

Acceleron SAN® C-Series



Acceleron SAN is a unified storage arrays are designed with enterprise features and reliability at an entry-level cost. This Software Defined Storage solution well suited for wide range of applications. It is suitable for Enterprises looking for flexible storage options. Available in two models, the Acceleron SAN C100 provide unified file, block, and object storage, and are available in single hybrid or all-flash configurations. The Acceleron SAN C-Series offers excellent reliability and affordability for small and medium IT environments.

The Acceleron SAN C-Series fits a wide range of applications from file and media storage to business continuity, video surveillance, and many others. The Acceleron SAN C-Series provides data integrity, reliability, and ease-of management for business.

FLASH ASSISTED PERFORMANCE

Acceleron SAN gives Solid-state performance by caching read and write. Acceleron SAN leverages ZFS to merge multi-layer DRAM and flash cache with high-density spinning disks: system RAM and SSDs are used to cache reads and writes while HDDs store the data.

STORAGE OPTIMIZATION

Acceleron SAN maximizes storage efficiency by offering compression, deduplication, and thin provisioning at no extra cost. Before data is stored, Acceleron SAN dynamically detects and compresses what it can and skips over any data too inefficient to be worthwhile.

UNLIMITED SNAPSHOTS AND REPLICATION

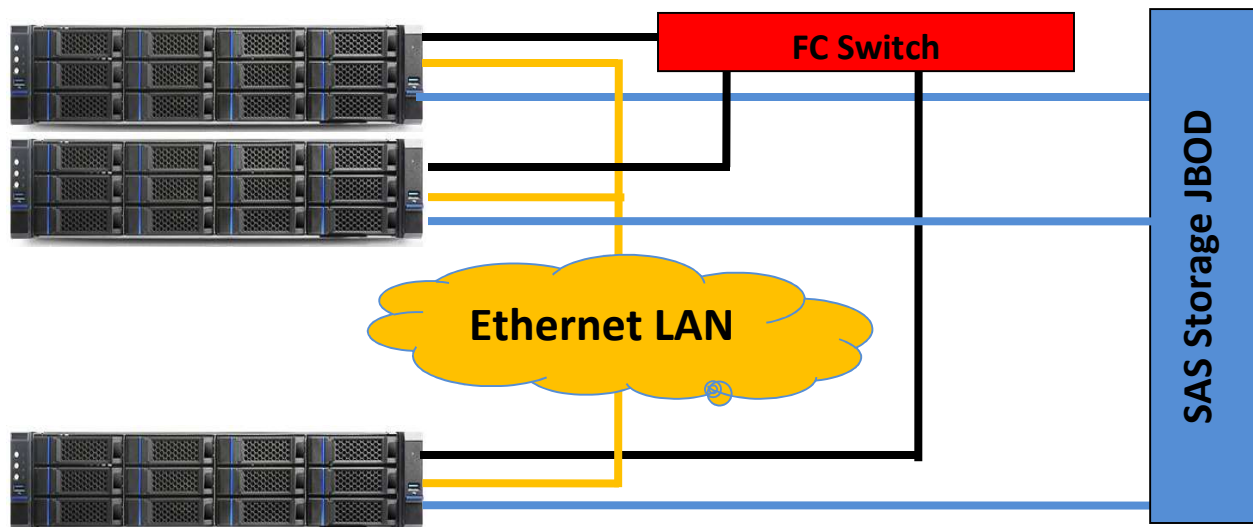
Most storage appliances require additional licenses for advanced features – but not Acceleron SAN. Unlimited file version retention, restoration, and replication are some of these features. Data is automatically protected locally against unintentional alteration, such as ransomware or malware, with minimal storage consumption. Data can be replicated locally, remotely, or to the cloud for backups or disaster recovery.

