



DATA SHEET

Trusted. Efficient. Versatile.  
**Exos 10E2400**



Seagate® Exos™ 10E2400 enterprise hard drives are the industry's fastest 10K-RPM drives, with capacities up to 2.4TB in a 2.5-inch form factor, and intended for traditional data centers where density, power consumption and data integrity are paramount.



### Best-Fit Applications

- Mission critical servers and external storage arrays
- Database and online transaction process (OLTP) applications
- Power- and space-constrained data centers
- Green IT and drive-retirement cost reduction initiatives
- Compliance and data security initiatives
- Migration from 3.5-inch drive systems to next-generation technology
- Cost-effective alternative to higher-priced performance solutions



### The Perfect Match of High Capacity and High Performance

The high capacity and small 2.5-inch footprint of the Exos 10E2400 drive enables data centers to keep pace with data growth and optimize data center real estate. Exos 10E2400 delivers up to 2.4TB of high-performance data access for write-intensive applications. A single advanced format interface model lets you future-proof your storage infrastructure. The Seagate Enhanced Caching feature accelerates read and write I/O operations, preventing applications from slowing down under peak usage conditions. The latest 12Gb/s SAS interface provides improved scalability.

### Maximize Storage Investments for the Long Haul

Exos 10E2400 offers Protection Information (PI) to help protect against data corruption,<sup>1</sup> and Seagate PowerChoice™ technology for T10-compliant power management enables IT organizations to tailor systems for enhanced power consumption. RAID recovery is faster and safer with the help of the Seagate RAID Rebuild® technology option.

### Industry-Leading Data Security Features

Seagate Secure™ SED and FIPS 140-2 government-grade models offer hardware-based security to help protect data-at-rest.<sup>2</sup> With Instant Secure Erase, drive retirement is safe, fast and cost-effective. Seagate Secure models meet the NIST 800-88 media sanitization specification and support the Trusted Computer Group (TCG) standard.<sup>2</sup>

### Exos 10E300 Enterprise Hard Drives

The industry's fastest 10K-RPM drives are also available in 300GB capacity and are a perfect choice for entry-level boot server applications.

<sup>1</sup> Protection Information (PI) feature requires PI-compliant host or controller support.

<sup>2</sup> Seagate Secure models not available in all countries. May require TCG-compliant host or controller support.



