



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 2.4 TB in a 2.5-inch form factor, and intended for traditional data centres 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 centres
- 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 centres to keep pace with data growth and optimise data centre real estate. Exos 10E2400 delivers up to 2.4 TB 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 12 Gb/s SAS interface provides improved scalability.

### Maximise 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 organisations 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 sanitisation 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 300 GB 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	2.4 TB	1.8 TB	1.2 TB	600GB
Standard Model	ST2400MM0129	ST1800MM0129	ST1200MM0129	ST600MM0099
Seagate Secure™ SED Model	—	—	ST1200MM0139	ST600MM0109
Seagate Secure FIPS 140-2/Common Criteria Model <sup>1</sup>	ST2400MM0149	ST1800MM0149	—	—
<b>Performance</b>				
Spindle Speed (RPM)	10,000 RPM	10,000 RPM	10,000 RPM	10,000 RPM
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, Multi-segmented (MB)	256	256	256	256
<b>Enhanced Caching Features</b>				
I/O Acceleration and Response Time Optimisation	Enabled	Enabled	Enabled	Enabled
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
12 Gb/s SAS	Yes	Yes	Yes	Yes
<b>Configuration/Reliability</b>				
Discs/Heads	4/8	3/6	2/4	1/2
External Transfer Rate (MB/s)	1,200	1,200	1,200	1,200
Non-recoverable Read Errors per Bits Read, Max	1 per 10E16	1 per 10E16	1 per 10E16	1 per 10E16
Annualised 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	0.45/0.39	0.46/0.40
Typical Operating (W)	8.6	7.2	6.9	7.1
Average Idling Power (W)	4.9	4.3	3.7	3.4
Performance Efficiency Index (Idle W/GB)	0.0020	0.0024	0.0031	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, Non-operating (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. Non-operating: 2 ms (Gs)	400	400	400	400
Vibration, Operating: <500 Hz (Gs)	0.5	0.5	0.5	0.5
Vibration, Non-operating: <500 Hz (Gs)	3	3	3	3
<b>Physical</b>				
Height (in/mm, max) <sup>2</sup>	0.591 in/15 mm	0.591 in/15 mm	0.591 in/15 mm	0.591 in/15 mm
Width (in/mm, max) <sup>2</sup>	2.75 in/69.85 mm	2.75 in/69.85 mm	2.75 in/69.85 mm	2.75 in/69.85 mm
Depth (in/mm, max) <sup>2</sup>	3.955 in/100.45 mm	3.955 in/100.45 mm	3.955 in/100.45 mm	3.955 in/100.45 mm
Weight (lb/g)	202 g/0.445 lb	206 g/0.455 lb	191 g/0.422 lb	179 g/0.394 lb
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> 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	1.2 TB	600GB	300GB
Standard Model	ST1200MM0009	ST600MM0009	ST300MM0048
Seagate Secure™ SED Model	ST1200MM0039	ST600MM0039	ST300MM0058
Seagate Secure FIPS 140-2/Common Criteria Model <sup>1</sup>	—	—	—
<b>Performance</b>			
Spindle Speed (RPM)	10,000 RPM	10,000 RPM	10,000 RPM
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, Multi-segmented (MB)	128	128	128
<b>Enhanced Caching Features</b>			
I/O Acceleration and Response Time Optimisation	—	—	—
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)	—	—	—
12 Gb/s SAS	Yes	Yes	Yes
<b>Configuration/Reliability</b>			
Discs/Heads	2/4	1/2	1/2
External Transfer Rate (MB/s)	1,200	1,200	1,200
Non-recoverable Read Errors per Bits Read, Max	1 per 10E16	1 per 10E16	1 per 10E16
Annualised Failure Rate (AFR)	0.44%	0.44%	0.44%
Limited Warranty (years)	5	5	5
<b>Power Management</b>			
Typical Op (A) +5V/+12V	0.45/0.39	0.46/0.40	0.34/0.38
Typical Operating (W)	6.9	7.1	6.3
Average Idling Power (W)	3.7	3.4	3.1
Performance Efficiency Index (Idle W/GB)	0.0031	0.0057	0.010
<b>Environmental</b>			
Ambient Temperature, Operating (°C)	5°C – 55°C	5°C – 55°C	5°C – 55°C
Ambient Temperature, Non-operating (C°)	-40°C – 70°C	-40°C – 70°C	-40°C – 70°C
Shock, Max. Operating: 11ms (Gs)	40	40	40
Shock, Max. Non-operating: 2 ms (Gs)	400	400	400
Vibration, Operating: <500 Hz (Gs)	0.5	0.5	0.5
Vibration, Non-operating: <500 Hz (Gs)	3	3	3
<b>Physical</b>			
Height (in/mm, max) <sup>2</sup>	0.591 in/15 mm	0.591 in/15 mm	0.591 in/15 mm
Width (in/mm, max) <sup>2</sup>	2.76 in/70.1 mm	2.76 in/70.1 mm	2.76 in/70.1 mm
Depth (in/mm, max) <sup>2</sup>	3.955 in/100.45 mm	3.955 in/100.45 mm	3.955 in/100.45 mm
Weight (lb/g)	191 g/0.422 lb	179 g/0.394 lb	218 g/0.481 lb
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> These base deck dimensions conform to the Small Form Factor Standard (SFF-8201) found at [www.sffcommittee.org](http://www.sffcommittee.org).

[seagate.com](http://seagate.com)



© 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, Fast Format, PowerChoice, Seagate RAID Rebuild, Seagate Secure, and the Seagate Secure logo 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](http://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. DS1959.6-2004GB April 2020