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,[1] 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.[2] 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.[2]

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.

1 Protection Information (PI) feature requires PI-compliant host or controller support.
2 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[1]	—	—	ST1200MM0139	ST600MM0109
Seagate Secure FIPS 140-2/Common Criteria Model[1,2]	ST2400MM0149	ST1800MM0149	—	—
Performance				
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)	279 to 136	279 to 136	279 to 136	279 to 136
Cache, Multi-segmented (MB)	256	256	256	256
Enhanced Caching Features				
I/O Acceleration and Response Time Optimisation	Enabled	Enabled	Enabled	Enabled
NAND Flash Type	eMLC	eMLC	eMLC	eMLC
NAND Flash Size	16 GB	16 GB	16 GB	16 GB
Intelligent NAND Endurance Management	Yes	Yes	Yes	Yes
Enterprise Features				
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
Configuration/Reliability				
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
Power Management				
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 Idling Power (W)	4.9	4.3	3.8	3.4
Performance Efficiency Index (Idle W/GB)	0.0020	0.0024	0.0032	0.0057
Environmental				
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
Physical				
Height (in/mm, max)[3]	0.591 in/15 mm	0.591 in/15 mm	0.591 in/15 mm	0.591 in/15 mm
Width (in/mm, max)[3]	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)[3]	3.955 in/100.46 mm	3.955 in/100.46 mm	3.955 in/100.46 mm	3.955 in/100.46 mm
Weight (lb/g)	202 g/0.445 lb	218 g/0.48 lb	220 g/0.486 lb	215 g/0.474 lb
Carton Unit Quantity	40	40	40	40
Cartons per Pallet / Cartons per Layer	60/10	60/10	60/10	60/10

1 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.

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

3 These base deck dimensions conform to the Small Form Factor Standard (SFF-8201) found at 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[1]	ST1200MM0039	ST600MM0039	ST300MM0058
Seagate Secure FIPS 140-2/Common Criteria Model[1],[2]	—	—	—
Performance			
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)	262 to 136	262 to 136	215 to 125
Cache, Multi-segmented (MB)	128	128	128
Enhanced Caching Features			
I/O Acceleration and Response Time Optimisation	—	—	—
NAND Flash Type	—	—	—
NAND Flash Size	—	—	—
Intelligent NAND Endurance Management	—	—	—
Enterprise Features			
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
Configuration/Reliability			
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
Power Management			
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 Idling Power (W)	3.8	3.4	3.4
Performance Efficiency Index (Idle W/GB)	0.0032	0.0057	0.0057
Environmental			
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
Physical			
Height (in/mm, max)[3]	0.591 in/15 mm	0.591 in/15 mm	0.591 in/15 mm
Width (in/mm, max)[3]	2.76 in/70.1 mm	2.76 in/70.1 mm	2.76 in/70.1 mm
Depth (in/mm, max)[3]	3.955 in/100.46 mm	3.955 in/100.46 mm	3.955 in/100.46 mm
Weight (lb/g)	220 g/0.486 lb	215 g/0.474 lb	215 g/0.474 lb
Carton Unit Quantity	40	40	40
Cartons per Pallet / Cartons per Layer	60/10	60/10	60/10

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