



Welcome to mRAID16: High Performance massively scalable 4K/8K video storage for the media and entertainment industry

Active Storage's mRAID16 is specifically designed to meet the evolving challenges of modern broadcast and post-production storage infrastructures. It is a high performance and massively scalable 4K/8K video storage system for the most demanding media workflows. The mRAID16 has performance, scalability and configuration flexibility to meet nearly every broadcast and post-production facility's needs from ingest to archive.

mRAID16 is a continuation of the Active Storage award winning mRAID storage system. It is designed for the smoothest workflow, highest ease of use, and ultimate user collaboration and creativity. Combining superior performance and massive capacity in one system, mRAID16 is the product to address all customers' media storage needs in house.

Storage Architecture for 4K/8K Workflow

With a deep understanding of media workflow, mRAID16 is architected to support 4K/8K uncompressed video streams. It comes with dual-controller in standard configuration providing over 6GB/s data throughput. The system can easily scale-out to multiple controllers with over 20GB/s bandwidth. mRAID16 is an ideal primary storage for 4K/8K media workflow.

Innovative System Software

mRAID16 comes with a hyper-converged architecture. Its virtualized RAID kernel design separates physical hard drives from logical volumes. It divides disk space into small data blocks, and uses the blocks to create RAID groups for fine-grained resource management. This technology realizes automatic load balancing, higher storage performance, better storage space utilization, and faster disk reconstruction.

Massive Media Storage

Besides its outstanding performance for media workflows, mRAID16 is excellent for near-line and archive storage. It comes with a 2U 12-bay controller enclosure and 4U 24-bay expansion enclosures that supports up to 6PB in a dual-controller mRAID16 system.

ActiveManager

ActiveManager is a browser based, Apple friendly, modern graphical user interface for mRAID16. It provides system monitoring, configuration and performance statistics in single software application. ActiveManager is a powerful, intuitive, and easy to use tool to manage the mRAID16.

Business benefits

- Ideal in SAN environment for Mac, Windows and Linux workstations
- High performance storage for content creation
- Enterprise performance and reliability without enterprise complexity
- High availability architecture against any component failure
- Linear scale-out performance and capacity

Key features

- Massively scalable shared storage for performance and capacity
- 4K/8K media workflow optimized video storage
- Near-line and archive storage up to 6PB in capacity
- True all-active controller design
- FC16 and 10GE interfaces deliver over 6GB/s data throughput
- Fastest disk rebuild time down to minutes from days
- Supports all SSD and multi-tier SSD/HDD configurations

Post Production Workflow



Additional features

- Hyper-converged architecture with enterprise performance and reliability
- Block virtualized RAID kernel design provides an unmatched level of fine-tuning and fastest disk rebuild time
- Redundant path, multiple FC and 10GE ports and large cache guarantee maximum performance
- Controllers automatically load balance to provide highest throughput
- Fully redundant components with seamless fail-over and fail-back
- Dynamic online capacity expansion and drive roaming
- Battery-backed cache to hard disks guarantees no data loss
- Low noise and high energy-efficient power and cooling system
- Automated ID assignment and one stroke power on/off for all enclosures
- 100% Apple Xsan and Active Storage vSAN compatible
- Browser based Apple friendly management suite
- Scale-out architecture for both SAN and NAS

Technical specifications

- Dual Intel Xeon 6-core processors
- System capacity: 48TB expandable to 6PB
- Front-end interface (standard): 8x 16Gb/s FC or 8x 10Gb/s Ethernet
- Front-end interface (optional): 16x 16Gb/s FC or 16x 10Gb/s Ethernet
- Front-end interface: Mix FC or Ethernet ports
- Back-end interface: 4x 12Gb/s SAS ports
- Expansion uplink/downlink: 8x 12Gb/s SAS ports
- System cache: 48GB standard expandable to 128GB
- RAID level support: 0, 1, 3, 5, 6, 10 and 50
- Disk support: SSD, SAS and NL-SAS
- Power: 100V to 240V AC
- Controller enclosure: 2U, 3.4"x17.6"x29.5", 122 lbs.
- Expansion enclosure: 4U, 6.9"x17.6"x19.3", 124 lbs.
- Operating temperature: 5°C to 40°C
- Operating humidity: 10% to 90%

Dual-Controller System



Front view



Rear view

Expansion



Front view



Rear view

Configurations

	48TB System	96TB System	96TB Expansion	192TB Expansion
Overall Capacity*	48TB expandable to 6PB	96TB expandable to 6PB	96TB	192TB
Connectivity	8 x 16Gb/s FC	8 x 16Gb/s FC	2 x 12Gb/s SAS	2 x 12Gb/s SAS
Hard Drive Module	Hot swappable 4TB NL-SAS	Hot swappable 8TB NL-SAS	Hot swappable 4TB NL-SAS	Hot swappable 8TB NL-SAS
Controller	Dual 6-core Xeon, 48GB Cache	Dual 6-core Xeon, 48GB Cache	Dual I/O	Dual I/O
Power and Cooling	Redundant hot swappable	Redundant hot swappable	Redundant hot swappable	Redundant hot swappable
Battery Back Up	Full backup to disks	Full backup to disks		
Suggested Retail**	\$21,999	\$27,999	\$19,999	\$31,999

Active Storage is the innovative leader for broadcast, post-production, online and archive solutions. Many of the most recognizable media and creative brands in the world choose Active Storage because we understand their needs and deliver solutions they can rely on. Fast, reliable, and easy to deploy, Active Storage delivers a best-of-breed user experience, award-winning industrial design and customer service. Ease of use and robust performance make Active Storage the first choice for complex storage deployments.

*Usable capacity will vary depending on drive configuration and RAID level.

**MSRP in U.S. Dollars for North America. Pricing in other currencies and locales may differ to reflect local exchange rate and shipping. Please contact your reseller or Active Storage for more information for your region.

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