EXOS
ENTERPRISE

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,[1] 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 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 24×7 operations.

Robust Bulk Data Storage for a 24×7 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.

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

EXOS ENTERPRISE™

Specifications	512n SATA	
Capacity	2TB	1TB
Base Model	ST2000NM0008	ST1000NM0008
Features		
SuperParity	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
Reliability/Data Integrity		
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 24×7 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 (24×7)	8,760	8,760
Bytes per Sector	512	512
Limited Warranty (years)	5	5
Performance		
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/s²)	12.5	12.5
Power Consumption		
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
Environmental		
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
Physical		
Height (in/mm, max)[1]	26.1 mm/1.028 in	26.1 mm/1.028 in
Width (mm/in, max)[1]	101.85 mm/4.01 in	101.85 mm/4.01 in
Depth (mm/in, max)[1]	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

1 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.

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