



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 centre seamlessly with single enclosures that host up to 84 drives each and connect up to four enclosures that can host up to 336 drives (6.04 PB using 18 TB drives). Capacity varies with drives used.
- 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 7 GB/s sequential read, 5.5 GB/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 84 drives in a single 5U enclosure with up to 99.999% high availability and throughputs reaching 7 GB/s sequential read and 5.5 GB/s sequential write. Easily expand to accommodate data proliferation by connecting up to four Exos X 5U84 systems together for a total of 336 drive slots.

Cost-Optimised 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 optimised 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.



Specifications	
4005/5005 Controller Performance	7 GB/s read throughput 5.5 GB/s write throughput
Total BODs	Maximum of 4x 5U84 BODs
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	SAS HDD NL-SAS HDD SAS SSD
Data Protection	Seagate ADAPT RAID levels supported: 0, 1, 3, 5, 6, 10, and 50
System Configuration	"Up to 84; 3.5" drives per chassis, Connect up to 4 enclosures together, totalling 336 drives. E.g. 6.04 PB with 18 TB Drives. Capacity varies with drives used."
Physical	Height: 222.3 mm / 8.75 in Width: 444.5 mm / 17.5 in Depth: 981 mm / 38.63 in Width w/ear mounts: 483 mm / 19.01 in RBOD weight: 82 kg / 180 lb RBOD weight (with drives): 135 kg / 298 lb EBOD weight: 80 kg / 175 lb EBOD weight (with drives): 130 kg / 287 lb
Hosts	
External Ports	8 per system
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	Host speed: 12 Gb/s, 6 Gb/s SAS Interface type: HD Mini-SAS
System Configuration	
System Memory	16 GB per system (4005), 32 GB per system (5005)
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	180VAC-240VAC, 50Hz/60Hz
Max Power Output per PSU	2200W
Environmental/Temperature Ranges	
Operating/Non-operating 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/Non-operating Humidity	-12°C DP and 8% 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/20 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)

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