Acceleron SAN Data Protection

Acceleron SAN C-Series has automatic and scheduled multi-layer data integrity checks ensure data consistency, while unlimited snapshots and clones make it is easy to implement a disaster protection strategy and to instantly roll back to a previous point-in-time. At the same time, a scheduled self-healing mechanism fixes malfunctions and automatically restores full data redundancy in the system. Even when a disk fails, the software-based spare function offers one disk to several RAID arrays, saving you money on extra hardware without compromising data safety

Optimized for Data Centre

The Acceleron SAN C-Series is optimized for the modern data center, ready for compute-intensive applications that involve big data, BlockChain, AI, intensive virtualization workloads and higher-density server configurations. It helps customers a web based management of storage infrastructures and maintaining continuous operations during updates or refreshes. It support various configurable options such as Intel Scalable CPU power, Fibre Channel connections, networks running, 10, 25, 40, 50 or 100 Gb Ethernet while developing solutions specialized for datacenter.



Acceleron SAN Scalability

Acceleron SAN C-Series will let you experience unlimited flexibility and minimize downtime. Acceleron SAN AS-Series uses a 128-bit file system that includes unlimited snapshots for easy backup, unlimited clones for easy duplication, unlimited capacity with volume sizes up to one Zetabyte, as well as unlimited amount of disks which can be increased on the fly without effort by using thin provisioning. There are no limitations and you may easily control the total cost of ownership and expand your storage infrastructure as data grow

ACCELERON SAN Software Specifications	
Storage Architecture	<ul style="list-style-type: none"> • HDD + Optional R/W Cache • SSD + NVMe R/W Cache
Storage Technology	<ul style="list-style-type: none"> • SATA • SAS • NL-SAS • SSD • NVMe
Read Cache Technology	<ul style="list-style-type: none"> • SAS SSD, NV-DIMM
Enterprise File System	<ul style="list-style-type: none"> • OpenZFS – File System • Block File System • Object File System
Data Management	<ul style="list-style-type: none"> • Snapshots • Replication • Rollback • Clones • Encryption • Mirroring • RAIDZ1/Z2/Z3
Data Reduction	<ul style="list-style-type: none"> • Thin Provisioning • Compression • Clones • De-duplication
Access Protocol	<ul style="list-style-type: none"> • SMB/CIFS • FTP • Secure FTP • HTTP • Apple Talk • NFS v3 • FC (Fibre Channel)
Application Integration	<ul style="list-style-type: none"> • Application Plugins
Software Compatibility	<ul style="list-style-type: none"> • Clients: Microsoft Windows, Linux, UNIX, Mac OS 8.0-10.5.8, X
Administration	<ul style="list-style-type: none"> • Unlimited number of users, groups, NICs or HDDs • English, German and Japanese language • Tuning Tools for advanced administrators • Remote Access Console • Automated update and rollback to previous OS version • Task and Schedule Manager • Command Line Interface (CLI) and WebGUI • Save and restore • settings Connection status and session management