| Specifications                                                       | FastFormat™ 512 Emulation/4K Native |                  |                  |                  |
|----------------------------------------------------------------------|-------------------------------------|------------------|------------------|------------------|
| Capacity                                                             | 2.4TB                               | 1.8TB            | 1.2TB            | 600GB            |
| Standard Model                                                       | ST2400MM0129                        | ST1800MM0129     | ST1200MM0129     | ST600MM0099      |
| Seagate Secure™ SED Model <sup>1</sup>                               | —                                   | —                | ST1200MM0139     | ST600MM0109      |
| Seagate Secure FIPS 140-2/Common Criteria Model <sup>1,2</sup>       | ST2400MM0149                        | ST1800MM0149     | —                | —                |
| <b>Performance</b>                                                   |                                     |                  |                  |                  |
| Spindle Speed (RPM)                                                  | 10000RPM                            | 10000RPM         | 10000RPM         | 10000RPM         |
| Average Latency (ms)                                                 | 2.9                                 | 2.9              | 2.9              | 2.9              |
| Sustained Transfer Rate (Outer to Inner Diameter, MB/s)              | 266 to 130                          | 266 to 130       | 266 to 130       | 266 to 130       |
| Cache, Multisegmented (MB)                                           | 256                                 | 256              | 256              | 256              |
| <b>Enhanced Caching Features</b>                                     |                                     |                  |                  |                  |
| I/O Acceleration and Response Time Optimization                      | Enabled                             | Enabled          | Enabled          | Enabled          |
| NAND Flash Type                                                      | eMLC                                | eMLC             | eMLC             | eMLC             |
| NAND Flash Size                                                      | 16GB                                | 16GB             | 16GB             | 16GB             |
| Intelligent NAND Endurance Management                                | Yes                                 | Yes              | Yes              | Yes              |
| <b>Enterprise Features</b>                                           |                                     |                  |                  |                  |
| Secure Download & Diagnostics (SD&D) and Instant Secure Erase Option | Yes                                 | Yes              | Yes              | Yes              |
| FastFormat (512e/4Kn AF Switching)                                   | Yes                                 | Yes              | Yes              | Yes              |
| 12Gb/s SAS                                                           | Yes                                 | Yes              | Yes              | Yes              |
| <b>Configuration/Reliability</b>                                     |                                     |                  |                  |                  |
| Disks/Heads                                                          | 4/8                                 | 3/6              | 2/4              | 1/2              |
| External Transfer Rate (MB/s)                                        | 1200                                | 1200             | 1200             | 1200             |
| Nonrecoverable Read Errors per Bits Read, Max                        | 1 per 10E16                         | 1 per 10E16      | 1 per 10E16      | 1 per 10E16      |
| Annualized Failure Rate (AFR)                                        | 0.44%                               | 0.44%            | 0.44%            | 0.44%            |
| Limited Warranty (years)                                             | 5                                   | 5                | 5                | 5                |
| <b>Power Management</b>                                              |                                     |                  |                  |                  |
| Typical Op (A) +5V/+12V                                              | 0.47/0.52                           | 0.44/0.42        | 0.46/0.41        | 0.46/0.40        |
| Typical Operating (W)                                                | 8.6                                 | 7.2              | 7.2              | 7.1              |
| Average Idle Power (W)                                               | 4.9                                 | 4.3              | 3.8              | 3.4              |
| Performance Efficiency Index (Idle W/GB)                             | 0.0020                              | 0.0024           | 0.0032           | 0.0057           |
| <b>Environmental</b>                                                 |                                     |                  |                  |                  |
| Ambient Temperature, Operating (C°)                                  | 5° C – 55° C                        | 5° C – 55° C     | 5° C – 55° C     | 5° C – 55° C     |
| Ambient Temperature, Nonoperating (C°)                               | -40° C – 70° C                      | -40° C – 70° C   | -40° C – 70° C   | -40° C – 70° C   |
| Shock, Max. Operating: 11ms (Gs)                                     | 40                                  | 40               | 40               | 40               |
| Shock, Max. Nonoperating: 2ms (Gs)                                   | 400                                 | 400              | 400              | 400              |
| Vibration, Operating: <500Hz (Gs)                                    | 0.5                                 | 0.5              | 0.5              | 0.5              |
| Vibration, Nonoperating: <500Hz (Gs)                                 | 3                                   | 3                | 3                | 3                |
| <b>Physical</b>                                                      |                                     |                  |                  |                  |
| Height (in/mm, max) <sup>3</sup>                                     | 0.591in/15.00mm                     | 0.591in/15.00mm  | 0.591in/15.00mm  | 0.591in/15.00mm  |
| Width (in/mm, max) <sup>3</sup>                                      | 2.750in/69.85mm                     | 2.750in/69.85mm  | 2.750in/69.85mm  | 2.750in/69.85mm  |
| Depth (in/mm, max) <sup>3</sup>                                      | 3.955in/100.45mm                    | 3.955in/100.45mm | 3.955in/100.45mm | 3.955in/100.45mm |
| Weight (g/lb)                                                        | 202g/0.445lb                        | 218g/0.480lb     | 220g/0.486lb     | 215g/0.474lb     |
| Carton Unit Quantity                                                 | 40                                  | 40               | 40               | 40               |
| Cartons per Pallet/Cartons per Layer                                 | 60/10                               | 60/10            | 60/10            | 60/10            |

<sup>1</sup> Not all drives may be available in all countries. Seagate Secure drives meet ISO/IEC 27040 and NIST 800-88 standards and may require use of TCG-compliant host or controller support.

<sup>2</sup> FIPS 140-2 in review. See FIPS 140-2 Level 2 Certificate at <http://csrc.nist.gov/groups/STM/cmvp/validation.html>

<sup>3</sup> These base deck dimensions conform to the Small Form Factor Standard (SFF-8201) found at [www.sffcommittee.org](http://www.sffcommittee.org).



