



DATA SHEET

Trusted. Efficient. Versatile.

Exos 7E8



The Seagate® Exos® 7E8 enterprise hard drive confidently stores up to 8 TB of data without sacrificing performance. The secure, high-capacity, high-performance drives are optimised for demanding enterprise bulk data applications.



Best-Fit Applications

- Hyperscale applications/cloud data centres
- Massive scale-out data centres
- OLTP and HPC applications
- High-capacity density RAID storage
- Mainstream enterprise external storage arrays
- Distributed file systems, including Hadoop and Ceph
- Enterprise backup and restore — D2D, virtual tape
- Centralised surveillance

Enterprise Drive for Bulk Data Applications

Exos 7E8 hard drives support up to 8 TB per drive,¹ offering bulk data storage for data centre infrastructures requiring a highly reliable enterprise hard drive. Exos 7E8 provides cost-effective, reliable access to unstructured data. Built on field-proven 10th-generation conventional magnetic recording (CMR) technology, the Exos 7E8 drive helps to catalyse the datasphere, enabling data centre architects and IT professionals to deliver trusted performance, rock-solid reliability, ironclad security, and low TCO for demanding 24x7 operations.

Robust Bulk Data Storage for a 24x7 World

Exos 7E8 drives are backed by a 2 million hour MTBF rating and support workloads of 550 TB per year — 10x that of desktop hard drives. With state-of-the-art cache, on-the-fly error-correction algorithms, and rotational vibration design, the Exos 7E8 helps ensure consistent performance in replicated and RAID multi-drive systems.

High Performance for Mainstream Data Centre Applications

Meet your storage workload requirements in the most efficient and cost-effective data centre footprint on the market today. The Exos 7E8 delivers easy integration into bulk storage systems with 12 Gb/s SAS and SATA 6 Gb/s interface options. With user-definable innovative technology advancements like PowerChoice™ and Seagate RAID Rebuild®, you can tailor your nearline storage requirements for even greater improvements in lowering your TCO.

Enhanced Reliability, Data Protection, and Security

Advanced security features help protect data where it lives — on the drive. Exos 7E8 prevents unauthorised drive access and safeguards stored data with security features that include Secure Downloads & Diagnostics, TCG-compliant Self-Encrypting Drive, and government-grade FIPS/Common Criteria tamper-resistant hard drive.² Seagate Secure™ drives simplify drive repurposing and disposal, help protect data-at-rest, and comply with corporate and federal data security mandates.

¹ Seagate recommends validating your configuration with your HBA/RAID controller manufacturer to ensure full capacity capabilities.

² Self-Encrypting Drives (SED) are not available in all models or countries. May require TCG-compliant host or controller support.





