SEPATON S2100-ES2 MULTIFUNCTION DATA PROTECTION APPLIANCE
Enterprise Performance, Deduplication, and Scalability

The SEPATON S2100®-ES2 Series 1900/2900 is the fastest, simplest, and most scalable data protection solution in the industry. This enterprise-class, multifunction appliance delivers intelligent data protection powered by our proprietary ContentAware™ technology. The S2100 collects and uses metadata from the backup stream to provide advanced deduplication as well as intelligent monitoring and management of data assets throughout the data protection life cycle, from backup to restore to long-term retention and deletion.

The SEPATON S2100®-ES2 is an intelligent data protection appliance that delivers a comprehensive and flexible solution for easily and cost-effectively protecting and managing data through all phases of the data protection lifecycle.

STORAGE POOLING PROTECTS THE CLOUD

The S2100 features storage pooling, enabling you to create discrete storage environments (pools) within a single appliance and provision each with its own disk type, deduplication configuration, replication priority, backup policies, backup application. Benefits include:

- **Meet cloud multi-tenancy and charge-back requirements.** S2100 appliances support public and private cloud infrastructures by enabling managers to protect and manage data from multiple clients, departments, or applications in a single appliance. Pool-level usage is tracked and efficient charge-back reporting.

- **Maximize ROI.** The S2100's multi-node, scalable DeltaScale™ architecture enables you to store all of your data in a single system for CAPEX and OPEX efficiency.

- **Improve quality of service.** You have the flexibility to provision performance and capacity where you need it for optimal service levels for ingest performance, replication, or deduplication.

INTELLIGENT MANAGEMENT AND REPORTING BY POOL

The S2100-ES2's DeltaView™ Manager console enables one administrator to manage petabytes of data in one easy-to-manage system.

SEPATON's ContentAware™ Analytics provides detailed pool-level reporting, including a centralized view of capacity growth, consolidated reporting of usage for charge-back as well as trending reports for capacity and performance planning.

GRID SCALABILITY CUTS CAPITAL EXPENSE

SEPATON's unique DeltaScale grid architecture enables you to start with a single processing node and add up to seven more to scale performance to 4800 MB/second in one appliance. Scale usable capacity of an appliance from 12 TB to 1.6 PB (without deduplication) by adding disk. Scaling is also simplified with cabinets that are pre-cabled for non-disruptive expansion.

The S2100-ES2 automatically brings added storage or performance on-line and configures the devices to the optimal settings.

The S2100-ES2 is also equipped with high density 2TB drives and hardware compression to optimize its physical storage capacity so you can store more data in a single easy-to-manage system.

DeltaStor® deduplication software further optimizes capacity by performing concurrent, byte-level deduplication of petabytes of data without slowing performance.

HIGH AVAILABILITY DESIGN

The S2100-ES2 is designed for high availability with features that include:

- SATA RAID 6-based Hitachi Data Systems enterprise-class storage with hot spare disks and non-disruptive firmware upgrades
- Redundant control and data paths with dual battery backup
- Redundant cooling
- Hot swappable power
- Real-time 24x7 platform monitoring and diagnostics and automated alerts.
- Redundant, internally mirrored drives protect critical software

The S2100 cabinet is also designed for enterprise-class reliability and scalability incorporating a fully redundant infrastructure, including power distribution units, Ethernet switches, Fibre Channel switches, lights-out management, and pre-cabling for expansion.

BANDWIDTH OPTIMIZED REPLICATION

DeltaRemote™ software enables fast, cost-effective replication of large data volumes by transmitting only new data.

DeltaRemote can reduce bandwidth requirements by up to 97 percent. The S2100-ES2 Series 1900/2900 can be used as a target or source for replication in existing SEPATON environments. Combined with storage pools, this capability enables you to prioritize replication by pool.

SECURE ERASURE OPTION

Secure Erasure™ is a licensed option for the S2100-ES2 that delivers guaranteed, audit able erasure of data on virtual tape cartridges. With Secure Erasure, storage administrator can schedule all or selected cartridges to be completely over-written with a National Institute of Standards and Technology (NIST)-approved data pattern. Secure Erasure generates audit reports for each cartridge as auditable proof of destruction.

