

# Enterprise Capacity 3.5 HDD

VERSION 5

Data Sheet

## Capacity-Optimized Enterprise Hard Drive for Bulk-Data Applications

- 1TB to 8TB<sup>1</sup>, 3.5-inch enterprise drive with industry-leading CMR technology, for maximum storage per storage slot
- Advanced Write Caching feature utilizes enhanced algorithms, resulting in the industry's highest nearline storage workload performance efficiencies
- Reliable access to unstructured data in bulk storage applications
- 12Gb/s SAS and SATA 6Gb/s interfaces in industry-standard formats (512n, 512e and 4Kn) for easy integration into replicated and RAID multi-drive storage servers and systems
- State-of-the-art cache, on-the-fly error-correction algorithms, super parity and end-to-end SAS-based data integrity for accurate data storage
- Industry-leading rotational vibration design helps ensure consistent performance in dense multi-drive systems
- Engineered for 24x7 workloads of 550TB/yr—10x that of desktop drives
- Robust performance with dual processors, ramp load technology, top-cover-attached motor and humidity sensor for optimum performance in all chassis
- On-demand PowerBalance™ feature available for lower power/performance in random read/write environments
- Seagate Secure® Self-Encrypting Drive featuring Instant Secure Erase for cost-saving drive retirement and secure data-at-rest protection<sup>2</sup>



## Best-Fit Applications

- Hyperscale applications/cloud data centers with replicated storage
- Massive scale-out data centers and big data analytics
- High-capacity density RAID storage
- Mainstream enterprise external storage arrays
- Distributed file systems, including Hadoop and Ceph
- Enterprise backup and restore—D2D, virtual tape
- Centralized surveillance

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

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



# Enterprise Capacity 3.5 HDD

VERSION 5

Specifications	4Kn SATA			
	8TB	6TB	4TB	2TB
Capacity	8TB	6TB	4TB	2TB
Base Model	ST8000NM0045	ST6000NM0125	ST4000NM0085	ST2000NM0105
PowerBalance™ Model	—	—	—	—
Seagate Secure® Model <sup>1</sup>	ST8000NM0115	ST6000NM0185	ST4000NM0055	—
Seagate Secure SED-FIPS Model <sup>1,2</sup>	ST8000NM0145	ST6000NM0265	—	—
<b>Special Features</b>				
Protection Information (T10 DIF)	—	—	—	—
Humidity Sensor	Yes	Yes	Yes	Yes
SuperParity	—	—	—	—
Halogen Free	Yes	Yes	Yes	Yes
PowerChoice™ Technology	Yes	Yes	Yes	Yes
PowerBalance™ Technology	Yes	Yes	Yes	Yes
Cache	256MB	256MB	128MB	128MB
Advanced Write Caching (Internal NOR flash)	Yes	Yes	Yes	Yes
<b>Reliability/Data Integrity</b>				
Vibration, Nonoperating: 10Hz to 500Hz (Grms)	5	5	5	5
MTBF	2,000,000hr	2,000,000hr	2,000,000hr	2,000,000hr
Reliability Rating @ Full 24x7 Operation (AFR)	0.44%	0.44%	0.44%	0.44%
Nonrecoverable 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	8760	8760	8760	8760
Bytes per Sector	4096	4096	4096	4096
Warranty, Limited (years)	5	5	5	5
<b>Performance</b>				
Spindle Speed (RPM)	7200	7200	7200	7200
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 @ 1500Hz (rad/s <sup>2</sup> )	12.5	12.5	12.5	12.5
<b>Power Consumption</b>				
Idle Average (W)	7.6W	7.25W	5.45W	4.25W
Average Operating Power	11W	8.31W	6.94W	5.9W
Power Supply Requirements	+12 V and +5 V	+12 V and +5 V	+12 V and +5 V	+12 V and +5 V
<b>Environmental/Temperature</b>				
Temperature, Operating (°C)	5°C – 60°C	5°C – 60°C	5°C – 60°C	5°C – 60°C
Shock, Operating Read/Write (Gs)	70/40Gs	70/40Gs	70/40Gs	70/40Gs
Shock, Nonoperating, 1ms/2ms (Gs)	150/250	150/250	150/300	150/300
<b>Physical</b>				
Height (mm/in) <sup>3</sup>	26.1mm/1.028in	26.1mm/1.028in	26.1mm/1.028in	26.1mm/1.028in
Width (mm/in, max) <sup>3</sup>	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in
Depth (mm/in, max) <sup>3</sup>	147.0mm/5.787in	147.0mm/5.787in	147.0mm/5.787in	147.0mm/5.787in
Weight (g/lb)	780g/1.72lb	705g/1.55lb	680g/1.5lb	610g/1.34lb
Carton Unit Quantity	20	20	20	20
Cartons per Pallet / Cartons per Layer	40 / 8	40 / 8	40 / 8	40 / 8

<sup>1</sup> 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.