| Specifications                                                       | 512 Native       |                  | 512 Native (v8 models) |
|----------------------------------------------------------------------|------------------|------------------|------------------------|
| Capacity                                                             | 1.2TB            | 600GB            | 300GB                  |
| Standard Model                                                       | ST1200MM0009     | ST600MM0009      | ST300MM0048            |
| Seagate Secure™ SED Model <sup>1</sup>                               | ST1200MM0039     | ST600MM0039      | ST300MM0058            |
| Seagate Secure FIPS 140-2/Common Criteria Model <sup>1,2</sup>       | —                | —                | —                      |
| <b>Performance</b>                                                   |                  |                  |                        |
| Spindle Speed (RPM)                                                  | 10000RPM         | 10000RPM         | 10000RPM               |
| Average Latency (ms)                                                 | 2.9              | 2.9              | 2.9                    |
| Sustained Transfer Rate (Outer to Inner Diameter, MB/s)              | 250 to 130       | 250 to 130       | 215 to 125             |
| Cache, Multisegmented (MB)                                           | 128              | 128              | 128                    |
| <b>Enhanced Caching Features</b>                                     |                  |                  |                        |
| I/O Acceleration and Response Time Optimization                      | —                | —                | —                      |
| NAND Flash Type                                                      | —                | —                | —                      |
| NAND Flash Size                                                      | —                | —                | —                      |
| Intelligent NAND Endurance Management                                | —                | —                | —                      |
| <b>Enterprise Features</b>                                           |                  |                  |                        |
| Secure Download & Diagnostics (SD&D) and Instant Secure Erase Option | Yes              | Yes              | Yes                    |
| FastFormat (512e/4Kn AF Switching)                                   | —                | —                | —                      |
| 12Gb/s SAS                                                           | Yes              | Yes              | Yes                    |
| <b>Configuration/Reliability</b>                                     |                  |                  |                        |
| Disks/Heads                                                          | 2/4              | 1/2              | 1/2                    |
| External Transfer Rate (MB/s)                                        | 1200             | 1200             | 1200                   |
| Nonrecoverable Read Errors per Bits Read, Max                        | 1 per 10E16      | 1 per 10E16      | 1 per 10E16            |
| Annualized Failure Rate (AFR)                                        | 0.44%            | 0.44%            | 0.44%                  |
| Limited Warranty (years)                                             | 5                | 5                | 5                      |
| <b>Power Management</b>                                              |                  |                  |                        |
| Typical Op (A) +5V/+12V                                              | 0.46/0.41        | 0.46/0.40        | 0.46/0.40              |
| Typical Operating (W)                                                | 7.2              | 7.1              | 6.3                    |
| Average Idle Power (W)                                               | 3.8              | 3.4              | 3.4                    |
| Performance Efficiency Index (Idle W/GB)                             | 0.0032           | 0.0057           | 0.0057                 |
| <b>Environmental</b>                                                 |                  |                  |                        |
| Ambient Temperature, Operating (C°)                                  | 5°C – 55°C       | 5°C – 55°C       | 5°C – 55°C             |
| Ambient Temperature, Nonoperating (C°)                               | -40°C – 70°C     | -40°C – 70°C     | -40°C – 70°C           |
| Shock, Max. Operating: 11ms (Gs)                                     | 40               | 40               | 40                     |
| Shock, Max. Nonoperating: 2ms (Gs)                                   | 400              | 400              | 400                    |
| Vibration, Operating: <500Hz (Gs)                                    | 0.5              | 0.5              | 0.5                    |
| Vibration, Nonoperating: <500Hz (Gs)                                 | 3                | 3                | 3                      |
| <b>Physical</b>                                                      |                  |                  |                        |
| Height (in/mm, max) <sup>3</sup>                                     | 0.591in/15.00mm  | 0.591in/15.00mm  | 0.591in/15.00mm        |
| Width (in/mm, max) <sup>3</sup>                                      | 2.760in/70.10mm  | 2.760in/70.10mm  | 2.760in/70.10mm        |
| Depth (in/mm, max) <sup>3</sup>                                      | 3.955in/100.45mm | 3.955in/100.45mm | 3.955in/100.45mm       |
| Weight (g/lb)                                                        | 220g/0.486lb     | 215g/0.474lb     | 215g/0.474lb           |
| Carton Unit Quantity                                                 | 40               | 40               | 40                     |
| Cartons per Pallet/Cartons per Layer                                 | 60/10            | 60/10            | 60/10                  |

<sup>1</sup> Not all drives may be available in all countries. Seagate Secure drives meet ISO/IEC 27040 and NIST 800-88 standards and may require use of TCG-compliant host or controller support.

<sup>2</sup> FIPS 140-2 in review. See FIPS 140-2 Level 2 Certificate at <http://csrc.nist.gov/groups/STM/cmvp/validation.html>

<sup>3</sup> These base deck dimensions conform to the Small Form Factor Standard (SFF-8201) found at [www.sffcommittee.org](http://www.sffcommittee.org).

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