Specifications	512n SATA				
	6TB	4TB	3TB	2TB	1TB
Capacity	6TB	4TB	3TB	2TB	1TB
Base Model	ST6000NM002A	ST4000NM000A	ST3000NM000A	ST2000NM000A	ST1000NM000A
PowerBalance™ Model	—	—	—	—	—
Seagate Secure™ Model ¹	—	ST4000NM006A	—	—	ST1000NM002A
Seagate Secure SED-FIPS Model ^{1,2}	—	ST4000NM013A	ST3000NM004A	—	—
Features					
Protection Information (T10 DIF)	—	—	—	—	—
Humidity Sensor	Yes	Yes	Yes	Yes	Yes
SuperParity	Yes	Yes	Yes	Yes	Yes
Low Halogen	Yes	Yes	Yes	Yes	Yes
PowerChoice™ Technology	Yes	Yes	Yes	Yes	Yes
PowerBalance™ Technology	Yes	Yes	Yes	Yes	Yes
Cache, Multi-segmented (MB)	256	256	256	256	256
Advanced Write Caching (Internal NOR flash)	Yes	Yes	Yes	Yes	Yes
Reliability/Data Integrity					
Vibration, Non-operating: 10 Hz to 500 Hz (Grms)	5	5	5	5	5
MTBF	2,000,000 hr	2,000,000 hr	2,000,000 hr	2,000,000 hr	2,000,000 hr
Reliability Rating @ Full 24x7 Operation (AFR)	0.44%	0.44%	0.44%	0.44%	0.44%
Non-recoverable Read Errors per Bits Read, Max	1 sector per 10E15	1 sector per 10E15	1 sector per 10E15	1 sector per 10E15	1 sector per 10E15
Power-on Hours	8,760	8,760	8,760	8,760	8,760
Bytes per Sector	512	512	512	512	512
Warranty, Limited (years)	5	5	5	5	5
Performance					
Spindle Speed (RPM)	7,200	7,200	7,200	7,200	7,200
Interface Access Speed (Gb/s)	6.0, 3.0, 1.5	6.0, 3.0, 1.5	6.0, 3.0, 1.5	6.0, 3.0, 1.5	6.0, 3.0, 1.5
Max Sustainable Transfer Rate	215MB/s	215MB/s	215MB/s	215MB/s	215MB/s
Average Latency (ms)	4.16	4.16	4.16	4.16	4.16
Interface Ports	Single	Single	Single	Single	Single
Rotational Vibration @ 1,500 Hz (rad/s ²)	12.5	12.5	12.5	12.5	12.5
Power Consumption					
Idling Average (W)	7.1 W	5.38 W	5.38 W	4.48 W	4.48 W
Average Operating Power	12.91 W	10.77 W	10.77 W	9.91 W	9.91 W
Power Supply Requirements	+12 V and +5 V	+12 V and +5 V	+12 V and +5 V	+12 V and +5 V	+12 V and +5 V
Environmental/Temperature					
Temperature, Operating (°C)	5°C – 60°C	5°C – 60°C	5°C – 60°C	5°C – 60°C	5°C – 60°C
Shock, Operating Read/Write (Gs)	70/40 Gs	70/40 Gs	70/40 Gs	70/40 Gs	70/40 Gs
Shock, Non-operating, 1 ms/2 ms (Gs)	150/300	150/300	150/300	150/300	150/300
Physical					
Height (in/mm, max) ³	1.028 in/26.1 mm	1.028 in/26.1 mm	1.028 in/26.1 mm	1.028 in/26.1 mm	1.028 in/26.1 mm
Width (in/mm, max) ³	4.01 in/101.85 mm	4.01 in/101.85 mm	4.01 in/101.85 mm	4.01 in/101.85 mm	4.01 in/101.85 mm
Depth (in/mm, max) ³	5.787 in/147 mm	5.787 in/147 mm	5.787 in/147 mm	5.787 in/147 mm	5.787 in/147 mm
Weight (lb/g)	716 g/1.58 lb	649 g/1.43 lb	649 g/1.43 lb	620 g/1.37 lb	620 g/1.37 lb
Carton Unit Quantity	20	20	20	20	20
Cartons per Pallet / Cartons per Layer	40/8	40/8	40/8	40/8	40/8

¹ Self-Encrypting Drives (SED) and FIPS 140-2 Validated drives are not available in all models or countries. May require TCG-compliant host or controller support.

² FIPS 140-2 Level 2 Certification in process.

³ These base deck dimensions conform to the Small Form Factor Standard (SFF-8201) found at www.sffcommittee.org. For connector-related dimensions, see SFF-8223.



