



DATA SHEET

Efficient. Agile. Scalable.

Exos X 2U12



Seagate® Exos™ X 2U12 delivers advanced data protection, capacity, and performance at an entry-level cost.



Product Highlights

- Save space but maximise capacity by expanding up to 120 drives
- Deliver data fast with 7 GB/s throughput in an all-HDD configuration
- Rebuild drives faster than ever and reduce downtime with Seagate ADAPT data protection technology
- Opt for replication and snapshot features to meet critical enterprise requirements

Key Advantages

Maximise Capacity and Consistent High Performance. Leverage both speed and performance at a budget-friendly price. This system enables even the smallest business to get data to applications fast, with maximum throughput of up to 7 GB/s. Additionally, businesses can expand the system as data requirements grow, with up to 168 TB of storage capacity¹ in only a 2U rack mount.

Deliver Versatile Architecture Built to Scale. Use this flexible solution for cost-conscious businesses that require high read and write throughput as well as more storage. Application access to data is virtually instantaneous, and purpose-built modularity makes it easy to set up, maintain, and expand via interchangeable FRUs and hot-swappable components.

Ensure Applications Have Access to Critical Data. Take advantage of features that enable extreme cost efficiency while also providing up to 99.999% data availability. Parallel architecture, data replication, and fast streaming make access to data unfettered. In addition, exclusive Seagate ADAPT data protection technology supports fast and efficient drive rebuilds that virtually eliminate system downtime.

Reduce Cost and Resources. Meet stringent worldwide requirements for recycling and environmental friendliness with a nimble system that flexes as use cases evolve and capacity needs increase. It is perfectly suited for the SMB market due to high capacity and efficient management capabilities, and can help you minimise environmental impact and recognise cost savings through high performance.

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 security measures for reliable and safe file access, transfer, and management.

¹ Using Exos 14 TB drives



Specifications	
3005 Controller Performance	3.5 GB/s read throughput 3 GB/s write throughput
4005 Controller Performance	7 GB/s read throughput 5.5 GB/s write throughput
Expansion BODs	J1212 (2U12) Maximum of 3x 2U12 EBODs (3005), 8x 2U12 EBODs (4005)
Advanced Software Features	Auto-tiering, Snapshots, Asynchronous replication
Base Array Software Features	Virtual pools, Thin provisioning, ADAPT, SSD read cache, Encryption
High-Availability Features	Redundant hot-swap controllers Redundant hot-swap drives, fans, power Dual power cords Hot standby spare Automatic failover Multi-path support
Device Support	NL-SAS HDD
Data Protection	Seagate ADAPT RAID levels supported: 0, 1, 3, 5, 6, 10, and 50
System Configuration (12, 3.5-in devices)	Up to 12 drives per chassis 168 TB max capacity per chassis (based on 14 TB HDDs)
Physical	Height: 87.9 mm / 3.46 in Width: 443 mm / 17.44 in Depth: 630 mm / 24.8 in Width w/ear mounts: 483 mm / 19.01 in Weight: 17 kg / 38 lb Weight (with drives): 32 kg / 71 lb
Hosts	
External Ports	4 per system (3005), 8 per system (4005)
Fibre Channel Models	Host speed: 16 Gb/s, 8 Gb/s Fibre Channel Interface type: SFP+
iSCSI Models	Host speed: 10 Gb/s, 1 Gb/s iSCSI Interface type: SFP+
SAS Models (4005 only)	Host speed: 12 Gb/s, 6 Gb/s SAS Interface type: HD Mini-SAS
System Configuration	
System Memory	16 GB per system
Volumes per System	1,024
Cache	Mirrored cache: Yes Super-capacitor cache backup: Yes Cache backup to flash: Yes – non-volatile
Management	
Interface Types	10/100/1000 Ethernet, Mini USB
Protocols Supported	SNMP, SSL, SSH, SMTP, HTTP(S)
Management Consoles	Web GUI, CLI
Management Software	Seagate Systems storage management console Remote diagnostics Non-disruptive updates Volume expansion
Power Requirements — AC Input	
Input Power Requirements	100V-240V AC 60 Hz/50 Hz
Max Power Output per PSU	580W
Environmental/Temperature Ranges	
Operating/Non-operating Temperature	ASHRAE A2, 5 °C to 35 °C (41 °F to 95 °F), derate 1°C/300 m above 900 m, 20 °C/hr max rate of change / -40 °C to 70 °C (-40 °F to 158 °F)
Operating/Non-operating Humidity	-12°C DP and 10% RH to 21°C DP and 80% RH, max DP 21°C / 5% to 100% non-condensing
Operating/Non-operating Shock	5 Gs, 10ms, half sine pulses/15 Gs, 10ms, half sine pulses
Operating/Non-operating Vibration	0.21 Gs rms 5 Hz to 500 Hz random / 1.04 Gs rms 2 Hz to 200 Hz random
Standards/Approvals	
Safety Certifications	UL 60950-1 (United States) CAN/CSA-C22.2 No.60950-1-07 (Canada) EN 60950-1 (European Union) IEC 60950-1 (International) CCC (China PRC – CCC Power Supplies) BIS (India – BIS Power Supplies)
Ecodesign	Commission Regulation (EU) 2019/424 (Directive 2009/125/EC)
Emissions (EMC)	FCC CFR 47 Part 15 Subpart B Class A (United States) ICES/NMB-003 Class A (Canada) EN 55032 Class A, EN 55024, EN 61000-3-2, EN 61000-3-3 (Europe) AS/NZS CISPR 32 Class A (Australia/New Zealand) VCCI Class A (Japan) KN 32 Class A/KN 35 (S. Korea) CNS 13438 Class A (Taiwan)
Harmonics	EN 61000-3-2 (EU)
Flicker	EN 61000-3-3 (EU)
Immunity	EN 55024 (EU) KN 24/KN 35 (S. Korea)
Environmental Standards	The RoHS Directive (2011/65/EU) The WEEE Directive (2012/19/EU) The REACH Directive (EC/1907/2006) The Batteries Directive (2006/66/EC)
Standard Marks/Approvals	Australia/New Zealand (RCM), Canada (cUL/ICES/NMB-003 Class A), China (CCC – PSU only), European Union (CE), Japan (VCCI), South Korea (KC), Taiwan (BSMI), United States (FCC/UL)

© 2020 Seagate Technology LLC. All rights reserved. Seagate, Seagate Technology, and the Spiral logo are registered trademarks of Seagate Technology LLC in the United States and/or other countries. Exos, the Exos logo, and Seagate Secure are either trademarks or registered trademarks of Seagate Technology LLC or one of its affiliated companies in the United States and/or other countries. All other trademarks or registered trademarks are the property of their respective owners. When referring to drive capacity, one gigabyte, or Gb, equals one billion bytes; and one terabyte, or TB, equals one trillion bytes. Your computer's operating system may use a different standard of measurement and report a lower capacity. In addition, some of the listed capacity is used for formatting and other functions, and thus will not be available for data storage. Actual data rates may vary depending on operating environment and other factors, such as chosen interface and disk capacity. The export or re-export of Seagate hardware or software is regulated by the U.S. Department of Commerce, Bureau of Industry and Security (for more information, visit www.bis.doc.gov), and may be controlled for export, import and use in other countries. Seagate reserves the right to change, without notice, product offerings or specifications. DS1994.5-2009GB September 2020