

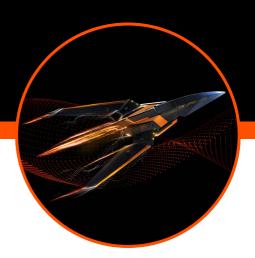


2.5-in SSD DATA SHEET

Built for Fast Data Centre Applications

## Nytro 2050 SAS SSD Series

The Seagate Nytro 2050 SAS SSD is the superior SATA alternative, delivering up to 7 TB in 2.5-in x 15 mm form factor. Harness a 12 Gb/s interface with dual ports for speeds up to 1,050 MB/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

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

High-density capacities of up to 7 TB in a 2.5-in  $\times$  15 mm 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<sup>™</sup> with Secure Download and Diagnostics (SD&D), SED, and SED FIPS 140-2 options for advanced data security<sup>1</sup>

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.





Specifications	Nytro 2350 — Scaled Endurance				
Capacity	7.68 TB	3.84 TB	1.92 TB	960GB	
Standard Model	XS7680SE70085	XS3840SE70085	XS1920SE70085	XS960SE70085	
Seagate Secure <sup>™</sup> SED Model <sup>1</sup>	XS7680SE70095	XS3840SE70095	XS1920SE70095	XS960SE70095	
Seagate Secure FIPS 140-2/Common	XS7680SE70105	XS3840SE70105	XS1920SE70105	XS960SE70105	
Criteria Mode <sup>1</sup>	X370003E70103	A330403E70103	A319203E70103	A39003E70103	
Seagate Instant Secure Erase (ISE)	XS7680SE70115	XS3840SE70115	XS1920SE70115	XS960SE70115	
Model					
Features	040.40.01.4	040.40.01/	040.40.017	040.40.017	
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 × 15 mm	2.5 in × 15 mm	2.5 in × 15 mm	2.5 in × 15 mm	
Performance		T T T T T T T T T T T T T T T T T T T			
Sequential Read (MB/s) Sustained, 128 KB <sup>2</sup>	1,050	1,050	1,050	1,050	
Sequential Write (MB/s) Sustained, 128 KB <sup>2</sup>	1,050	1,050	1,050	1,050	
Random Read (IOPS) Sustained, 4 KB <sup>2</sup>	190,000	190,000	170,000	190,000	
Random Write (IOPS) Sustained, 4 KB <sup>2</sup>	50,000	50,000	50,000	50,000	
Random 30% Write (IOPS) Sustained, 4 KB <sup>2</sup>	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	7,000	3,500	1,700	
Non-recoverable Read Errors per Bits Read	1 per 10E17	1 per 10E17	1 per 10E17	1 per 10E17	
Annualised Failure Rate (AFR)	0.35%	0.35%	0.35%	0.35%	
Limited Warranty (years)	5	5	5	5	
Power Management					
+5/+12 V Max Start Current (A)	1.2/0.2	1.2/0.2	1.2/0.2	1.1/0.2	
Average Idling Power (W)	4.7	4.5	4.9	4.7	
Physical					
Height (in/mm, max) <sup>3</sup>	0.591/15.00	0.591/15.00	0.591/15.00	0.591/15.00	
Width (in/mm, max) <sup>3</sup>	2.760/70.10	2.760/70.10	2.760/70.10	2.760/70.10	
Depth (in/mm, max) <sup>3</sup>	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	

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> These base deck dimensions conform to the Small Form Factor Standard (SFF-8201) found at <a href="www.sffcommittee.org">www.sffcommittee.org</a>. For connector-related dimensions, see SFF-8223 (SAS models).





Specifications		Nytro 2550 — Mixed Workloads	
Capacity	3.8 TB	1.9 TB	960GB
Standard Model	XS3840LE70085	XS1920LE70085	XS960LE70085
Seagate Secure <sup>™</sup> SED Model <sup>1</sup>	XS3840LE70095	XS1920LE70095	XS960LE70095
Seagate Secure FIPS 140-2/Common	XS3840LE70105	XS1920LE70105	XS960LE70105
Criteria Mode <sup>1</sup>	A33640LE70103	X31920LE70103	X3900LE70103
Seagate Instant Secure Erase (ISE)	XS3840LE70115	XS1920LE70115	XS960LE70115
Model			
Features	CAC 10 Ob/s	CAC 10 Ch/c	CAC 10 Ob/o
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 × 15 mm	2.5 in × 15 mm	2.5 in × 15 mm
Performance		1	
Sequential Read (MB/s) Sustained, 128 KB <sup>2</sup>	1,050	1,050	1,050
Sequential Write (MB/s) Sustained, 128 KB <sup>2</sup>	1,050	1,050	1,050
Random Read (IOPS) Sustained, 4 KB <sup>2</sup>	190,000	190,000	190,000
Random Write (IOPS) Sustained, 4 KB <sup>2</sup>	7,500	7,500	7,500
Random 30% Write (IOPS) Sustained, 4	400.000	400.000	405.000
KB <sup>2</sup>	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, 5,300
Non-recoverable Read Errors per Bits Read	1 per 10E17	1 per 10E17	1 per 10E17
Annualised Failure Rate (AFR)	0.35%	0.35%	0.35%
Limited Warranty (years)	5	5	5
Power Management			
+5/+12 V Max Start Current (A)	1.2/0.22	1.2/0.2	1.1/0.2
Average Idling Power (W)	4.8	4.9	4.7
Physical			
Height (in/mm, max) <sup>3</sup>	0.591/15.00	0.591/15.00	0.591/15.00
Width (in/mm, max) <sup>3</sup>	2.760/70.10	2.760/70.10	2.760/70.10
Depth (in/mm, max) <sup>3</sup>	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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- 3 These base deck dimensions conform to the Small Form Factor Standard (SFF-8201) found at <a href="https://www.sffcommittee.org">www.sffcommittee.org</a>. For connector-related dimensions, see SFF-8223 (SAS models).

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