Specifications	512n SAS				
	6TB	4TB	3TB	2TB	1TB
Capacity	6TB	4TB	3TB	2TB	1TB
Base Model	ST6000NM003A	ST4000NM003A	ST3000NM001A	ST2000NM003A	ST1000NM001A
PowerBalance™ Model	—	—	—	—	—
Seagate Secure™ Model ¹	—	ST4000NM007A	ST3000NM003A	ST2000NM007A	—
Seagate Secure SED-FIPS Model ^{1,2}	—	ST4000NM015A	ST3000NM005A	—	—
Features					
Protection Information (T10 DIF)	Yes	Yes	Yes	Yes	Yes
Humidity Sensor	Yes	Yes	Yes	Yes	Yes
SuperParity	Yes	Yes	Yes	Yes	Yes
Low Halogen	Yes	Yes	Yes	Yes	Yes
PowerChoice™ Technology	Yes	Yes	Yes	Yes	Yes
PowerBalance™ Technology	Yes	Yes	Yes	Yes	Yes
Cache, Multi-segmented (MB)	256	256	256	256	256
Advanced Write Caching (Internal NOR flash)	Yes	Yes	Yes	Yes	Yes
Reliability/Data Integrity					
Vibration, Non-operating: 10 Hz to 500 Hz (Grms)	5	5	5	5	5
MTBF	2,000,000 hr	2,000,000 hr	2,000,000 hr	2,000,000 hr	2,000,000 hr
Reliability Rating @ Full 24x7 Operation (AFR)	0.44%	0.44%	0.44%	0.44%	0.44%
Non-recoverable Read Errors per Bits Read, Max	1 sector per 10E15	1 sector per 10E15	1 sector per 10E15	1 sector per 10E15	1 sector per 10E15
Power-on Hours	8,760	8,760	8,760	8,760	8,760
Bytes per Sector	512	512	512	512	512
Warranty, Limited (years)	5	5	5	5	5
Performance					
Spindle Speed (RPM)	7,200	7,200	7,200	7,200	7,200
Interface Access Speed (Gb/s)	12.0, 6.0, 3.0	12.0, 6.0, 3.0	12.0, 6.0, 3.0	12.0, 6.0, 3.0	12.0, 6.0, 3.0
Max Sustainable Transfer Rate	215MB/s	215MB/s	215MB/s	215MB/s	215MB/s
Average Latency (ms)	4.16	4.16	4.16	4.16	4.16
Interface Ports	Dual	Dual	Dual	Dual	Dual
Rotational Vibration @ 1,500 Hz (rad/s ²)	12.5	12.5	12.5	12.5	12.5
Power Consumption					
Idling Average (W)	7.97 W	5.94 W	5.94 W	4.86 W	4.86 W
Average Operating Power	13.18 W	11.33 W	11.33 W	10.09 W	10.09 W
Power Supply Requirements	+12 V and +5 V	+12 V and +5 V	+12 V and +5 V	+12 V and +5 V	+12 V and +5 V
Environmental/Temperature					
Temperature, Operating (°C)	5°C – 60°C	5°C – 60°C	5°C – 60°C	5°C – 60°C	5°C – 60°C
Shock, Operating Read/Write (Gs)	70/40 Gs	70/40 Gs	70/40 Gs	70/40 Gs	70/40 Gs
Shock, Non-operating, 1 ms/2 ms (Gs)	150/300	150/300	150/300	150/300	150/300
Physical					
Height (in/mm, max) ³	1.028 in/26.1 mm	1.028 in/26.1 mm	1.028 in/26.1 mm	1.028 in/26.1 mm	1.028 in/26.1 mm
Width (in/mm, max) ³	4.01 in/101.85 mm	4.01 in/101.85 mm	4.01 in/101.85 mm	4.01 in/101.85 mm	4.01 in/101.85 mm
Depth (in/mm, max) ³	5.787 in/147 mm	5.787 in/147 mm	5.787 in/147 mm	5.787 in/147 mm	5.787 in/147 mm
Weight (lb/g)	716 g/1.58 lb	649 g/1.43 lb	649 g/1.43 lb	620 g/1.37 lb	620 g/1.37 lb
Carton Unit Quantity	20	20	20	20	20
Cartons per Pallet / Cartons per Layer	40/8	40/8	40/8	40/8	40/8

¹ Self-Encrypting Drives (SED) and FIPS 140-2 Validated drives are not available in all models or countries. May require TCG-compliant host or controller support.

² FIPS 140-2 Level 2 Certification in process.

³ These base deck dimensions conform to the Small Form Factor Standard (SFF-8201) found at www.sffcommittee.org. For connector-related dimensions, see SFF-8223.