<sup>2</sup> FIPS 140-2 Level 2 Certification in process.

<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). For connector-related dimensions, see SFF-8223.

# Enterprise Capacity 3.5 HDD



VERSION 5

Specifications	4Kn SAS			
Capacity	8TB	6TB	4TB	2TB
Base Model	ST8000NM0065	ST6000NM0105	ST4000NM0095	ST2000NM0115
PowerBalance™ Model	—	—	—	—
Seagate Secure® Model <sup>1</sup>	ST8000NM0095	ST6000NM0205	ST4000NM0075	—
Seagate Secure SED-FIPS Model <sup>1,2</sup>	ST8000NM0125	ST6000NM0255	—	—
<b>Special Features</b>				
Protection Information (T10 DIF)	Yes	Yes	Yes	Yes
Humidity Sensor	Yes	Yes	Yes	Yes
SuperParity	Yes	Yes	Yes	Yes
Halogen Free	Yes	Yes	Yes	Yes
PowerChoice™ Technology	Yes	Yes	Yes	Yes
PowerBalance™ Technology	Yes	Yes	Yes	Yes
Cache	256MB	256MB	128MB	128MB
Advanced Write Caching (Internal NOR flash)	Yes	Yes	Yes	Yes
<b>Reliability/Data Integrity</b>				
Vibration, Nonoperating: 10Hz to 500Hz (Gms)	5	5	5	5
MTBF	2,000,000hr	2,000,000hr	2,000,000hr	2,000,000hr
Reliability Rating @ Full 24x7 Operation (AFR)	0.44%	0.44%	0.44%	0.44%
Nonrecoverable 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	8760	8760	8760	8760
Bytes per Sector	4096, 4160, 4224	4096, 4160, 4224	4096, 4160, 4224	4096, 4160, 4224
Warranty, Limited (years)	5	5	5	5
<b>Performance</b>				
Spindle Speed (RPM)	7200	7200	7200	7200
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 @ 1500Hz (rad/s <sup>2</sup> )	12.5	12.5	12.5	12.5
<b>Power Consumption</b>				
Idle Average (W)	8.5W	8.37W	6.52W	4.57W
Average Operating Power	12W	9.2W	7.74W	6.34W
Power Supply Requirements	+12 V and +5 V	+12 V and +5 V	+12 V and +5 V	+12 V and +5 V
<b>Environmental/Temperature</b>				
Temperature, Operating (°C)	5°C – 60°C	5°C – 60°C	5°C – 60°C	5°C – 60°C
Shock, Operating Read/Write (Gs)	70/40Gs	70/40Gs	70/40Gs	70/40Gs
Shock, Nonoperating, 1ms/2ms (Gs)	150/250	150/250	150/300	150/300
<b>Physical</b>				
Height (mm/in) <sup>3</sup>	26.1mm/1.028in	26.1mm/1.028in	26.1mm/1.028in	26.1mm/1.028in
Width (mm/in, max) <sup>3</sup>	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in
Depth (mm/in, max) <sup>3</sup>	147.0mm/5.787in	147.0mm/5.787in	147.0mm/5.787in	147.0mm/5.787in
Weight (g/lb)	780g/1.72lb	705g/1.55lb	680g/1.5lb	610g/1.34lb
Carton Unit Quantity	20	20	20	20
Cartons per Pallet / Cartons per Layer	40 / 8	40 / 8	40 / 8	40 / 8

<sup>1</sup> 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.

<sup>2</sup> FIPS 140-2 Level 2 Certification in process.

<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). For connector-related dimensions, see SFF-8223.

