

FlashDisk® All Flash Array

AF-2U24 Series

Extreme Speed - 487K IOPS of SAN Attached Flash Storage

Low \$/Gb without Compression or De-duplication



The FlashDisk All Flash Array - Simply Faster

A Better Approach to All Flash Storage

The FlashDisk All Flash Array (AFA) from Winchester Systems has been designed to store data in native format without compression or de-duplication. Why? We view them as technologies designed to solve legacy problems based on older flash technologies. With the advent of newer, higher density, cost effective enterprise class flash drives, we simply don't need compression or de-duplication to build a high performance, yet cost competitive all flash array. The FlashDisk AFA doesn't use complex software in an attempt to enable consumer grade flash drives like some of our competitors, we only use reliable, proven enterprise class SAS flash drives.

With the FlashDisk AFA - your data is never modified from its original format, so there's no risk of data loss due to de-duplication hashing conflicts, compression or de-duplication table corruption or the associated hardware resources these software layers consume. Your data is always secure, always protected.

Extreme Speed and Predictable Performance

Optimized for performance, the FlashDisk AFA blends high speed RAID controllers, 8 or 16 Gb Fibre Channel, 10 Gb iSCSI, latest 12 Gb/s SAS disk connectivity and SSDs into an easy to manage solution. With up to **487,000 IOPS** and **12.6 GB/second** of throughput - the FlashDisk AFA can easily replace multiple racks of legacy disk drives with a single enclosure, offering significant operational, power, space and cooling savings.

The FlashDisk AFA is a perfect VDI solution, with over 90,000 VDI RAID5 IOPS or more than 9.5x the performance of a traditional HDD based array, allowing you to support up to 3,300 VDI users. Database customers can see similar improvements with the FlashDisk AFA, where Orion benchmark testing showed over 8.5x the performance of a traditional HDD based array.

The performance of the FlashDisk AFA is consistent and predictable without variations due to the overhead of the complicated software stacks used in other all flash products. This gives you the ability to redesign your datacenter and optimize even your most performance critical environments.

True Capacity without Compression or De-duplication

With scalability up to 276 TB using two expansion shelves and low initial and incremental costs, the FlashDisk AFA makes it easy to build a configuration to satisfy all your storage needs - without requiring the overhead, costs and capacity uncertainty of de-duplication or compression. With the FlashDisk AFA your capacity is always known and always predictable.

FlashDisk AFA

- **487K IOPS**
- **9.5x Faster For VDI**
- **8.5x Faster For DBMS**
- **True Capacity w/o Compression or De-duplication**
- **Scales Up to 276 TB**
- **Feature Rich & Affordable**

FlashDisk® All Flash Array

AF-2U24 Series

Feature Rich - Yet Simple

The FlashDisk AFA has a robust set of enterprise-class data services including: snapshots, thin provisioning, remote replication, SED encryption and more. With the management simplicity of an appliance - the FlashDisk AFA is easy to deploy and support.

Uncompromising Reliability

Leveraging 20+ years of RAID controller experience, the FlashDisk AFA offers fully redundant, hot-swappable controllers, fans, PSUs and drives. With proactive SSD wear level monitoring, email notifications and backed by Winchester Systems world-class support - your data is always safe.

Surprisingly Affordable

Unlike other all-flash storage products with complicated pricing schemes based on "effective capacity" - the FlashDisk AFA costs **33% less** per gigabyte while offering **2x - 8x the IOPS / \$** compared to our competitors - making it one of the best performing yet most affordable products in the market. This offers you the flexibility to deploy the FlashDisk AFA in a variety of both performance or capacity based applications.

FlashDisk AFA Specifications

Maximum Capacity	276 TB
Performance	Up to 487K IOPS 12.6 GB/s Throughput
Host Connectivity	Up to 16 Ports: - 8 or 16 Gb/s Fibre Channel - 10 Gb/s Ethernet iSCSI 4 Ports Built-in: - 1 Gb/s Ethernet iSCSI
2.5" SSD Drives	Up to 72 - Enterprise class SAS eMLC SSDs 400 GB - 3.84 TB Capacity
Physical	2U / Enclosure - Up to 3 Total 3.5" h x 17.5" w x 21" d per enclosure Approximately 50 lbs. fully loaded (RAID Unit)
Power & Cooling	Dual Redundant 530W 80 PLUS efficiency PSUs 100 - 240 VAC / 47 - 63 Hz. 0° to 40° C operating; -40° to 60° C non-operating
Compliance	FCC, UL, CE
Warranty	Standard one year next day on site, advanced part replacement and toll free hotline during business hours (M-F, 8 AM - 5 PM) - Optional 24x7 on-site service, spare parts and advance part replacement - Customizable service programs available for classified sites

www.winsys.com



FlashDisk AFA - Rear View - Fully Populated with Host Boards



FlashDisk AFA - Front View - Fully Expanded with Two Expansion Shelves