Acceleron NAS
Product Specifications

Acceleron NAS® A100

Acceleron NAS unified storage arrays are designed with enterprise features and reliability at an entry-level cost. Available in two models, the Acceleron NAS A100 provide unified file, block, and object storage, and are available in single hybrid or all-flash configurations. The Acceleron NAS A-Series offers excellent reliability and affordability for small and medium IT environments.

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

Acceleron NAS is a dedicated file storage device that enables multiple user computer and heterogeneous client devise to access centralized storage over LAN.

HYPERCONVERGED NAS

Acceleron NAS A-Series comes with hyper converged storage and web scale features. User can scale up NAS storage without affecting performance of existing storage by adding more storage NAS boxes as a cluster at no-extra provisioning cost.

FLASH ASSISTED PERFORMANCE

Acceleron NAS gives Solid-state performance by caching read and write. Acceleron NAS 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 NAS maximizes storage efficiency by offering compression, deduplication, and thin provisioning at no extra cost. Before data is stored, Acceleron NAS 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 NAS. Unlimited snapshots and replication, compression and Deduplication are some of its advanced features. A-Series also support unlimited file version retention, restoration, and replication features too. Acceleron NAS can be used as storage local storage, remote backup storage, or to the cloud for backups or disaster recovery.

AUTO- TIERING SUPPORT

Acceleron NAS A100 supports cache tiring feature which implements auto-tiring feature, during setup user can specify different Tiering options to setup a volume based on the type of storage available in the storage box. It helps the administrator to setup a dynamic and automatic placement/ movement of data across the right disk storage tiers based on defined policies configured during initial configuration.

NAS Software Specifications	
Storage Architecture	• HDD + Optional R/W Cache • SSD + NVMe R/W Cache
Storage Technology	• SATA • SAS • NL-SAS • SSD • NVMe
Read Cache Technology	• DDR3/4/5 RAM or SATA SSD (**Minimum 32GB DDR RAM**)
Write Cache Technology	• SAS SSD based write Cache (**Global)**
Enterprise File System	• Block File System • Object File System
Data Management	• Snapshots • Replication • Rollback • Clones • Encryption • Mirroring • Hardware RAID 0/1/5/6/10/50/60 (For A100 with Microsoft Server based NAS) and RAID Z1/Z2/Z3 (For A100 with FreeBSD based NAS) • Wide Stripping
Data Reduction	• Thin Provisioning • Compression • Clones • De-duplication
De-Duplication Features (For A100 with Microsoft Storage Server based NAS)	• Support for multiple schedules when de-duplication process can be run. • Support for limiting the time period of deduplication process. • Support for bypassing the recent files under the de-duplication process so that production operations remain intact. • Support for more than 64TB of file system for de-duplication.

Access Protocol	• TCP/IP • NFSv3 • NFSv4 • NFS 4.1 (Windows Storage Server based NAS) • SMB • CIFS • AFP • iSCSI, • HTTP/WebDAV
	• FTP
Application Integration	• Application Plugins
Software Compatibility	• Clients: Unix, AIX, Linux, Solaris, Windows,FreeBSD, MacOS
Volume Migration	• FC to iSCSI and iSCSI to FC Volume migration
Monitoring	• Web based GUI • System Status Monitoring • SNMP Traps • Event Log functions • USB BACKUP & RESTORE • EMAIL Alerts
Network Management	• GUI based tool for network, storage management • CLI based tool for network, storage management
IP protocol	• Support both IPv4 and IPv6
Replication	• Synchronous Volume Replication over LAN • Asynchronous Data (file) Replication over LAN and WAN • Dynamically managed re-sync bandwidth of Volume Replication • Upto 100TB license for replication through DFS-R (A100 with Microsoft Windows Storage Server)

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NAS Hardware Specifications	
Form factor	• 1U/2U/4U, 19" rack mount, expanded using Disk Enclosure • Dimensions (W)–174 mm • Configured at purchase
Storage Controller Processor subsystem	• Single Controller with single socket or dual socket • Intel Xeon 2nd Generation or 3rd Generation processors withcores ranging from 4 cores to 64 cores • RAM configured in the range of 16GB to 1TB DDR4 • Boot Volume 2 x240GB SATA SSD • Configured at purchase
Storage OS	• Preconfigured Storage OS on SSD drives with RAID 1
Max Physical Storage	• 36 x 3.5" HDD/SSD and 2PB+ with additional Disk Enclosure
Read Cache Size	• Optional support
RAID Controller	• LSI MEGARAID SAS 9361-8i 2GB cache • LSI MEGARAID SAS - 9305-16e, 0/1/5/6/10/JBOD
Front Control	• Power button • System reset button
Front I/O Ports	• 2 x USB 3.0
Visual Indicators	• Power • UID • LAN activity • HDD status
Rear Panel	• 2 x RJ45 Network interfaces (10/100/1000 Base-T)
	• 2 x RJ45 Network interfaces (10/100/1000/10000 Base-T/SFP+) • 1 x IPMI interface (10/100/1000 Base-T) • 1 x VGA • 1 x DB-9 (serial port) • 2 x 16Gbps FC • 4 x 12Gbps SAS Interface
Expansion slots	• 1 x PCIe 3.0 x16, Low Profile • 2 x PCIe 3.0 x8, Low Profile
Drive bays	• 36 x 3.5" or 2.5" SAS/NLSAS/SSD (configured at purchase) Additional Capacity expansion with additional Disk Enclosure
Power	• 2 (1+1) CRPS (80+ Platinum)
Cooling	• 80 x 25/38mm internal fans
Temperature	• Operating: 10oC to 35oC (50oF to 95oF) • Non-operating: -40oC to 70oC (-40oF to 158oF)
Weight	• 35Kg
Operating System	• FreeBSD/Microsoft Windows Storage Server 2016/2019/2022, • Microsoft Windows Server IOT 2019/2022 • Linux

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