# Enterprise Capacity 3.5 HDD



VERSION 5

Specifications	512e SATA			
	8TB	6TB	4TB	2TB
Capacity	8TB	6TB	4TB	2TB
Base Model	ST8000NM0055	ST6000NM0115	ST4000NM0115	ST2000NM0125
PowerBalance™ Model	ST8000NM0165	ST6000NM0215	—	—
Seagate Secure® Model <sup>1</sup>	ST8000NM0105	ST6000NM0175	ST4000NM0245	—
Seagate Secure SED-FIPS Model <sup>1,2</sup>	ST8000NM0155	ST6000NM0275	ST4000NM0225	—
<b>Special Features</b>				
Protection Information (T10 DIF)	—	—	—	—
Humidity Sensor	Yes	Yes	Yes	Yes
SuperParity	—	—	—	—
Halogen Free	Yes	Yes	Yes	Yes
PowerChoice™ Technology	Yes	Yes	Yes	Yes
PowerBalance™ Technology	Yes	Yes	Yes	Yes
Cache	256MB	256MB	128MB	128MB
Advanced Write Caching (Internal NOR flash)	Yes	Yes	Yes	Yes
<b>Reliability/Data Integrity</b>				
Vibration, Nonoperating: 10Hz to 500Hz (Gms)	5	5	5	5
MTBF	2,000,000hr	2,000,000hr	2,000,000hr	2,000,000hr
Reliability Rating @ Full 24x7 Operation (AFR)	0.44%	0.44%	0.44%	0.44%
Nonrecoverable 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	8760	8760	8760	8760
Bytes per Sector	512	512	512	512
Warranty, Limited (years)	5	5	5	5
<b>Performance</b>				
Spindle Speed (RPM)	7200	7200	7200	7200
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 @ 1500Hz (rad/s²)	12.5	12.5	12.5	12.5
<b>Power Consumption</b>				
Idle Average (W)	7.6W	7.25W	5.45W	4.25W
Average Operating Power	11W	8.31W	6.94W	5.9W
Power Supply Requirements	+12 V and +5 V	+12 V and +5 V	+12 V and +5 V	+12 V and +5 V
<b>Environmental/Temperature</b>				
Temperature, Operating (°C)	5°C – 60°C	5°C – 60°C	5°C – 60°C	5°C – 60°C
Shock, Operating Read/Write (Gs)	70/40Gs	70/40Gs	70/40Gs	70/40Gs
Shock, Nonoperating, 1ms/2ms (Gs)	150/250	150/250	150/300	150/300
<b>Physical</b>				
Height (mm/in) <sup>3</sup>	26.1mm/1.028in	26.1mm/1.028in	26.1mm/1.028in	26.1mm/1.028in
Width (mm/in, max) <sup>3</sup>	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in
Depth (mm/in, max) <sup>3</sup>	147.0mm/5.787in	147.0mm/5.787in	147.0mm/5.787in	147.0mm/5.787in
Weight (g/lb)	780g/1.72lb	705g/1.55lb	680g/1.50lb	610g/1.34lb
Carton Unit Quantity	20	20	20	20
Cartons per Pallet / Cartons per Layer	40 / 8	40 / 8	40 / 8	40 / 8

<sup>1</sup> 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.

<sup>2</sup> FIPS 140-2 Level 2 Certification in process.

<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). For connector-related dimensions, see SFF-8223.

