



2.5-in SSD DATA SHEET

Built for Fast Data Centre Applications

NyTRO 3032 SAS SSD Series



The Seagate® NyTRO® 3032 SAS SSD delivers up to 15 TB in a 2.5-in × 15 mm form factor, a 12 Gb/s interface with dual ports for speeds up to 2,200 MB/s, drive monitoring, government-grade encryption, and up to 10 DWPD for fast, scalable, secure performance for demanding enterprise workloads.



Key Advantages

12 Gb/s SAS interface and dual ports for 24×7 performance

High-density capacities of up to 15 TB in a 2.5-in × 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™ with Secure Download and Diagnostics (SD&D), SED, and SED FIPS 140-2 options for advanced data security¹

Built for easy integration with Linux and Microsoft OS

Best-Fit Applications

- Server virtualisation
- OLTP databases
- Software-defined storage
- All-flash arrays
- Caching and tiering

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



Specifications	Nytro 3332 — Scaled Endurance				
Capacity	15.36 TB	7.68 TB	3.84 TB	1.92 TB	960GB
Standard Model	XS15360SE70084	XS7680SE70084	XS3840SE70084	XS1920SE70084	XS960SE70084
Seagate Secure™ SED Model ¹	XS15360SE70094	XS7680SE70094	XS3840SE70094	XS1920SE70094	XS960SE70094
Seagate Secure FIPS 140-2/Common Criteria Model ¹	XS15360SE70104	XS7680SE70104	XS3840SE70104	XS1920SE70104	XS960SE70104
Seagate Instant Secure Erase (ISE) Model	XS15360SE70114	XS7680SE70114	XS3840SE70114	XS1920SE70114	XS960SE70114
Features					
Interface (Dual Port)	SAS 12 Gb/s	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	3D eTLC
Form Factor	2.5 in × 15 mm	2.5 in × 15 mm	2.5 in × 15 mm	2.5 in × 15 mm	2.5 in × 15 mm
Performance — Single Port 12 Gb/s					
Sequential Read (MB/s) Sustained, 128 KB ²	1,050	1,100	1,100	1,100	1,100
Sequential Write (MB/s) Sustained, 128 KB ²	950	1,000	1,000	1,000	950
Random Read (IOPS) Sustained, 4 KB ²	120,000	170,000	180,000	180,000	170,000
Random Write (IOPS) Sustained, 4 KB ²	16,000	80,000	85,000	85,000	70,000
Random 30% Write (IOPS) Sustained, 4 KB ²	46,000	160,000	160,000	150,000	130,000
Performance — Dual Port 12 Gb/s					
Sequential Read (MB/s) Sustained, 128 KB ²	2,100	2,000	2,200	2,200	2,150
Sequential Write (MB/s) Sustained, 128 KB ²	1,000	1,650	1,650	1,650	1,300
Random Read (IOPS) Sustained, 4KB ²	150,000	240,000	240,000	230,000	210,000
Random Write (IOPS) Sustained, 4KB ²	20,000	80,000	85,000	85,000	70,000
Random 30% Write (IOPS) Sustained, 4KB ²	46,000	160,000	160,000	160,000	140,000
Endurance/Reliability					
Lifetime Endurance (Drive Writes per Day)	1	1	1	1	1
Total Bytes Written (TB)	28,000	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	1 per 10E17
Annualised Failure Rate (AFR)	0.35%	0.35%	0.35%	0.35%	0.35%
Warranty, Limited (years)	5	5	5	5	5
Power Management					
+5/+12 V Max Start Current (A)	0.80/0.21	0.80/0.21	0.80/0.21	0.80/0.21	0.80/0.21
Average Idling Power (W)	4.6	4.6	4.6	4.6	4.6
Physical					
Height (in/mm, max) ³	0.591 in/15 mm	0.591 in/15 mm	0.591 in/15 mm	0.591 in/15 mm	0.591 in/15 mm
Width (in/mm, max) ³	2.76 in/70.1 mm	2.76 in/70.1 mm	2.76 in/70.1 mm	2.76 in/70.1 mm	2.76 in/70.1 mm
Depth (in/mm, max) ³	3.955 in/100.45 mm	3.955 in/100.45 mm	3.955 in/100.45 mm	3.955 in/100.45 mm	3.955 in/100.45 mm
Weight (lb/g)	0.364 lb/165 g	0.364 lb/165 g	0.364 lb/165 g	0.364 lb/165 g	0.364 lb/165 g
Carton Unit Quantity	10	10	10	10	10
Cartons per Pallet	90	90	90	90	90
Cartons per Layer	9	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).



