RAID INCORPORATED

DATA SHEET

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

Up to 2PB of data in a single 5U enclosure with throughputs reaching 12GB/s sequential read, and 10GB/s sequential write. Easily adapt to burgeoning data generation with three additional 5U 84-Bay expansion systems for a total maximum capacity of 8PB CMR.

Data Integrity and Reliability

This advanced storage array is packed with features that enable up to five nines (99.999%) data availability. Application access to data is virtually 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 ultra-dense, intelligent storage platform with capacity up to 8PB CMR to deliver enterprise level performance and security at an exceptional value. 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 all 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 high-performance storage environments that require high read and write throughput, while still needing considerable storage space.

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 4 enclosures for 336 drives of data storage to readily conserve space and maximize capacity (8PB CMR). 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 | SSD Read Cache | Volume Copy Base Array Features: Virtual Pools | Thin Provisioning | Declustered RAID | Encryption | Quick Rebuild High-Availability Features: Active/active hot-swap controllers | Redundant hot-swap drives, fans, power supplies | Dual power cords | Hot standby spare |Automatic failover | Multi-path support Drive Support: SAS, HDD, NL-SAS HDD, SAS SSD (2.5 or 3.5 Form Factors) Data Protection: Declustered RAID | RAID levels supported: 0, 1, 5, 6, 10, and 50 Self Healing Technology: Self Sufficient Drive Restoration (SSDR) Maximum Expansion: 5U84 Arrays, Up to 84 drives per enclosure, 4 enclosures max including the master, totaling 336 Drives
Physical	Height: 222.3mm / 8.75 in | Width: 444.5mm / 17.5 in | Depth: 981mm / 38.63 in | Width w/ear mounts: 483mm / 19.01 in | RBOD Weight: 82kg / 180 lb | RBOD Weight (with drives): 135kg / 298 lb | EBOD Weight: 80 kg / 175 lb | EBOD Weight (with drives): 130 kg / 287 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: 200VAC-240VAC, 50Hz/60Hz Max Power Output per PSU: 2200W
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 8% 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 / 20 Gs, 10ms, half sine pulses Operating/Nonoperating Vibration: 0.21 Gs rms 5Hz to 500Hz random / 1.04 Gs rms 2Hz to 200Hz random

DS121324-v6 Dec 2024