EN 60950
QUALITY STANDARDS	Manufactured under an ISO 9002 registered quality system
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 Expansion S50 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.

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