2.5-in SSD DATA SHEET

Built for Fast Data Center Applications

Nytro 2050 SAS SSD Series



The Seagate Nytro 2050 SAS SSD is the superior SATA alternative, delivering up to 7TB in 2.5-in x 15mm form factor. Harness a 12Gb/s interface with dual ports for speeds up to 1050MB/s, choose from three endurance options including up to 3 DWPD, and rely on drive monitoring and government-grade encryption. It's all here—fast, consistent, scalable, and secure performance for the most demanding enterprise workloads.



Best-Fit Applications

- Single-port, high-capacity storage systems
- SATA-compatible systems

Key Advantages

12Gb/s SAS interface and a single port for 24×7 performance

High-density capacities of up to 7TB in a 2.5-in × 15mm form factor

Low latency and high QoS for better responsiveness and user experience

Easily manage and monitor SSD health with SeaChest

Three endurance options to meet workload, deployment, and TCO demands

Ensures reliable data protection for mission-critical applications

Seagate Secure™ with Secure Download and Diagnostics (SD&D), SED, and SED FIPS 140-2 options for advanced data security[1]

Built for easy integration with Linux and Microsoft OS

1 Self-encrypting drives (SED) are not available in all models or countries. May require TCG-compliant host or controller support.

NYTRO™



Specifications	Nytro 2350—Scaled Endurance			
Capacity	7.68TB	3.84TB	1.92TB	960GB
Standard Model	XS7680SE70085	XS3840SE70085	XS1920SE70085	XS960SE70085
Seagate Secure™ SED Model[1]	XS7680SE70095	XS3840SE70095	XS1920SE70095	XS960SE70095
Seagate Secure FIPS 140-2/Common Criteria Mode[1]	XS7680SE70105	XS3840SE70105	XS1920SE70105	XS960SE70105
Seagate Instant Secure Erase (ISE) Model	XS7680SE70115	XS3840SE70115	XS1920SE70115	XS960SE70115
Features				
Interface	SAS 12 Gb/s	SAS 12 Gb/s	SAS 12 Gb/s	SAS 12 Gb/s
NAND Flash Type	3D eTLC	3D eTLC	3D eTLC	3D eTLC
Form Factor	2.5 in × 15mm	2.5 in × 15mm	2.5 in × 15mm	2.5 in × 15mm
Performance				
Sequential Read (MB/s) Sustained, 128KB[2]	1,050	1,050	1,050	1,050
Sequential Write (MB/s) Sustained, 128KB[2]	1,050	1,050	1,050	1,050
Random Read (IOPS) Sustained, 4KB[2]	190,000	190,000	170,000	190,000
Random Write (IOPS) Sustained, 4KB[2]	50,000	50,000	50,000	50,000
Random 30% Write (IOPS) Sustained, 4KB[2]	120,000	120,000	120,000	120,000
Endurance/Reliability				
Lifetime Endurance (Drive Writes per Day)	1	1	1	1
Total Bytes Written (TB)	14,000	7000	3500	1700
Nonrecoverable Read Errors per Bits Read	1 per 10E17	1 per 10E17	1 per 10E17	1 per 10E17
Annualized Failure Rate (AFR)	0.35%	0.35%	0.35%	0.35%
Limited Warranty (years)	5	5	5	5
Power Management				
+5/+12V Max Start Current (A)	1.2/0.2	1.2/0.2	1.2/0.2	1.1/0.2
Average Idle Power (W)	4.7	4.5	4.9	4.7
Physical				
Height (in/mm, max)[3]	0.591/15.00	0.591/15.00	0.591/15.00	0.591/15.00
Width (in/mm, max)[3]	2.760/70.10	2.760/70.10	2.760/70.10	2.760/70.10
Depth (in/mm, max)[3]	3.955/100.45	3.955/100.45	3.955/100.45	3.955/100.45
Weight (lb/gm)	0.3638/165	0.3638/165	0.3638/165	0.3638/165
Carton Unit Quantity	10	10	10	10
Cartons per Pallet	90	90	90	90
Cartons per Layer	9	9	9	9

1 Not all drives may be available in all countries. Seagate Secure drives meet ISO/IEC 27040 and NIST 800-88 standards and may require use of TCG-compliant host or controller support.

2 All performance measured at queue depth of 32 per PHY at beginning of life. System application performance may vary based on SAS host and prior system workload.

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 (SAS models).

NYTRO™



Specifications	Nytro 2550—Mixed Workloads		
Capacity	3.8TB	1.9TB	960GB
Standard Model	XS3840LE70085	XS1920LE70085	XS960LE70085
Seagate Secure™ SED Model[1]	XS3840LE70095	XS1920LE70095	XS960LE70095
Seagate Secure FIPS 140-2/Common Criteria Mode[1]	XS3840LE70105	XS1920LE70105	XS960LE70105
Seagate Instant Secure Erase (ISE) Model	XS3840LE70115	XS1920LE70115	XS960LE70115
Features			
Interface	SAS 12 Gb/s	SAS 12 Gb/s	SAS 12 Gb/s
NAND Flash Type	3D eTLC	3D eTLC	3D eTLC
Form Factor	2.5 in × 15mm	2.5 in × 15mm	2.5 in × 15mm
Performance			
Sequential Read (MB/s) Sustained, 128KB[2]	1,050	1,050	1,050
Sequential Write (MB/s) Sustained, 128KB[2]	1,050	1,050	1,050
Random Read (IOPS) Sustained, 4KB[2]	190,000	190,000	190,000
Random Write (IOPS) Sustained, 4KB[2]	7,500	7,500	7,500
Random 30% Write (IOPS) Sustained, 4KB[2]	160,000	160,000	135,000
Endurance/Reliability			
Lifetime Endurance (Drive Writes per Day)	3	3	3
Total Bytes Written (TB)	21,000	10,500	5300
Nonrecoverable Read Errors per Bits Read	1 per 10E17	1 per 10E17	1 per 10E17
Annualized Failure Rate (AFR)	0.35%	0.35%	0.35%
Limited Warranty (years)	5	5	5
Power Management			
+5/+12V Max Start Current (A)	1.2/0.22	1.2/0.2	1.1/0.2
Average Idle Power (W)	4.8	4.9	4.7
Physical			
Height (in/mm, max)[3]	0.591/15.00	0.591/15.00	0.591/15.00
Width (in/mm, max)[3]	2.760/70.10	2.760/70.10	2.760/70.10
Depth (in/mm, max)[3]	3.955/100.45	3.955/100.45	3.955/100.45
Weight (lb/gm)	0.3638/165	0.3638/165	0.3638/165
Carton Unit Quantity	10	10	10
Cartons per Pallet	90	90	90
Cartons per Layer	9	9	9

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