# Enterprise Capacity 3.5 HDD



VERSION 5

Specifications	512e SAS			
	8TB	6TB	4TB	2TB
Capacity	8TB	6TB	4TB	2TB
Base Model	ST8000NM0075	ST6000NM0095	ST4000NM0125	ST2000NM0135
PowerBalance™ Model	ST8000NM0175	ST6000NM0225	—	—
Seagate Secure® Model <sup>1</sup>	ST8000NM0085	ST6000NM0195	ST4000NM0255	—
Seagate Secure SED-FIPS Model <sup>1,2</sup>	ST8000NM0135	ST6000NM0285	ST4000NM0235	—
<b>Special Features</b>				
Protection Information (T10 DIF)	Yes	Yes	Yes	Yes
Humidity Sensor	Yes	Yes	Yes	Yes
SuperParity	Yes	Yes	Yes	Yes
Halogen Free	Yes	Yes	Yes	Yes
PowerChoice™ Technology	Yes	Yes	Yes	Yes
PowerBalance™ Technology	Yes	Yes	Yes	Yes
Cache	256MB	256MB	128MB	128MB
Advanced Write Caching (Internal NOR flash)	Yes	Yes	Yes	Yes
<b>Reliability/Data Integrity</b>				
Vibration, Nonoperating: 10Hz to 500Hz (Gms)	5	5	5	5
MTBF	2,000,000hr	2,000,000hr	2,000,000hr	2,000,000hr
Reliability Rating @ Full 24x7 Operation (AFR)	0.44%	0.44%	0.44%	0.44%
Nonrecoverable 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	8760	8760	8760	8760
Bytes per Sector	512, 520, 528	512, 520, 528	512, 520, 528	512, 520, 528
Warranty, Limited (years)	5	5	5	5
<b>Performance</b>				
Spindle Speed (RPM)	7200	7200	7200	7200
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 @ 1500Hz (rad/s²)	12.5	12.5	12.5	12.5
<b>Power Consumption</b>				
Idle Average (W)	8.5W	8.37W	6.52W	4.57W
Average Operating Power	12W	9.2W	7.74W	6.34W
Power Supply Requirements	+12 V and +5 V	+12 V and +5 V	+12 V and +5 V	+12 V and +5 V
<b>Environmental/Temperature</b>				
Temperature, Operating (°C)	5°C – 60°C	5°C – 60°C	5°C – 60°C	5°C – 60°C
Shock, Operating Read/Write (Gs)	70/40Gs	70/40Gs	70/40Gs	70/40Gs
Shock, Nonoperating, 1ms/2ms (Gs)	150/250	150/250	150/300	150/300
<b>Physical</b>				
Height (mm/in) <sup>3</sup>	26.1mm/1.028in	26.1mm/1.028in	26.1mm/1.028in	26.1mm/1.028in
Width (mm/in, max) <sup>3</sup>	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in
Depth (mm/in, max) <sup>3</sup>	147.0mm/5.787in	147.0mm/5.787in	147.0mm/5.787in	147.0mm/5.787in
Weight (g/lb)	780g/1.72lb	705g/1.55lb	680g/1.5lb	610g/1.34lb
Carton Unit Quantity	20	20	20	20
Cartons per Pallet / Cartons per Layer	40 / 8	40 / 8	40 / 8	40 / 8

<sup>1</sup> 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.

<sup>2</sup> FIPS 140-2 Level 2 Certification in process.

<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). For connector-related dimensions, see SFF-8223.

# Enterprise Capacity 3.5 HDD



VERSION 5

Specifications	512n SATA				
Capacity	6TB	4TB	3TB	2TB	1TB
Base Model	ST6000NM0235	ST4000NM0035	ST3000NM0005	ST2000NM0055	ST1000NM0055
PowerBalance™ Model	—	—	—	—	—
Seagate Secure® Model <sup>1</sup>	—	ST4000NM0045	ST3000NM0015	ST2000NM0065	ST1000NM0065
Seagate Secure SED-FIPS Model <sup>1,2</sup>	—	ST4000NM0105	ST3000NM0055	—	—
<b>Special Features</b>					
Protection Information (T10 DIF)	—	—	—	—	—
Humidity Sensor	Yes	Yes	Yes	Yes	Yes
SuperParity	Yes	Yes	Yes	Yes	Yes
Halogen Free	Yes	Yes	Yes	Yes	Yes
PowerChoice™ Technology	Yes	Yes	Yes	Yes	Yes
PowerBalance™ Technology	No	No	No	No	No
Cache	256MB	128MB	128MB	128MB	128MB
Advanced Write Caching (Internal NOR flash)	No	No	No	No	No
<b>Reliability/Data Integrity</b>					
Vibration, Nonoperating: 10Hz to 500Hz (Gms)	5	5	5	5	5
MTBF	2,000,000hr	2,000,000hr	2,000,000hr	2,000,000hr	2,000,000hr
Reliability Rating @ Full 24x7 Operation (AFR)	0.44%	0.44%	0.44%	0.44%	0.44%
Nonrecoverable 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	8760	8760	8760	8760	8760
Bytes per Sector	512	512	512	512	512
Warranty, Limited (years)	5	5	5	5	5
<b>Performance</b>					
Spindle Speed (RPM)	7200	7200	7200	7200	7200
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 @ 1500Hz (rad/s <sup>2</sup> )	12.5	12.5	12.5	12.5	12.5
<b>Power Consumption</b>					
Idle Average (W)	8.15W	5.45W	5.45W	4.25W	4.25W
Average Operating Power	9.80W	6.9W	6.9W	5.91W	5.91W
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
<b>Environmental/Temperature</b>					
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)	70/40Gs	70/40Gs	70/40Gs	70/40Gs	70/40Gs
Shock, Nonoperating, 1ms/2ms (Gs)	150/250	150/300	150/300	150/300	150/300
<b>Physical</b>					
Height (mm/in) <sup>3</sup>	26.1mm/1.028in	26.1mm/1.028in	26.1mm/1.028in	26.1mm/1.028in	26.1mm/1.028in
Width (mm/in, max) <sup>3</sup>	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in
Depth (mm/in, max) <sup>3</sup>	147.00mm/5.787in	147.0mm/5.787in	147.0mm/5.787in	147.0mm/5.787in	147.0mm/5.787in
Weight (g/lb)	780g/1.72lb	704g/1.55lb	704g/1.55lb	610g/1.34lb	610g/1.34lb
Carton Unit Quantity	20	20	20	20	20
Cartons per Pallet / Cartons per Layer	40 / 8	40 / 8	40 / 8	40 / 8	40 / 8

