

### DATA SHEET

# Efficient Capacity, Maximum Speed & High Performance Delivered – All in One

This system enables the smallest organization to the largest data center to efficiently deliver data to applications at 740K maximum IOPS in an all-flash configuration, the highest tested speed at its price point on the market today. By seamlessly adapting from all-flash to hybrid flash to all-drive configurations, this nimble system flexes as use cases evolve and capacity needs increase.

### **Data Integrity and Reliability**

This advanced storage array is packed with features that enable up to five nines (99.999%) data availability. Access to data is unrestricted on account of parallel architecture, multi-core processing, data replication, and fast streaming while Self Sufficient Drive Restoration (SSDR) self-healing technology renews errant drives to service in place and declustered RAID data protection enables fast and efficient drive rebuilds to virtually eliminate system downtime.

### **Purpose-Built Modularity**

Purpose-built modularity makes set up, maintenance and expansion easy. All system components—the enclosure, the controllers, the firmware, and the drives—are developed and optimized by our engineers to work together seamlessly. Modular architecture makes components interchangeable between systems, and upgrades are simple due to common FRUs, PCMs, controllers, and software.

Block-level intelligent storage platform with capacity up to 3.7PB (allflash configuration) and faster processors that is ideal for highperformance workloads. Highlights include dual active/active controllers powered by the latest generation ASIC-based architecture, self-healing and declustered RAID data protection.

### **Built to Scale Architecture**

Built to ensure space is used to its maximum potential, application access to data is virtually instantaneous, ensuring IT, researchers and end users can work efficiently. This flexible solution is perfect for organizations with demanding AI, ML, virtual, database and streaming environments that require high IOPS.

### **Intelligent Data Security**

Protect vital business assets with ease. Cybersecurity features and intelligent firmware – including SFTP, SSH and HTTPS management protocols, SED support, and administrator access controls – are built-in to allow for secure and reliable file access, transfer and management.

### **Highlights**



Stack 10 enclosures for 240 drives of data storage to readily conserve space and maximize capacity (3.7PB). Flexible hard drive, flash and hybrid flash configuration options allow for seamless expansion.



Dual active/active controllers provide superb uptime and redundancy to ensure unrestricted access to data and can achieve superior sequential read and write performance.



Declustered RAID erasure code data protection technology helps rebuild drives faster than ever to reduce recovery time and protect from data loss.



Self-healing storage technology, Self Sufficient Drive Restoration (SSDR), ensures data integrity and reliability by renewing errant drives to service in place. Field-proven design with five nines (99.999%) availability.



Real-time data tiering based on activity and access allows for efficient management of hot and cold data.



Optional replication and snapshot features can be configured to meet critical enterprise requirements.

## **Technical Specifications**

System Features	Controller Performance: 12GB/s read throughput; 10GB/s write throughput   IOPS 740 K Advanced Features: Auto-Tiering   Snapshots   Asynchronous Replication Base Array Features: Virtual Pools   Thin Provisioning   Declustered RAID   SSD Read Cache   Encryption   FIPS-2 Drive Support High-Availability Features: Redundant hot-swap controllers   Redundant hot-swap drives, fans, power   Dual power cords   Hot standby spare  Automatic failover   Multi-path support Drive Support: SAS, HDD, NL-SAS HDD, SAS SSD (2.5 Form Factors) Data Protection: Declustered RAID   RAID levels supported: 0, 1, 5, 6, 10, and 50 Self Healing Technology: Autonomous Drive Regeneration (ADR) Maximum Expansion: 2U24 Arrays, Up to 24 drives per enclosure, 10 enclosures max including the master, totaling 240 Drives
Physical	Height: 87.9mm / 3.46 in   Width: 443mm / 17.44 in   Depth: 630mm / 24.8 in   Width w/ear mounts: 483mm / 19.01 in  Weight: 17kg / 38 lb   Weight (with drives): 30kg / 66 lb
Hosts	External Ports: 4 per Controller, 8 per System Fibre Channel Models: Host speed: 32/16/8 Gb/s Fibre Channel   Interface type: SFP+/SFP28 iSCSI Models: Host speed: 10Gb/s, 25 Gb/s iSCSI   Interface type: SFP+/SFP28 Ethernet: 10GbaseT SAS Models: Host speed: 12Gb/s, 6Gb/s SAS   Interface type: HD Mini-SAS
System Configuration	System Memory: 48GB per system (24GB per controller) Volumes per System: 1024 Cache: Mirrored cache  Supercapacitor cache backup   Cache backup to flash - nonvolatile
Management	Interface Types: 10/100/1000 Ethernet, Micro USB Protocols Supported: SNMP, SSL, SSH, SMTP, HTTP(S), REDFISH Management Consoles: Web GUI, CLI Management Software: Storage management console   Remote diagnostics   Nondisruptive updates   Volume expansion
Power Requirements - AC Input	Input Power Requirements: 100V-240V AC, 60Hz/50Hz Max Power Output per PSU: 580W
Environmental/Temperature Ranges	Operating/Nonoperating Temperature: ASHRAE A2, 5°C to 35°C (41°F to 95°F), derate 1°C/300m above 900m, 20°C/hr max rate of change / -40°C to 70°C (-40°F to 158°F) Operating/Nonoperating Humidity: -12°C DP and 10% RH to 21°C DP and 80% RH, max DP 21°C / 5% to 100% noncondensing Operating/Nonoperating Shock: 5 Gs, 10ms, half sine pulses / 15 Gs, 10ms, half sine pulses Operating/Nonoperating Vibration: 0.21 Gs rms 5Hz to 500Hz random / 1.04 Gs rms 2Hz to 200Hz random



RAID Inc. was founded in 1994 to deliver high-performance storage solutions. The company has earned industry praise for providing platform agnostic technical guidance in high performance computing (HPC), big data, cloud and software-defined data centers—in the most efficient, reliable and cost-effective manner. The world's leading research facilities, government, life science, financial, healthcare, energy, and cloud service providers leverage our team of engineers' extensive academic, research lab and commercial expertise that makes RAID Inc. a trusted industry leader. For more information, visit our website <a href="https://www.raidinc.com/">https://www.raidinc.com/</a> or call 1.800.330.7335.

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