



Specifications	512e/4KN (FastFormat™) SATA				
Capacity	10TB	8TB	6TB	4TB	2TB
Standard	ST10000NM017B	ST8000NM017B	ST6000NM019B	ST4000NM024B	ST2000NM017B
PowerBalance™ Model **	ST10000NM025B	ST8000NM025B	ST6000NM027B	—	—
Seagate Secure™ SED Model ¹ **	ST10000NM019B	ST8000NM019B	ST6000NM021B	ST4000NM026B	ST2000NM019B
Seagate Secure SED-FIPS 140-3 Model ¹ **	ST10000NM021B	ST8000NM021B	ST6000NM023B	ST4000NM028B	—
**not all models will be generally offered as standard configurations	—	—	—	—	—
Features					
Protection Information (T10 DIF)	—	—	—	—	—
Super Parity	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, Multisegmented (MB)	256	256	256	256	256
Advanced Write Caching (8M internal NOR flash)	Yes	Yes	Yes	Yes	Yes
Reliability/Data Integrity					
Vibration, Nonoperating: 10Hz to 500Hz (Grms)	5	5	5	5	5
Mean Time Between Failures (MTBF, hours)	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
Reliability Rating @ Full 24x7 Operation (AFR)	0.44%	0.44%	0.44%	0.44%	0.44%
Nonrecoverable Read Errors per Bits Read	1 sector per 10E15	1 sector per 10E15	1 sector per 10E15	1 sector per 10E15	1 sector per 10E15
Power-On Hours per Year	8760	8760	8760	8760	8760
Sector Size (Bytes per Logical Sector)	512	512	512	512	512
Warranty, Limited (years)	5	5	5	5	5
Performance					
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. Sustained Transfer Rate OD	263MB/s	255MB/s	250MB/s	250MB/s	226MB/s
Average Latency (ms)	4.16	4.16	4.16	4.16	4.16
Interface Ports	Single	Single	Single	Single	Single
Rotation Vibration @ 1500 Hz (rad/s²)	12.5	12.5	12.5	12.5	12.5
Power Consumption					
Idle Power, Average (W)	7.8	7.06	7.06	5.16	5.16
Typical Operating, Random Read (W)	11.8	11.03	11.03	9.4	9.4
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, Operating (°C) Drive Reported	5 ~ 60	5 ~ 60	5 ~ 60	5 ~ 60	5 ~ 60
Shock, Operating 2ms Read/Write (Gs)	70/40Gs	70/40Gs	70/40Gs	70/40Gs	70/40Gs
Shock, Nonoperating, (1ms/2ms) (Gs)	150/300	150/300	150/300	150/300	150/300
Physical					
Height (in/mm, max) ²	1.028in/26.11mm	1.028in/26.11mm	1.028in/26.11mm	1.028in/26.11mm	1.028in/26.11mm
Width (in/mm, max) ²	4.010in/101.85mm	4.010in/101.85mm	4.010in/101.85mm	4.010in/101.85mm	4.010in/101.85mm
Depth (in/mm, max) ²	5.787in/147.0mm	5.787in/147.0mm	5.787in/147.0mm	5.787in/147.0mm	5.787in/147.0mm
Weight (g/lb)	720g/1.59lb	716g/1.58lb	716g/1.58lb	620g/1.37lb	620g/1.37lb
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), Instant Secure Erase (ISE) drives, and FIPS 140-3 Validated drives are not available in all models or countries. May require TCG-compliant host or controller support.

² 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.