<sup>1</sup> 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.

<sup>2</sup> FIPS 140-2 Level 2 Certification in process.

<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). For connector-related dimensions, see SFF-8223.

# Enterprise Capacity 3.5 HDD



VERSION 5

Specifications	512n SAS				
Capacity	6TB	4TB	3TB	2TB	1TB
Base Model	ST6000NM0245	ST4000NM0025	ST3000NM0025	ST2000NM0045	ST1000NM0045
PowerBalance™ Model	—	—	—	—	—
Seagate Secure® Model <sup>1</sup>	—	ST4000NM0065	ST3000NM0035	ST2000NM0085	ST1000NM0075
Seagate Secure SED-FIPS Model <sup>1,2</sup>	—	ST4000NM0135	ST3000NM0045	—	—
<b>Special Features</b>					
Protection Information (T10 DIF)	Yes	Yes	Yes	Yes	Yes
Humidity Sensor	Yes	Yes	Yes	Yes	Yes
SuperParity	Yes	Yes	Yes	Yes	Yes
Halogen Free	Yes	Yes	Yes	Yes	Yes
PowerChoice™ Technology	Yes	Yes	Yes	Yes	Yes
PowerBalance™ Technology	No	No	No	No	No
Cache	256MB	128MB	128MB	128MB	128MB
Advanced Write Caching (Internal NOR flash)	No	No	No	No	No
<b>Reliability/Data Integrity</b>					
Vibration, Nonoperating: 10Hz to 500Hz (Gms)	5	5	5	5	5
MTBF	2,000,000hr	2,000,000hr	2,000,000hr	2,000,000hr	2,000,000hr
Reliability Rating @ Full 24x7 Operation (AFR)	0.44%	0.44%	0.44%	0.44%	0.44%
Nonrecoverable 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	8760	8760	8760	8760	8760
Bytes per Sector	512	512	512	512	512
Warranty, Limited (years)	5	5	5	5	5
<b>Performance</b>					
Spindle Speed (RPM)	7200	7200	7200	7200	7200
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 @ 1500Hz (rad/s <sup>2</sup> )	12.5	12.5	12.5	12.5	12.5
<b>Power Consumption</b>					
Idle Average (W)	8.57W	6.52W	6.52W	4.75W	4.75W
Average Operating Power	10.86W	7.74W	7.74W	6.3W	6.3W
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
<b>Environmental/Temperature</b>					
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)	70/40Gs	70/40Gs	70/40Gs	70/40Gs	70/40Gs
Shock, Nonoperating, 1ms/2ms (Gs)	150/250	150/300	150/300	150/300	150/300
<b>Physical</b>					
Height (mm/in) <sup>3</sup>	26.1mm/1.028in	26.1mm/1.028in	26.1mm/1.028in	26.1mm/1.028in	26.1mm/1.028in
Width (mm/in, max) <sup>3</sup>	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in
Depth (mm/in, max) <sup>3</sup>	147.00mm/5.787in	147.0mm/5.787in	147.0mm/5.787in	147.0mm/5.787in	147.0mm/5.787in
Weight (g/lb)	780g/1.72lb	680g/1.5lb	680g/1.5lb	610g/1.34lb	610g/1.34lb
Carton Unit Quantity	20	20	20	20	20
Cartons per Pallet / Cartons per Layer	40 / 8	40 / 8	40 / 8	40 / 8	40 / 8

<sup>1</sup> 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.

<sup>2</sup> FIPS 140-2 Level 2 Certification in process.

<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). For connector-related dimensions, see SFF-8223.

SEAGATE.COM

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

© 2016 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.

PowerBalance, PowerChoice and Seagate Secure 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. 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. DS1882.3-1610US October 2016