

# SEPATON S2100-ES2™

## VIRTUAL TAPE LIBRARY SYSTEM



High-performance enterprise backup/restore solution with plug-and-play simplicity

### EASY TO INTEGRATE

Requires no modification of existing storage or backup infrastructure

### EASY TO USE

No changes in user routines; graphical management interface

### HIGH PERFORMANCE

Up to 10 times faster than tape drive systems

Up to 3 times faster than host-based disk-to-disk backup/restore

### FLEXIBLE

Enables multiple tape library types and multiple tape format emulations in a single appliance

### SCALABLE

Gracefully scale capacity from 3 terabytes to 1 petabyte in a single appliance

### EXTENSIBLE

Easily extend functionality with SEPATON ReadyRestore™ applications

# SHRINK BACKUP WINDOWS. ACCELERATE RESTORE TIMES. REDUCE COSTS.

**In today's data-intensive, 'round-the-clock enterprise environments, backup demands are growing—while backup windows are shrinking. The SEPATON S2100-ES2 Virtual Tape Library System meets this critical challenge with a high-performance, RAID-based solution that:**

- performs backups at up to 1200 MB/second—up to 10 times faster than tape systems and up to 3 times as fast as host-based disk-to-disk systems
- emulates a variety of popular tape library systems—no changes in end-user behavior
- integrates quickly and easily with existing storage and server infrastructures—it's up and running within minutes
- scales cost-effectively in both capacity and performance to keep pace with growing enterprise requirements—up to 1 PB at up to 4.3 TB/hour in a single appliance
- supports a growing family of SEPATON ReadyRestore™ applications, enabling you to add advanced, new backup/restore capabilities, quickly and cost-effectively

## A TURNKEY SOLUTION

The SEPATON S2100-ES2 is a complete backup/restore solution that combines Fibre Channel adapter technology, SATA RAID disk storage and SEPATON's unique ContentAware™ architecture to dramatically increase backup/restore performance, flexibility and scalability.

The S2100-ES2 emulates a variety of popular tape library environments and integrates with existing backup/restore applications, including: VERITAS NetBackup™, VERITAS Backup Exec™, Legato Networker™, CommVault® Galaxy™, IBM® Tivoli® Storage Manager, Computer Associates BrightStor®, and BakBone® NetVault™. To users, it looks and operates exactly like their existing tape library—except that it delivers wire-speed data transfer rates.

## EASY INTEGRATION

The S2100-ES2 offers appliance-like ease of integration in both SAN and non-SAN storage and server environments. The system can be up and running in minutes. Configuration is simple with the browser-based SEPATON S2100-ES2 Management Console. Graphical views of the library, media management and device management look exactly the same as the familiar tape library. A CLI is also provided which offers access to all functions available through the graphical user interface (GUI).

## FLEXIBLE EMULATION

The S2100-ES2 can be quickly configured to emulate a variety of automated tape libraries from StorageTek®, Quantum®, ADIC®, HP® and others. It can emulate up to 64 tape libraries simultaneously—accommodating heterogeneous server/application environments with a single system to reduce overall costs.

The S2100-ES2 emulates a variety of tape formats, including DLT, SDLT, LTO, AIT, and more.

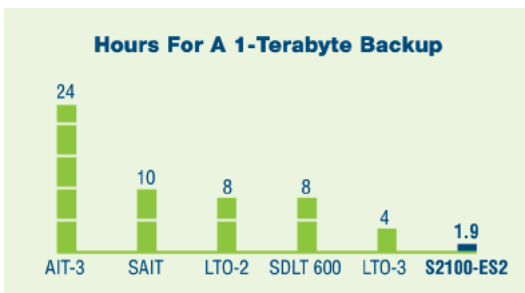
The S2100-ES2 is a complete turnkey solution which installs in minutes and integrates seamlessly with the leading backup and restore applications.



### UNSURPASSED PERFORMANCE

The S2100-ES2 eliminates tape drive bottlenecks to dramatically shrink backup windows and accelerate restore times with industry-leading backup speeds up to 4.3 TB per hour.

At the heart of the S2100-ES2's performance is SEPATON's unique Scalable Replication Engine (SRE)<sup>™</sup> technology. SRE nodes host the SEPATON emulation application and interface with media servers and backup hosts. Each node can support up to two 2-gigabit Fibre Channel ports, providing up to 300 MB/second aggregate bandwidth, with the ability to emulate up to 64 tape drives (up to 256 per appliance). A single S2100-ES2 can be configured with up to four SRE nodes to achieve its 4.3 TB/hour potential.



SEPATON's unique Scalable Replication Engine (SRE) technology enables a RAID-based virtual tape library with staggering speed, as compared to both tape-based and competing disk-based systems.