Specifications	512e SATA			
	8TB	6TB	4TB	2TB
Capacity	8TB	6TB	4TB	2TB
Base Model	ST8000NM000A	ST6000NM021A	ST4000NM002A	ST2000NM001A
PowerBalance™ Model	ST8000NM016A	—	—	—
Seagate Secure™ Model ¹	ST8000NM004A	—	ST4000NM010A	—
Seagate Secure SED-FIPS Model ^{1,2}	ST8000NM008A	ST6000NM025A	ST4000NM012A	—
Features				
Protection Information (T10 DIF)	—	—	—	—
Humidity Sensor	Yes	Yes	Yes	Yes
SuperParity	Yes	Yes	Yes	Yes
Low Halogen	Yes	Yes	Yes	Yes
PowerChoice™ Technology	Yes	Yes	Yes	Yes
PowerBalance™ Technology	Yes	Yes	Yes	Yes
Cache, Multi-segmented (MB)	256	256	256	256
Advanced Write Caching (Internal NOR flash)	Yes	Yes	Yes	Yes
Reliability/Data Integrity				
Vibration, Non-operating: 10 Hz to 500 Hz (Grms)	5	5	5	5
MTBF	2,000,000 hr	2,000,000 hr	2,000,000 hr	2,000,000 hr
Reliability Rating @ Full 24x7 Operation (AFR)	0.44%	0.44%	0.44%	0.44%
Non-recoverable Read Errors per Bits Read, Max	1 sector per 10E15	1 sector per 10E15	1 sector per 10E15	1 sector per 10E15
Power-on Hours	8,760	8,760	8,760	8,760
Bytes per Sector	512	512	512	512
Warranty, Limited (years)	5	5	5	5
Performance				
Spindle Speed (RPM)	7,200	7,200	7,200	7,200
Interface Access Speed (Gb/s)	6.0, 3.0, 1.5	6.0, 3.0, 1.5	6.0, 3.0, 1.5	6.0, 3.0, 1.5
Max Sustainable Transfer Rate	249MB/s	226MB/s	226MB/s	226MB/s
Average Latency (ms)	4.16	4.16	4.16	4.16
Interface Ports	Single	Single	Single	Single
Rotational Vibration @ 1,500 Hz (rad/s ²)	12.5	12.5	12.5	12.5
Power Consumption				
Idling Average (W)	7.64 W	6.2 W	5.4 W	4.42 W
Average Operating Power	12.81 W	11.67 W	10.89 W	9.83 W
Power Supply Requirements	+12 V and +5 V	+12 V and +5 V	+12 V and +5 V	+12 V and +5 V
Environmental/Temperature				
Temperature, Operating (°C)	5°C – 60°C	5°C – 60°C	5°C – 60°C	5°C – 60°C
Shock, Operating Read/Write (Gs)	70/40 Gs	70/40 Gs	70/40 Gs	70/40 Gs
Shock, Non-operating, 1 ms/2 ms (Gs)	150/300	150/300	150/300	150/300
Physical				
Height (in/mm, max) ³	1.028 in/26.1 mm	1.028 in/26.1 mm	1.028 in/26.1 mm	1.028 in/26.1 mm
Width (in/mm, max) ³	4.01 in/101.85 mm	4.01 in/101.85 mm	4.01 in/101.85 mm	4.01 in/101.85 mm
Depth (in/mm, max) ³	5.787 in/147 mm	5.787 in/147 mm	5.787 in/147 mm	5.787 in/147 mm
Weight (lb/g)	716 g/1.58 lb	693 g/1.53 lb	649 g/1.43 lb	620 g/1.37 lb
Carton Unit Quantity	20	20	20	20
Cartons per Pallet / Cartons per Layer	40/8	40/8	40/8	40/8

¹ Self-Encrypting Drives (SED) and FIPS 140-2 Validated drives are not available in all models or countries. May require TCG-compliant host or controller support.

² FIPS 140-2 Level 2 Certification in process.

³ These base deck dimensions conform to the Small Form Factor Standard (SFF-8201) found at www.sffcommittee.org. For connector-related dimensions, see SFF-8223.