Network management	<ul style="list-style-type: none"> • DHCP Client • Teaming / Bonding (including Adapter Fault Tolerance) • Proxy Settings • Jumbo Frames • Static Routing Manager
Storage management	<ul style="list-style-type: none"> • Software and Hardware iSCSI Initiator • Software RAID 0, 1, 4, 5, 6, 10 • Fibre Channel HBA support (initiator and target mode) • Multiple snapshots (multiple active snapshots - one LV at a time) • Logical Volumes and Groups • Online Logical Volume Expansion • Online RAID Capacity Expansion • Support for Automatic Session Reassignment (ASR) for FC and iSCSI protocols
Storage management/replications	<ul style="list-style-type: none"> • Synchronous Volume Replication over LAN • Asynchronous Data (file) Replication over LAN and WAN • Dynamically managed re-sync bandwidth of Volume Replication
Monitoring	<ul style="list-style-type: none"> • Hardware monitoring • S.M.A.R.T - monitoring system for hard disc drive failures • SnMP v2, v3
Specific NAS functionality	<ul style="list-style-type: none"> • Active-Active NFS Failover (separate Feature Pack) • Windows Active Directory / Primary Domain Controller • Support for Network Information Service (NIS) Internal and external LDAP User and Group Quota Control Antivirus
Data integrity and availability	<ul style="list-style-type: none"> • ZFS 256-bit block level checksums • Mirror (eq. RAID 10), RAID-Z1, -Z2, (eq. RAID 5, 6), -Z3 • On- and Off-site Data Protection • Active-Active or Active-Passive dual node HA Cluster for iSCSI, FC and NFS, SMB (CIFS) • Self-healing against silent data corruption • Disk Multipathing • Hot Spare Disk configuration
Data optimization	<ul style="list-style-type: none"> • RAM, SSD and HDD hybrid pool • Tiered Caching • Unlimited Snapshots • Unlimited Clones (writable Snapshots) • Thin Provisioning • Over Provisioning • Inline Data Deduplication • Inline Compression
Management	<ul style="list-style-type: none"> • WebGUI, Console UI, CLI • SNMP and REST API • E-mail notification Roll-back to previous configuration • Remote Diagnostics from CLI

Examples of supported HA configurations	<ul style="list-style-type: none"> • Cluster in a Box (CiB) • Common Storage • Cluster over SAS Cluster over SAS with internal SAS expander • Cluster with multiple JBODs over SAS or FC • (Stretched) Metro Cluster over Ethernet And more...
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ACCELERON STOR Hardware Specifications	
Form factor	<ul style="list-style-type: none"> • 2U/4U, 19" rack mount • Dimensions (WxDxH) – 438 x 658 x 174 (mm)
Processor subsystem	<ul style="list-style-type: none"> • Dual Controller • 2 x Intel Xeon Processor upto 165W • From 128GB to 1TB RAM • Support Intel® Optane™ DC Persistent memory • Intel® C621 chipset
Max Physical Storage	<ul style="list-style-type: none"> • 384TB in 2U or Expanded to 640TB in 4U • It can scale up to 2PB with additional disk enclosures
Read Cache Size	<ul style="list-style-type: none"> • 480GB Intel® Optane™ NVMe
Front Control	<ul style="list-style-type: none"> • Power button • System reset button
Front I/O Ports	<ul style="list-style-type: none"> • 2 x USB 3.0
Visual Indicators	<ul style="list-style-type: none"> • Power • UID • LAN activity • HDD status
Rear Panel	<ul style="list-style-type: none"> • 10 x10Gbps Network interfaces • 2 x40Gbps /1 x100 Gbps Network interfaces / IB Interface (optional) • 4 x 10Gbps iSCSI ports • 4 x RJ45 Network interfaces (10/100/1000 Base-T) • 1 x IPMI interface (10/100/1000 Base-T) • 1 x VGA • 1 x DB-9 (serial port)
Fibre Channel	<ul style="list-style-type: none"> • 4 x 16Gbps FC ports
SAS Interface	<ul style="list-style-type: none"> • External SAS Interface for JBOD
Drive bays	<ul style="list-style-type: none"> • 2U 24 x 3.5" SAS/SATA or 24 x 2.5" SATA/SAS disks (configured at purchase) • Expanded using with JBOD enclosures, expand upto 480 x 3.5" SAS/SATA or 480 x2.5" SAS/SATA disks disks (configured at purchase)
Power	<ul style="list-style-type: none"> • 2 (1+1) CRPS (80+ Platinum)
Cooling	<ul style="list-style-type: none"> • 80 x 25/38mm internal fans
Temperature	<ul style="list-style-type: none"> • Operating: 10°C to 35°C (50°F to 95°F)

Acceleron SAN

Product Specifications

	<ul style="list-style-type: none">• Non-operating: -40°C to 70°C (-40°F to 158°F)
Weight	<ul style="list-style-type: none">• 15Kg
Operating System	<ul style="list-style-type: none">• Linux

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