WORLD-CLASS SUPPORT AND SERVICES

Technical support is available 7x24, 365 days per year. Enhanced services include parts delivery within four hours. The S2100-ES2 features remote monitoring, predictive failure analysis, and automatic alerting to enable users and the SEPATON Support Center to optimize system efficiency and to minimize unscheduled downtime by anticipating issues that may affect data protection. SEPATON supports the appliance for up to five years after the last ship date.

EXPERT PROFESSIONAL SERVICES

SEPATON provides a wide range of planning, design and assessment services, including Backup Assessments and Optimization Services engagements. These services go beyond system installation to provide expert professional consulting to help customers reduce costs and improve the efficiency of their backup environments.

SEPATON S2100-ES2 Series 1900/2900 Specifications

Performance	Minimum: up to 600 MB/sec., maximum: up to 4800 MB/sec.
Physical Capacity	(Usable) Minimum: 12 TB, maximum: 1.6 PB
Host Interface	4 Gb Fibre Channel, 1-16 per system
Virtual Devices	Maximum: 96 per node; 8 nodes, 768 virtual devices per appliance. (Minimum: one SRE® node per appliance)
Virtual Cartridges	Maximum: 5.3 million

Cabinet Characteristics	Base	Expansion
Usable Physical Capacity	Maximum: 96/192 TB (1TB/2TB drives)	Maximum: 156/312 TB (1TB/2TB drives)
Dimensions (in.)	80 H X 24 W X 40 D	80 H X 24 W X 40 D
Weight	Minimum: base unit with 1 array 526.5 lbs. (239 kg) Maximum: less than 1700 lbs. (772.7 kg)	

Power Requirements	US, Canada	Europe, Asia, Korea
Input Voltage (VAC +/- 10%)	120/208 VAC - 3 phase, 20A/phase (3P+PE)	230/400 VAC - 3 phase, 16A/phase (3P+N+PE)
Frequency	47/63 Hz	47/63 Hz
Input Power Connections (2 per cabinet)	Wellshin WS-267 plug, 250V-50A, 10 ft. cord (requires Wellshin WS-291 connector)	IEC 309 plug, 230-16A, 3 M cord
Maximum Power Consumption	7406 W (base) 4658 W (expansion) (Continuous for fully configured cabinet)	
Main Circuit Protection	Min 3-pole, 40 amp circuit breaker required; max 50 amp 3-pole breaker	

Environmental Operating Ranges

Humidity	10-80% non-condensing
Temperature	10-35 degrees (C)
Altitude	Maximum: 10,000 ft. (3050 m)
Vibration	.25 G @ 3 Hz - 20 Hz for 15 minutes
Shock	1 shock up to 20 G for 2 msec.
Certifications	FCC Part 15, CE (EN55022, EN55024), VCCI, AS/NZS (CISPR 22); CSA 60950, CE (EN60950); ISO 9001; RoHS, Korean KCC mark (MIC mark)

Tape Library Emulation
ADIC Scalar 1000, ADIC Scalar 10K, ADIC Scalar 24, Generic SCSI, HP ESL Series, HP MSL Series, HP Autoloader 1/8, IBM 3584, Quantum/ATL P1000, Quantum/ATL P3000, Quantum/ATL P4000, Quantum/ATL P7000, StorageTek L180, StorageTek L700

Tape Drive Emulations
HP Ultrium LTO-1, HP Ultrium LTO-2, HP Ultrium LTO-3, HP Ultrium LTO-4, IBM 3590, IBM 3592, IBM Ultrium LTO-1, IBM Ultrium LTO-2, IBM Ultrium LTO-3, IBM Ultrium LTO-4, Quantum DLT-7000, Quantum DLT-8000, Quantum SDLT-1, Quantum SuperDLT 320, Sony AIT-2, Sony AIT-3, StorageTek T9840, StorageTek T9940