



DATA SHEET

Integrated. Efficient. Intelligent. Exos X 5U84



Seagate® Exos™ X 5U84 is the datasphere's ultra-dense, intelligent solution for maximum capacity and performance at an exceptionally low TCO.



Product Highlights

- Expand a data center seamlessly with single enclosures that host up to 1.3PB¹ of data
- Efficiently manage hot and cold data with real-time data tiering option
- Deliver unfettered data access with dual redundant controllers capable of achieving up to 7GB/s sequential read, 5.5GB/s sequential 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 1.3PB¹ of data in a single 5U enclosure with throughputs reaching 7GB/s sequential read, and 5.5GB/s sequential write and up to 99.999% high availability. Easily expand to accommodate data proliferation with three additional Exos X 5U84 systems for a total capacity of 2PB.

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 up to a 99.999% availability design. 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™ 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 When using Exos 16TB drives



Specifications	
4005/5005 Controller Performance	7GB/s read throughput 5.5GB/s write throughput
Expansion BODs	J1284 (5U84) Maximum of 3x 5U84 EBODs
Advanced Features	Thin provisioning Snapshots Asynchronous replication
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	SAS HDD NL-SAS HDD SAS SSD
Data Protection	Seagate ADAPT RAID levels supported: 0, 1, 3, 5, 6, 10, and 50
System Configuration (84, 3.5-in devices)	Up to 84 drives per chassis 1344TB max capacity per chassis (based on 16TB HDDs)
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: 80kg / 175 lb EBOD weight (with drives): 130kg / 287 lb
Hosts	
External Ports	8 per system
Fibre Channel Models	Host speed: 16Gb/s, 8Gb/s Fibre Channel Interface type: SFP+
iSCSI Models	Host speed: 10Gb/s, 1Gb/s iSCSI Interface type: SFP+
SAS Models	Host speed: 12Gb/s, 6Gb/s SAS Interface type: HD Mini-SAS
System Configuration	
System Memory	16GB per system (4005), 32GB per system (5005)
Volumes per System	1024
Cache	Mirrored cache: Yes Supercapacitor cache backup: Yes Cache backup to flash: Yes – nonvolatile
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 Nondisruptive updates Volume expansion
Power Requirements—AC Input	
Input Power Requirements	180VAC-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)
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. DS1982.5-2003US March 2020