



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 1.3 PB<sup>1</sup> 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 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 1.3 PB<sup>1</sup> of data in a single 5U enclosure with throughputs reaching 7 GB/s sequential read, and 5.5 GB/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 2 PB.

**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.

<sup>1</sup> When using Exos 16 TB drives



| Specifications                            |   |
|---|---|
| 4005/5005 Controller Performance          | 7 GB/s read throughput   5.5 GB/s write throughput  |
| Expansion BODs                            | J1284 (5U84)   Maximum of 2x 5U84 EBODs   |
| 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 (84, 3.5-in devices) | Up to 84 drives per chassis   1,344 TB max capacity per chassis (based on 16 TB HDDs)   |
| 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: 16Gb/s, 8Gb/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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