Specifications	512e SAS			
	8TB	6TB	4TB	2TB
Capacity	8TB	6TB	4TB	2TB
Base Model	ST8000NM001A	ST6000NM029A	ST4000NM005A	ST2000NM004A
PowerBalance™ Model	—	—	—	—
Seagate Secure™ Model ¹	ST8000NM006A	—	ST4000NM011A	—
Seagate Secure SED-FIPS Model ^{1,2}	ST8000NM010A	ST6000NM033A	ST4000NM014A	—
Features				
Protection Information (T10 DIF)	Yes	Yes	Yes	Yes
Humidity Sensor	Yes	Yes	Yes	Yes
SuperParity	Yes	Yes	Yes	Yes
Low Halogen	Yes	Yes	Yes	Yes
PowerChoice™ Technology	Yes	Yes	Yes	Yes
PowerBalance™ Technology	Yes	Yes	Yes	Yes
Cache, Multi-segmented (MB)	256	256	256	256
Advanced Write Caching (Internal NOR flash)	Yes	Yes	Yes	Yes
Reliability/Data Integrity				
Vibration, Non-operating: 10 Hz to 500 Hz (Grms)	5	5	5	5
MTBF	2,000,000 hr	2,000,000 hr	2,000,000 hr	2,000,000 hr
Reliability Rating @ Full 24x7 Operation (AFR)	0.44%	0.44%	0.44%	0.44%
Non-recoverable Read Errors per Bits Read, Max	1 sector per 10E15	1 sector per 10E15	1 sector per 10E15	1 sector per 10E15
Power-on Hours	8,760	8,760	8,760	8,760
Bytes per Sector	512, 520, 528	512, 520, 528	512, 520, 528	512, 520, 528
Warranty, Limited (years)	5	5	5	5
Performance				
Spindle Speed (RPM)	7,200	7,200	7,200	7,200
Interface Access Speed (Gb/s)	12.0, 6.0, 3.0	12.0, 6.0, 3.0	12.0, 6.0, 3.0	12.0, 6.0, 3.0
Max Sustainable Transfer Rate	249MB/s	226MB/s	226MB/s	226MB/s
Average Latency (ms)	4.16	4.16	4.16	4.16
Interface Ports	Dual	Dual	Dual	Dual
Rotational Vibration @ 1,500 Hz (rad/s ²)	12.5	12.5	12.5	12.5
Power Consumption				
Idling Average (W)	7.97 W	6.84 W	5.79 W	5.06 W
Average Operating Power	13.18 W	12.3 W	11.12 W	10.14 W
Power Supply Requirements	+12 V and +5 V	+12 V and +5 V	+12 V and +5 V	+12 V and +5 V
Environmental/Temperature				
Temperature, Operating (°C)	5°C – 60°C	5°C – 60°C	5°C – 60°C	5°C – 60°C
Shock, Operating Read/Write (Gs)	70/40 Gs	70/40 Gs	70/40 Gs	70/40 Gs
Shock, Non-operating, 1 ms/2 ms (Gs)	150/300	150/300	150/300	150/300
Physical				
Height (in/mm, max) ³	1.028 in/26.1 mm	1.028 in/26.1 mm	1.028 in/26.1 mm	1.028 in/26.1 mm
Width (in/mm, max) ³	4.01 in/101.85 mm	4.01 in/101.85 mm	4.01 in/101.85 mm	4.01 in/101.85 mm
Depth (in/mm, max) ³	5.787 in/147 mm	5.787 in/147 mm	5.787 in/147 mm	5.787 in/147 mm
Weight (lb/g)	716 g/1.58 lb	693 g/1.53 lb	649 g/1.43 lb	620 g/1.37 lb
Carton Unit Quantity	20	20	20	20
Cartons per Pallet / Cartons per Layer	40/8	40/8	40/8	40/8

¹ Self-Encrypting Drives (SED) and FIPS 140-2 Validated drives are not available in all models or countries. May require TCG-compliant host or controller support.

² FIPS 140-2 Level 2 Certification in process.

³ These base deck dimensions conform to the Small Form Factor Standard (SFF-8201) found at www.sffcommittee.org. For connector-related dimensions, see SFF-8223.



