Seagate® Exos® X advanced storage array is a petabyte-scale, rack-mounted block storage enclosure with self-healing technology, advanced data protection, and software value delivering superefficient mass-capacity storage for conventional data centers and cloud infrastructure.

**Product Highlights**

- Self-healing storage technology, ADAPT, and ADR
- Deliver unfettered data access with dual redundant controllers capable of achieving superior sequential read and write performance
- Expand a data center seamlessly with flexible SSD, HDD, and hybrid configuration options
- Efficiently manage hot and cold data with real-time data tiering
- Save space and maximize capacity by stacking 10 Enclosures for 120 drives of data storage

**Key Advantages**

**Reliable and Self-healing.** Exos X features self-healing storage technology, Advanced Distributed Autonomic Protection Technology (ADAPT) and Autonomous Drive Regeneration (ADR). Field-proven design with five nines (99.999%) availability. Seagate ADAPT erasure code data protection software dramatically reduces array rebuild overhead. Unique Seagate ADR reduces human intervention and e-waste by automatically renewing hard drives "in situ" and on the fly.

**Built for speed and resilience.** Up to 2 times the performance of the previous generation with redundant active-active controllers powered by the ASIC-based VelosCT controller architecture. Streamline your overhead, with improved throughput, management, and recovery.

**Easy to Set Up, Maintain, and Expand.** All system components—the enclosure, the controller, the firmware, and the drives—are developed and optimized by our engineers to work together seamlessly. The modular architecture makes components interchangeable between systems, and upgrades are simple due to common FRUs, PCMs, controllers, and software.

**Gain and Scale Capacity with Consistent High Performance.** The Exos X 2U12 enables even the smallest business with maximum speed and throughput. Additionally, businesses can expand the system as data requirements grow, with 12 drive slots of storage capacity in a 2U rackmount enclosure. Connect up to ten 2U12 enclosures together for a total of 120 drive slots.

**Build In Security at the Foundation of the Data Life Cycle.** Protect the most valuable business assets with Seagate Secure™ cybersecurity features and intelligent firmware—such as SFTP, SED support, and administrator access controls—that provide built-in measures for reliable and safe file access, transfer, and management.

**Improve Hardware and Administrative Efficiency and Reduce Cost.** Meet stringent worldwide requirements for recycling and environmental friendliness with a nimble system that minimizes environmental impact and maximizes cost savings through high performance.
### Specifications

<table>
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<tr>
<th>Category</th>
<th>Details</th>
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<tbody>
<tr>
<td><strong>Controller Performance</strong></td>
<td>Up to 12GB/s read throughput, 10GB/s write throughput, 725K IOPS (Random Read)</td>
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<td><strong>Advanced Software Features</strong></td>
<td>Auto-Tiering, Snapshots, Asynchronous Replication</td>
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<td><strong>Base Array Software Features</strong></td>
<td>Virtual pools, Thin provisioning, ADAPT, SSD read cache, Encryption</td>
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<td><strong>High-Availability Features</strong></td>
<td>Self-healing storage with Advanced Distributed Autonomic Protection Technology (ADAPT) and Autonomous Drive Regeneration (ADR), redundant hot-swap controllers, drives, and fans, dual power cords, hot standby spare, automatic failover, and multi-path support.</td>
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<td><strong>Device (Drive) Support</strong></td>
<td>SAS HDD, NL-SAS HDD, SAS SSD (2.5 or 3.5 Form Factors)</td>
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<td><strong>Data Protection</strong></td>
<td>Seagate ADAPT and RAID levels supported: 0, 1, 5, 6, 10</td>
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<tr>
<td><strong>Self Healing Technology</strong></td>
<td>Autonomous Drive Regeneration (ADR)</td>
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| **System Maximum Expansion**          | 2U12 Arrays, Up to 12 drives per enclosure, 10 enclosures maximum including the master, totaling 120 Drives  
2U24 Arrays, Up to 24 drives per enclosure, 10 enclosures maximum including the master, totaling 240 Drives  
5U84 Arrays, Up to 84 drives per enclosure, 4 enclosures maximum including the master, totaling 336 Drives |
| **Physical**                          | 2U: Height: 87.9mm / 3.46 in, Width: 443mm / 17.44 in, Depth: 630mm / 24.8 in, Weight 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 Gb/s Fibre Channel, Interface type: SFP+/SFP28  
iSCSI Models: Host speed: 10Gb/s, 25Gb/s iSCSI, Interface type: SFP+/SFP28  
Ethernet: 10GBASE-T (auto-negotiation to 1Gb)  
SAS Models: Host speed: 12Gb/s, 6Gb/s SAS, Interface type: HD Mini-SAS |
| **System Configuration**              | System Memory: 48GB per system  
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: Seagate Systems storage management console, Remote diagnostics, Nondisruptive updates, Volume expansion |
| **Power Requirements—AC Input**      | Input Power Requirements: 100VAC-240VAC, 50Hz/60Hz  
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 8% RH to 21°C DP and 80% RH, max DP 21°C / 5% to 100% noncondensing  
Operating/Nonoperating Shock: 5 Gs, 11ms, half sine pulses / 15 Gs, 7ms, half sine pulses  
Operating/Nonoperating Vibration: 0.18 Gs rms 6Hz to 500Hz random / 0.5 (Z-axis) and 0.25 (X&Y-axis) Gs rms 6Hz to 200Hz random |