



# DDN AI400X™ STORAGE APPLIANCE

Unmatched storage performance and flexibility for Artificial Intelligence and Deep Learning.

Engineered from the ground-up for the AI-enabled data center, DDN's A<sup>3</sup>I solutions accelerate AI applications and streamline data-intensive workflows using the DDN shared parallel architecture. The DDN AI400X all-NVME appliance provides unmatched flexibility for your organization's AI needs.

## GPU-OPTIMIZED DATA PLATFORMS

Easy to deploy, A<sup>3</sup>I solutions are turn-key, pre-configured, and provide the most capable scaleout platform for capacity and performance. DDN A<sup>3</sup>I solutions ensure full saturation of GPUs for maximum productivity at any scale.

## FULL GPU SATURATION

Fully optimized for all types of workloads and data, A<sup>3</sup>I solutions ensure full GPU resource utilization even with distributed applications running on multiple computing servers. Performance testing on the DDN A<sup>3</sup>I architecture has been conducted with all widely-used DL frameworks, and consistently demonstrates higher performance and faster completion times. Using the A<sup>3</sup>I parallel client, containerized applications can engage the full capabilities of the data infrastructure and servers achieve full GPU saturation for DL workloads. A<sup>3</sup>I solutions fully integrate NVIDIA GPUDirect™ Storage for most-efficient data access from GPUs

## CAPACITY-EFFICIENT AI STORAGE

A<sup>3</sup>I solutions provide flexible capacity expansion options, with up to 256TB of scale-out NVMe capacity per appliance, and provide the highest data availability and maximum system uptime, with hardware and software components integrated as a fully redundant system.

## KEY FEATURES

Sequential read performance  
up to 48GB/s

Sequential write performance  
up to 34GB/s

Up to 3M IOPs per appliance



## 20x Scaling Efficiency and 20x DL Acceleration

## Fully-integrated and optimized for AI workloads and GPU enabled solutions

## Ideal for mission critical applications

### ABOUT BIOS IT

BIOS IT is a global design house, systems builder and integrated solution provider for enterprise performance computing. We construct bespoke clusters and appliances by hand picking the best components and newest technologies based on specific customer goals. We support well-known organisations at the top of their research fields, across science, engineering, academia and finance disciplines. Our comprehensive range of products and services include: high-performance enterprise servers, storage and networking, on-premise or in the cloud, with associated services, support, hosting and software.

The DDN AI400X is an all-NVME flash appliance that delivers fastest performance for AI workflows at all scale. Dual active controllers provide up to 48GB/s and 3M IOPS to clients via eight EDR/HDR100 IB or 100GbE ports. The DDN AI400X enables you to run workloads against all data anywhere and accelerating your most demanding workflows and applications.

### APPLICATIONS FINANCIAL SERVICES

DDN delivers demonstrably faster financial analytics for higher accuracy at lower costs with a smaller footprint. DDN platforms provide fast, scalable, external disk systems with massively parallel access to data.

### ACADEMIC RESEARCH

DDN solutions support the rising use of GPU hardware to run mixed-precision simulation algorithms, CPU clusters for shared computing and the distribution of shared research through common file access methods.

### AI & DEEP LEARNING

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|                       | DDN AI4000X™  |
|-----------------------|---|
| SYSTEM FEATURES       | High performance GPU-optimized parallel file system<br>Sequential read performance up to 48GB/s<br>Sequential write performance up to 34GB/s<br>Up to 3M IOPS per appliance   |
| CONTROLLER HOST PORTS | 8 x EDR/HDR100* InfiniBand or 100 GbE   |
| DRIVE SPPORT          | 2.5" dual port NVMe drives<br>32TB, 64TB, 128TB, 256TB useable capacity configurations  |
| SOFTWARE              | High performance parallel file system, LUN mapping and masking, intelligent write striping, read QoS, port zoning detection, data integrity check/correction, interface options (SSH to CLI, web-based GUI, Python API), state change messages (via e-mail, SNMP trap and syslog) |
| SAFETY                | Agency Certifications UI, cUI, CE, FC   |

CUSTOM CONFIGURATIONS ACROSS CORE COUNT, FORM FACTOR AND SUPPORT ARE ALSO AVAILABLE

For more information visit [www.bios-it.com](http://www.bios-it.com).



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