Specifications	4Kn SATA			
	8TB	6TB	4TB	2TB
Capacity	8TB	6TB	4TB	2TB
Base Model	ST8000NM002A	ST6000NM022A	ST4000NM001A	ST2000NM002A
PowerBalance™ Model	—	—	—	—
Seagate Secure™ Model ¹	—	—	—	—
Seagate Secure SED-FIPS Model ^{1,2}	ST8000NM009A	ST6000NM026A	—	—
Features				
Protection Information (T10 DIF)	—	—	—	—
Humidity Sensor	Yes	Yes	Yes	Yes
SuperParity	Yes	Yes	Yes	Yes
Low Halogen	Yes	Yes	Yes	Yes
PowerChoice™ Technology	Yes	Yes	Yes	Yes
PowerBalance™ Technology	Yes	Yes	Yes	Yes
Cache, Multi-segmented (MB)	256	256	256	256
Advanced Write Caching (Internal NOR flash)	Yes	Yes	Yes	Yes
Reliability/Data Integrity				
Vibration, Non-operating: 10 Hz to 500 Hz (Grms)	5	5	5	5
MTBF	2,000,000 hr	2,000,000 hr	2,000,000 hr	2,000,000 hr
Reliability Rating @ Full 24x7 Operation (AFR)	0.44%	0.44%	0.44%	0.44%
Non-recoverable Read Errors per Bits Read, Max	1 sector per 10E15	1 sector per 10E15	1 sector per 10E15	1 sector per 10E15
Power-on Hours	8,760	8,760	8,760	8,760
Bytes per Sector	4,096	4,096	4,096	4,096
Warranty, Limited (years)	5	5	5	5
Performance				
Spindle Speed (RPM)	7,200	7,200	7,200	7,200
Interface Access Speed (Gb/s)	6.0, 3.0, 1.5	6.0, 3.0, 1.5	6.0, 3.0, 1.5	6.0, 3.0, 1.5
Max Sustainable Transfer Rate	249MB/s	226MB/s	226MB/s	226MB/s
Average Latency (ms)	4.16	4.16	4.16	4.16
Interface Ports	Single	Single	Single	Single
Rotational Vibration @ 1,500 Hz (rad/s ²)	12.5	12.5	12.5	12.5
Power Consumption				
Idling Average (W)	7.64 W	6.2 W	5.4 W	4.42 W
Average Operating Power	12.81 W	11.67 W	10.89 W	9.83 W
Power Supply Requirements	+12 V and +5 V	+12 V and +5 V	+12 V and +5 V	+12 V and +5 V
Environmental/Temperature				
Temperature, Operating (°C)	5°C – 60°C	5°C – 60°C	5°C – 60°C	5°C – 60°C
Shock, Operating Read/Write (Gs)	70/40 Gs	70/40 Gs	70/40 Gs	70/40 Gs
Shock, Non-operating, 1 ms/2 ms (Gs)	150/300	150/300	150/300	150/300
Physical				
Height (in/mm, max) ³	1.028 in/26.1 mm	1.028 in/26.1 mm	1.028 in/26.1 mm	1.028 in/26.1 mm
Width (in/mm, max) ³	4.01 in/101.85 mm	4.01 in/101.85 mm	4.01 in/101.85 mm	4.01 in/101.85 mm
Depth (in/mm, max) ³	5.787 in/147 mm	5.787 in/147 mm	5.787 in/147 mm	5.787 in/147 mm
Weight (lb/g)	716 g/1.58 lb	693 g/1.53 lb	649 g/1.43 lb	620 g/1.37 lb
Carton Unit Quantity	20	20	20	20
Cartons per Pallet / Cartons per Layer	40/8	40/8	40/8	40/8

¹ Self-Encrypting Drives (SED) and FIPS 140-2 Validated drives are not available in all models or countries. May require TCG-compliant host or controller support.

² FIPS 140-2 Level 2 Certification in process.

³ These base deck dimensions conform to the Small Form Factor Standard (SFF-8201) found at www.sffcommittee.org. For connector-related dimensions, see SFF-8223.



