

DATA SHEET

## Integrated. Efficient. Intelligent. Exos X 5U84 Enterprise Storage Array





Seagate<sup>®</sup> Exos<sup>®</sup> X 5U84 Enterprise storage array is the datasphere's ultra-dense, intelligent solution for maximum capacity and performance at an exceptional value.



## **Product Highlights**

- Expand a data center seamlessly with single enclosures that host up to 84 drives each and connect up to four enclosures that can host up to 336 drives
- Efficiently manage hot and cold data with real-time data tiering option
- Deliver unfettered data access with dual redundant controllers capable of achieving leading sequential read and write performance
- 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

**Maximum Capacity and Consistent High Performance.** Up to 84 drives in a single 5U enclosure with high availability and superior sequential read and write throughput. Easily expand to accommodate data proliferation by connecting up to four Exos X 5U84 systems together for a total of 336 drive slots.

**Cost-Optimized Architecture.** This flexible solution is perfect for businesses with demanding streaming environments that require high read and write throughput while still needing considerable storage space. Built to ensure all space is used to its maximum potential, application access to data is virtually instantaneous, ensuring IT and end users can work efficiently.

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. This reduces support calls and eliminates technical learning curves. Modular architecture makes components interchangeable between systems, and upgrades are simple due to common FRUs, PCMs, controllers, and software.

**Get Data to Applications Fast and Protect Valuable Assets.** This system is full of features that enable applications to access data with leading availability. Parallel architecture, multi-core processing, data replication, and fast streaming make access to data unfettered while exclusive Seagate ADAPT data protection technology delivers fast drive rebuilds that virtually eliminate system downtime.

**Build In Security at the Foundation of the Data Life Cycle.** Protect the most valuable business assets with Seagate Secure<sup>™</sup> 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.





Specifications		
	4006, 6th Generation VeloCT	
Controller Performance	12GB/s read throughput, 10GB/s write throughput, IOPS	
	(Random Read) 725K	
Total add-on Expansion Chassis	10X 2U12 Enclosures, 10X 2U24 Enclosures, 4X 5U84 Enclosures	
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 (Drive) Support	SAS, HDD, NL-SAS HDD, SAS SSD	
Data Protection	Seagate ADAPT   RAID levels supported: 0, 1, 5, 6, 10, and 50	
System Configuration	2U12: Up to 12; 3.5" drives per chassis, Connect up to 10 enclosures together totaling 120 drives. 2U24: Up to 24; 3.5" drives per chassis, Connect up to 10 enclosures together totaling 120 drives. 5U84: Up to 84; 3.5" drives per chassis, Connect up to 4 enclosures together totaling 336 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, 25Gb/s iSCSI, Interface type: SFP+/SFP28	
Ethernet	10GbaseT	
SAS Models	Host speed: 12Gb/s, 6Gb/s SAS, Interface type: HD Mini-SAS	
System Configuration		
	49CP per system	
System Memory	48GB per system 1024	
Volumes per System		
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     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	
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)	
Safety Certifications Ecodesign		
	(International)   CCC (China PRC – CCC Power Supplies)   BIS (India – BIS Power Supplies)	
Ecodesign	(International)   CCC (China PRC – CCC Power Supplies)   BIS (India – BIS Power Supplies)         Commission Regulation (EU) 2019/424 (Directive 2009/125/EC)         FCC CFR 47 Part 15 Subpart B Class A (United States)   CES/NMB-007 Class A (Canada)           EN 55032 Class A, EN 55035:2017 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	
Ecodesign Emissions (EMC)	(International)   CCC (China PRC – CCC Power Supplies)   BIS (India – BIS Power Supplies)         Commission Regulation (EU) 2019/424 (Directive 2009/125/EC)         FCC CFR 47 Part 15 Subpart B Class A (United States)   CES/NMB-007 Class A (Canada)           EN 55032 Class A, EN 55035:2017 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)	
Ecodesign Emissions (EMC) Harmonics	(International)   CCC (China PRC – CCC Power Supplies)   BIS (India – BIS Power Supplies)         Commission Regulation (EU) 2019/424 (Directive 2009/125/EC)         FCC CFR 47 Part 15 Subpart B Class A (United States)   CES/NMB-007 Class A (Canada)           EN 55032 Class A, EN 55035:2017 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)         EN 61000-3-2 (EU)	

Standard	Marks/Approvals
----------	-----------------

## seagate.com



© 2021 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. DS1982.11S-2112US December 2021