Specifications	Nytro 3532 — Mixed Workloads			
Capacity	6.4 TB	3.2 TB	1.6 TB	800GB
Standard Model	XS6400LE70084	XS3200LE70084	XS1600LE70084	XS800LE70084
Seagate Secure™ SED Model ¹	XS6400LE70094	XS3200LE70094	XS1600LE70094	XS800LE70094
Seagate Secure FIPS 140-2/Common Criteria Model ¹	—	XS3200LE70104	XS1600LE70104	XS800LE70104
Seagate Instant Secure Erase (ISE) Model	XS6400LE70114	XS3200LE70114	XS1600LE70114	XS800LE70114
Features				
Interface (Dual Port)	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 x 15 mm	2.5 in x 15 mm	2.5 in x 15 mm	2.5 in x 15 mm
Performance — Single Port 12 Gb/s				
Sequential Read (MB/s) Sustained, 128 KB ²	1,100	1,100	1,100	1,100
Sequential Write (MB/s) Sustained, 128 KB ²	1,000	1,000	1,000	950
Random Read (IOPS) Sustained, 4 KB ²	170,000	180,000	180,000	170,000
Random Write (IOPS) Sustained, 4 KB ²	120,000	130,000	130,000	120,000
Random 30% Write (IOPS) Sustained, 4 KB ²	170,000	170,000	170,000	150,000
Performance — Dual Port 12 Gb/s				
Sequential Read (MB/s) Sustained, 128 KB ²	2,200	2,200	2,200	2,150
Sequential Write (MB/s) Sustained, 128 KB ²	1,650	1,650	1,650	1,300
Random Read (IOPS) Sustained, 4KB ²	240,000	240,000	230,000	210,000
Random Write (IOPS) Sustained, 4KB ²	120,000	130,000	130,000	120,000
Random 30% Write (IOPS) Sustained, 4KB ²	220,000	220,000	220,000	170,000
Endurance/Reliability				
Lifetime Endurance (Drive Writes per Day)	3	3	3	3
Total Bytes Written (TB)	35,000	17,500	8,700	4,400
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%
Warranty, Limited (years)	5	5	5	5
Power Management				
+5/+12 V Max Start Current (A)	0.80/0.21	0.80/0.21	0.80/0.21	0.80/0.21
Average Idling Power (W)	4.6	4.6	4.6	4.6
Physical				
Height (in/mm, max) ³	0.591 in/15 mm	0.591 in/15 mm	0.591 in/15 mm	0.591 in/15 mm
Width (in/mm, max) ³	2.76 in/70.1 mm	2.76 in/70.1 mm	2.76 in/70.1 mm	2.76 in/70.1 mm
Depth (in/mm, max) ³	3.955 in/100.45 mm	3.955 in/100.45 mm	3.955 in/100.45 mm	3.955 in/100.45 mm
Weight (lb/g)	0.364 lb/165 g	0.364 lb/165 g	0.364 lb/165 g	0.364 lb/165 g
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).