Specifications	4Kn SAS			
	8TB	6TB	4TB	2TB
Capacity	8TB	6TB	4TB	2TB
Base Model	ST8000NM003A	ST6000NM030A	ST4000NM004A	ST2000NM005A
PowerBalance™ Model	—	—	—	—
Seagate Secure™ Model ¹	—	—	—	—
Seagate Secure SED-FIPS Model ^{1,2}	ST8000NM011A	ST6000NM034A	—	—
Features				
Protection Information (T10 DIF)	Yes	Yes	Yes	Yes
Humidity Sensor	Yes	Yes	Yes	Yes
SuperParity	Yes	Yes	Yes	Yes
Low Halogen	Yes	Yes	Yes	Yes
PowerChoice™ Technology	Yes	Yes	Yes	Yes
PowerBalance™ Technology	Yes	Yes	Yes	Yes
Cache, Multi-segmented (MB)	256	256	256	256
Advanced Write Caching (Internal NOR flash)	Yes	Yes	Yes	Yes
Reliability/Data Integrity				
Vibration, Non-operating: 10 Hz to 500 Hz (Grms)	5	5	5	5
MTBF	2,000,000 hr	2,000,000 hr	2,000,000 hr	2,000,000 hr
Reliability Rating @ Full 24x7 Operation (AFR)	0.44%	0.44%	0.44%	0.44%
Non-recoverable Read Errors per Bits Read, Max	1 sector per 10E15	1 sector per 10E15	1 sector per 10E15	1 sector per 10E15
Power-on Hours	8,760	8,760	8,760	8,760
Bytes per Sector	4,096, 4,160, 4,224	4,096, 4,160, 4,224	4,096, 4,160, 4,224	4,096, 4,160, 4,224
Warranty, Limited (years)	5	5	5	5
Performance				
Spindle Speed (RPM)	7,200	7,200	7,200	7,200
Interface Access Speed (Gb/s)	12.0, 6.0, 3.0	12.0, 6.0, 3.0	12.0, 6.0, 3.0	12.0, 6.0, 3.0
Max Sustainable Transfer Rate	249MB/s	226MB/s	226MB/s	226MB/s
Average Latency (ms)	4.16	4.16	4.16	4.16
Interface Ports	Dual	Dual	Dual	Dual
Rotational Vibration @ 1,500 Hz (rad/s ²)	12.5	12.5	12.5	12.5
Power Consumption				
Idling Average (W)	7.97 W	6.84 W	5.79 W	5.06 W
Average Operating Power	13.18 W	12.3 W	11.12 W	10.14 W
Power Supply Requirements	+12 V and +5 V	+12 V and +5 V	+12 V and +5 V	+12 V and +5 V
Environmental/Temperature				
Temperature, Operating (°C)	5°C – 60°C	5°C – 60°C	5°C – 60°C	5°C – 60°C
Shock, Operating Read/Write (Gs)	70/40 Gs	70/40 Gs	70/40 Gs	70/40 Gs
Shock, Non-operating, 1 ms/2 ms (Gs)	150/300	150/300	150/300	150/300
Physical				
Height (in/mm, max) ³	1.028 in/26.1 mm	1.028 in/26.1 mm	1.028 in/26.1 mm	1.028 in/26.1 mm
Width (in/mm, max) ³	4.01 in/101.85 mm	4.01 in/101.85 mm	4.01 in/101.85 mm	4.01 in/101.85 mm
Depth (in/mm, max) ³	5.787 in/147 mm	5.787 in/147 mm	5.787 in/147 mm	5.787 in/147 mm
Weight (lb/g)	716 g/1.58 lb	693 g/1.53 lb	649 g/1.43 lb	620 g/1.37 lb
Carton Unit Quantity	20	20	20	20
Cartons per Pallet / Cartons per Layer	40/8	40/8	40/8	40/8

¹ Self-Encrypting Drives (SED) and FIPS 140-2 Validated drives are not available in all models or countries. May require TCG-compliant host or controller support.

² FIPS 140-2 Level 2 Certification in process.

³ These base deck dimensions conform to the Small Form Factor Standard (SFF-8201) found at www.sffcommittee.org. For connector-related dimensions, see SFF-8223.

AMERICAS Seagate Technology LLC 10200 South De Anza Boulevard, Cupertino, California 95014, United States, 408-658-1000
ASIA/PACIFIC Seagate Singapore International Headquarters Pte. Ltd. 7000 Ang Mo Kio Avenue 5, Singapore 569877, 65-6485-3888
EUROPE, MIDDLE EAST, AND AFRICA Seagate Technology SAS 16-18, rue du Dôme, 92100 Boulogne-Billancourt, France, 33 1-4186 10 00

© 2019 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, PowerBalance, 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), and may be controlled for export, import and use in other countries. Seagate reserves the right to change, without notice, product offerings or specifications. DS1957.2-1904US April 2019