



DATA SHEET

Trusted. Efficient. Versatile.

## Exos 7E2

The Seagate® Exos™ 7E2 enterprise hard drives with 1 TB and 2 TB capacities are specifically designed to address the needs of storing unstructured data cost-effectively. The traditional 512-native format with a 6 Gb/s SATA interface ensures easy integration into legacy storage servers and systems.



### Best-Fit Applications

- Legacy mainstream applications requiring 512n block size
- Hyperscale applications/cloud data centres with replicated storage
- Scale-out data centres and Big Data analytics
- High-capacity density RAID storage
- Mainstream enterprise external storage arrays (SAN, NAS, DAS)
- Distributed file systems, including Hadoop and Ceph
- Enterprise backup and restore — D2D, virtual tape
- Centralised surveillance

### Reliable Data Center-Grade Hard Drive Within Reach

The Exos 7E2 hard drives support up to 2 TB per drive,<sup>1</sup> offering economical storage for traditional 512-native infrastructures requiring a highly reliable enterprise hard drive. Exos 7E2 provides the most cost-effective, reliable access to unstructured data in bulk storage applications. Built on field-proven 9th generation conventional magnetic recording (CMR) technology, the Exos 7E2 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

The Exos 7E2 hard drives are proven, enterprise-class hard drives with enterprise-grade reliability backed by a 2 million hour MTBF rating. With state-of-the-art cache, on the fly error-correction algorithms and rotational vibration design, the Exos 7E2 helps ensure consistent performance in replicated and RAID multi-drive systems.

### Consistent, High Performance and Compatibility for Legacy Data Centre Applications

Meet your storage workload requirements with the most efficient and cost-effective SATA 6 Gb/s drive in a 3.5-inch data centre footprint. With user-definable innovative technology advancements like PowerChoice™ and Seagate RAID Rebuild®, you can tailor your bulk storage requirements for even greater improvements in your TCO.

### Enhanced Enterprise Reliability, Data Protection and Security

The Exos 7E2 series delivers firmware security features to help protect data where it lives — on the drive. Exos 7E2 hard drives safeguard firmware with authentic Secure Downloads & Diagnostics.

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



Specifications	512n SATA	
Capacity	2 TB	1 TB
Base Model	ST2000NM0008	ST1000NM0008
<b>Features</b>		
Super Parity	Yes	Yes
Low Halogen	Yes	Yes
PowerChoice™ Technology	Yes	Yes
Seagate RAID Rebuild® Technology	Yes	Yes
SD&D Firmware Security	Yes	Yes
Cache	128 MB	128 MB
<b>Reliability/Data Integrity</b>		
Vibration, Non-operating: 10 Hz to 500 Hz (Grms)	5	5
Mean Time Between Failures (MTBF, hours)	2,000,000	2,000,000
Reliability Rating @ Full 24x7 Operation (AFR)	0.44%	0.44%
Non-recoverable Read Errors per Bits Read, Max	1 sector per 10E15	1 sector per 10E15
Power-On Hours per Year (24x7)	8,760	8,760
Bytes per Sector	512	512
Limited Warranty (years)	5	5
<b>Performance</b>		
Spindle Speed (RPM)	7,200	7,200
Interface Access Speed (Gb/s)	6.0, 3.0, 1.5	6.0, 3.0, 1.5
Max. Sustained Transfer Rate OD (MB/s, MiB/s)	194	194
Average Latency (ms)	4.16	4.16
Interface Ports	Single	Single
Rotational Vibration @ 1,500 Hz (rad/s <sup>2</sup> )	12.5	12.5
<b>Power Consumption</b>		
Idle Power, Average (W)	4.7	4.7
Typical Operating (W)	7	7
Power Supply Requirements	+12 V and +5 V	+12 V and +5 V
<b>Environmental</b>		
Temperature, Operating (°C)	5°C – 60°C	5°C – 60°C
Shock, Operating 2 ms (Read/Write) (Gs)	70/40 Gs	70/40 Gs
Shock, Non-operating, 1 ms/2 ms (Gs)	200/300	200/300
<b>Physical</b>		
Height (in/mm, max) <sup>1</sup>	26.1 mm/1.028 in	26.1 mm/1.028 in
Width (mm/in, max) <sup>1</sup>	101.85 mm/4.01 in	101.85 mm/4.01 in
Depth (mm/in, max) <sup>1</sup>	147 mm/5.787 in	147 mm/5.787 in
Weight (lb/g)	550 g/1.212 lb	550 g/1.212 lb
Carton Unit Quantity	20	20
Cartons per Pallet	40	40
Cartons per Layer	8	8

<sup>1</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.

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