### SEAMLESS SCALABILITY

As your backup needs grow, so does the S2100-ES2. It is designed to scale from 3 terabytes to 1 petabyte of storage in a single appliance. Since each SRE node runs a copy of the VTL application, the S2100-ES2 offers linear scaling of performance.

### DATA COMPRESSION

The S2100-ES2 extends your backup capacity even further with integrated data compression averaging 2:1. Industry-leading compression technology effectively doubles your available backup storage, without compromising your backup/restore performance.

### ROCK-SOLID RELIABILITY

The SATA RAID 5-based storage of the S2100-ES2 is inherently more reliable than traditional tape backup. The S2100-ES2 eliminates aborted backups due to tape drive mechanical failures—improving backup efficiency and ensuring critical data is safe and sound. Hot swappable components, redundant cooling and power, and dual inlet power further enhance availability. Monitor appliance health via web-based system diagnostics with email component fault alerts.



**Web-based GUI.** The graphical S2100-ES2 Management Console puts you in control of all your SEPATON VTLs, with no host software. See, at a glance, all VTL components including emulated drives and cartridges. Easily add components, configure disks, and monitor appliance status and health, with real-time component failure email alerts.

### EXTENSIBLE FUNCTIONALITY

The S2100-ES2 offers the flexibility to extend the capabilities of the appliance by adding SEPATON's exclusive ReadyRestore family of data protection applications. SEPATON's ContentAware<sup>™</sup> architecture enables you to add new functionality—such as full Synthetic Full Backup, Remote Site Backup, Content-Based Compression and other advanced capabilities—without forklift upgrades.

## SPECIFICATIONS

<b>Capacity (usable):</b>	3 Terabytes minimum, 1 Petabyte maximum
<b>Performance:</b>	150 MB/second minimum, 1200 MB/second maximum
<b>Host Interface:</b>	2 Gigabit Fibre Channel, 1-8 ports
<b>Tape library emulations:</b>	Single or Multiple; up to 64 concurrent library emulations per appliance  Emulates: StorageTek L180, StorageTek L700, ADIC Scalar 24, ADIC Scalar 1000, ADIC Scalar 10K, Quantum/ATL P1000, Quantum/ATL P3000, Quantum/ATL P4000, Quantum/ATL P7000, HP MSL Series, HP ESL Series, Generic SCSI
<b>Tape drive emulations:</b>	Up to 64 per Scalable Replication Engine (SRE) node; up to 4 SRE nodes per S2100-ES2; 256 maximum per appliance  Emulates: IBM Ultrium LTO-1 drive, IBM Ultrium LTO-2 drive, HP Ultrium LTO-3, Quantum DLT-7000, Quantum DLT-8000, Quantum SDLT-1, Quantum SuperDLT 320, Sony AIT-2, Sony AIT-3, IBM 3590, StorageTek T9840, StorageTek T9940

## MANAGEMENT

<b>Web-based GUI:</b>	Configuration wizards; real-time graphical system monitoring; email system alerts; SNMP trapping. CLI also provided
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## CABINET CHARACTERISTICS

	BASE CABINET	EXPANSION CABINET
<b>Max. Capacity (usable):</b>	37.5 TB	43.5 TB
<b>Height:</b>	80 in.	80 in.
<b>Width:</b>	24in.	24 in.
<b>Depth:</b>	38 in.	38 in.

## POWER REQUIREMENTS

<b>Voltage:</b>	220VAC	220VAC
<b>Frequency:</b>	47Hz to 63Hz	47Hz to 63Hz
<b>Max Current:</b>	26A (220V)	22A (220V)
<b>Power Cord Connector:</b>	L14-20P (220V)	L14-20P (220V)
<b>Max Power Consumption:</b>	6263W	4897W
<b>Weight:</b>	Base Unit with one array: 530 lbs. (241 kg) Each additional array: 91 lbs. (41 kg)	

## ENVIRONMENTAL

### (Operating Ranges)

<b>Humidity:</b>	10-80% non-condensing
<b>Temperature:</b>	10-40 degrees C
<b>Max. Altitude:</b>	10,000 ft (3050 m)
<b>Vibration:</b>	.25 G @ 3Hz – 20Hz for 15 mins
<b>Shock:</b>	1 shock up to 20 G for 2 msec
<b>Agency Approvals:</b>	FCC Class A Part 15, UL 1950 Listed, EN 60950, CE Compliant

### A Commitment to Data Protection

At SEPATON, we are entirely focused on a single goal: to provide the most capable, easy-to-use enterprise data protection solutions available. Our breakthrough solutions enable corporate data centers to keep pace with their growing information protection needs, while reducing their total cost of ownership. With significant engineering resources and innovative, proprietary technologies, SEPATON is committed to expanding its product family to provide the industry's most complete solution for protecting your critical data—and preserving your technology investment.

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