Specifications	Nytro 3732 — Write Intensive			
Capacity	3.2 TB	1.6 TB	800GB	400GB
Standard Model	XS3200ME70084	XS1600ME70084	XS800ME70084	XS400ME70084
Seagate Secure™ SED Model ¹	XS3200ME70094	XS1600ME70094	XS800ME70094	XS400ME70094
Seagate Secure FIPS 140-2/Common Criteria Model ¹	XS3200ME70104	XS1600ME70104	—	—
Seagate Instant Secure Erase (ISE) Model	XS3200ME70114	XS1600ME70114	XS800ME70114	XS400ME70114
Features				
Interface (Dual Port)	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 x 15 mm	2.5 in x 15 mm	2.5 in x 15 mm	2.5 in x 15 mm
Performance — Single Port 12 Gb/s				
Sequential Read (MB/s) Sustained, 128 KB ²	1,100	1,100	1,100	1,100
Sequential Write (MB/s) Sustained, 128 KB ²	1,000	1,000	1,000	950
Random Read (IOPS) Sustained, 4 KB ²	170,000	180,000	180,000	170,000
Random Write (IOPS) Sustained, 4 KB ²	200,000	200,000	200,000	200,000
Random 30% Write (IOPS) Sustained, 4 KB ²	190,000	190,000	190,000	180,000
Performance — Dual Port 12 Gb/s				
Sequential Read (MB/s) Sustained, 128 KB ²	2,200	2,200	2,200	2,150
Sequential Write (MB/s) Sustained, 128 KB ²	1,650	1,650	1,650	1,300
Random Read (IOPS) Sustained, 4KB ²	240,000	240,000	220,000	200,000
Random Write (IOPS) Sustained, 4KB ²	200,000	200,000	200,000	200,000
Random 30% Write (IOPS) Sustained, 4KB ²	260,000	260,000	250,000	200,000
Endurance/Reliability				
Lifetime Endurance (Drive Writes per Day)	10	10	10	10
Total Bytes Written (TB)	58,400	29,200	14,600	7,300
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%
Warranty, Limited (years)	5	5	5	5
Power Management				
+5/+12 V Max Start Current (A)	0.80/0.21	0.80/0.21	0.80/0.21	0.80/0.21
Average Idling Power (W)	4.6	4.6	4.6	4.6
Physical				
Height (in/mm, max) ³	0.591 in/15 mm	0.591 in/15 mm	0.591 in/15 mm	0.591 in/15 mm
Width (in/mm, max) ³	2.76 in/70.1 mm	2.76 in/70.1 mm	2.76 in/70.1 mm	2.76 in/70.1 mm
Depth (in/mm, max) ³	3.955 in/100.45 mm	3.955 in/100.45 mm	3.955 in/100.45 mm	3.955 in/100.45 mm
Weight (lb/g)	0.364 lb/165 g	0.364 lb/165 g	0.364 lb/165 g	0.364 lb/165 g
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).

© 2020 Seagate Technology LLC. All rights reserved. Seagate, Seagate Technology, and the Spiral logo are registered trademarks of Seagate Technology LLC in the United States and/or other countries. Nitro, the Nitro logo, Seagate Secure, and the Seagate Secure logo are either trademarks or registered trademarks of Seagate Technology LLC or one of its affiliated companies in the United States and/or other countries. All other trademarks or registered trademarks are the property of their respective owners. When referring to drive capacity, one gigabyte, or GB, equals one billion bytes; and one terabyte, or TB, equals one trillion bytes. Your computer's operating system may use a different standard of measurement and report a lower capacity. In addition, some of the listed capacity is used for formatting and other functions, and thus will not be available for data storage. Actual data rates may vary depending on operating environment and other factors, such as chosen interface and disk capacity. The export or re-export of Seagate hardware or software is regulated by the U.S. Department of Commerce, Bureau of Industry and Security (for more information, visit www.bis.doc.gov), and may be controlled for export, import and use in other countries. Seagate reserves the right to change, without notice, product offerings or specifications. DS2047.1-2007GB July 2020