

Storage Management System

NETArchive
Datasheet

A vital component of ASTI's fully inclusive NAS based NETArchive® solution is the designed-in Storage Management System (SMS). Featuring the latest storage server technology from industry-leading manufacturers, the server provides the high-performance throughput and power required to support scalable data archiving operations.

The 2U server chassis fits neatly into a standard rack mount configuration along with other solution components. Designed to manage up to 2.8 PB of nearline data with virtually limitless offline media management, the SMS accelerates internal operations with a robust hardware configuration that includes up to 72 TB RAID Cache, high-speed I/O communications, and NETArchive S-Series libraries scaling up to 18 ODA Optical drives.

Each SMS comes preconfigured with ASTI's Archive Management Software (AMS) designed specifically for data archiving. The easy-to-use AMS application enables the server to present itself as a standard network resource with support for SMB, NFS, and FTP protocols. Data is automatically migrated to libraries in accordance with policies established within the AMS.

ASTI's high-powered Storage Management System has the hardware speed and functionality to support archiving solutions of any size or capacity whether small business or the largest enterprise.

Features

- Archive Controller w/Quad Core Processors
- 10MB Internal cache memory
- SAS RAID Drives
- Select from 2-12 RAID drives
 - Up to 72TB RAID Cache (RAW)
- Hardware RAID Controller with Supercap/NAND backup
- RAID Configuration Protection
- Redundant power supplies
- High speed connectivity to library drives
 - Dual HBA 8Gb Fibre Channel for Enterprise archives
 - Dual USB 3 Super speed for small to medium archives
- Standard NAS interface – dual 1Gbe Ethernet ports with load balancing and failover
- Rack mount or desktop installation
- RoHS Certified
- Pre-installed full-featured Archive Management Software (Ref: AMS datasheet for details)

Summary Overview

- Provides a high-speed, high-capacity hardware foundation for archiving large amounts of unstructured data (small, medium or enterprise archives)
- SMS, AMS and library components are fully integrated for easy installation and setup
- Supports incremental, non-disruptive scaling of libraries and drives
- Integrated server offers superior operational efficiency
 - Fewer devices to manage
 - Higher degree of service integration and consistency compared with multiple independent components
- Easily connects to NETArchive S-Series rack mount or desktop libraries
 - High speed fiber channel library connection optimizes drive/media accessibility (Enterprise connectivity)
 - Super USB (small to medium archives)
- Convenient space-efficient rackmount options



The SMS provides the high-performance throughput and power required to support scalable data archiving operations.

Storage Management System

SMS Technical Specifications

| | |
|--|--|
| Archive Controller CPU | Quad Intel Xeon E5 3.5Ghz |
| Cache RAM Internal | 10 MB Smart |
| SAS Ports | 8 |
| PCIe Bus | 5 GB/s Gen 3 |
| SSD Drives | 2 |
| Max Mem Bandwidth | 68 GB/s |
| Network Connectivity | Dual - 1Gbe +IPMI Bondable for Load Balancing or Failover |
| Redundant Power Supplies | Yes |
| RAID Drives (SAS) | 2 TB or 6 TB |
| RAID Cache (2, 8 or 12 drive) | 4-72 TB Max Raw |
| Configurable Global Hot Spares | Up to 2 |
| Library to Drive Connectivity - NAS30, NAS60 (ENT SMS includes Dual FC Card) | Fibre Channel 8 Gbps |
| Library to Drive Connectivity - NA Express | Super USB 3.0, 3.2 |
| Cables | |
| Power Supply Cables | Qty 2, 10 foot |
| Ethernet Cables RJ45 | Qty 2, 25 foot |
| Fibre Channel Cables ENT Only | Qty 2, 3mm LC |

Notes:

- Enterprise systems with more than two drives require a Fibre Channel switch for communication with library/drives. Reference field install document for cable specifications
- Fibre Channel cables are included with ODA1, ODA2 & ODA3 S Series FC Drives (Qty 1, 3mm LC)
- See NETArchive rack specifications for mounting details
- SMS includes snap-in rack mount slides (all models)
- RAID expansion options are available - contact ASTI for technical details

SMS Physical & Environmental Specifications

| | |
|--|--|
| SMS & Mounting Dimensions | |
| Height | 3.5" 2 U standard |
| Depth | 25.5" 3.0" 0.5" 1.75" 26-9/16" |
| Width | 17.6" rack opening clearance 19.0" |
| Slide Rail Posts: | 1-5/8" between square retractable guide posts |
| Slide Rail Holes: | #10 x 32 Thread |
| SMS Weight | |
| Max Config fully loaded (lbs / kgs) | 56 lbs / 25 kgs |
| Shipping Weight | |
| SMS (lbs / kgs) | 82 lbs / 37 kgs total |
| Shipping Dimensions | |
| SMS (LxWxH) inches | 36" x 26" x 15" |
| Power | |
| Operating Voltage (auto ranging) | 100 to 240 VAC (50-60Hz) |
| AC Current (Varies according to drives) | 1.5 - 3.4 Amps |
| Environment | |
| Operating Temperature | 50-90F / 10-32C |
| Humidity | 8% to 90% RH (non condensing) 5% to 93% RH (non condensing) 10% per hour |
| Temperature | 10 to 35 °C (50 to 95 °F) 40 to 70 °C (-40 to 158 °F) 10 °C per hour |
| Heat Dissipation (Min/Max BTU/per hour) | 717-1187 |
| Warranty | 1 Year Warranty |

SMS Enterprise/SMB Rackmount Models

| | |
|-------------|---------------------------------|
| NA-R100F-2 | Qty 2, 2TB/6TB SAS RAID Drives |
| NA-R100F-8 | Qty 8, 2TB/6TB SAS RAID Drives |
| NA-R100F-12 | Qty 12, 2TB/6TB SAS RAID Drives |

RAID Configurations (6TB SAS HDD's)

| 2 Drive RAID 1 | | 8 Drive RAID 6 | | 12 Drive RAID 6 | |
|----------------|--------|----------------|--------|-----------------|--------|
| Raw | Usable | Raw | Usable | Raw | Usable |
| 12TB | 5.5TB | 48TB | 16.8TB | 72TB | 39.1TB |



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