



2.5-in SSD DATA SHEET

Built for Fast Data Center Applications Nytro 3000 SAS SSD Series



The Seagate® Nytro® 3050 SAS SSDs delivers up to 15TB in a 2.5-in × 15mm form factor, a 12Gb/s interface with dual ports for speeds up to 2200MB/s, drive monitoring, government-grade encryption, and up to 10 DWPD for fast, scalable, secure performance for demanding enterprise workloads.



Best-Fit Applications

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



Key Advantages

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

High-density capacities of up to 15TB 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 security¹

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 3350—Scaled Endurance | | | | |
|---|-----------------------------|---------------|---------------|---------------|---------------|
| Capacity | 15.36TB | 7.68TB | 3.84TB | 1.92TB | 960GB |
| Standard Model | XS15360SE70045 | XS7680SE70045 | XS3840SE70045 | XS1920SE70045 | XS960SE70045 |
| Standard Seagate Secure SED Model ¹ | XS15360SE70055 | XS7680SE70055 | XS3840SE70055 | XS1920SE70055 | XS960SE70055 |
| Seagate Secure FIPS 140-2/Common Criteria Mode ¹ | XS15360SE70065 | XS7680SE70065 | XS3840SE70065 | XS1920SE70065 | XS960SE70065 |
| Seagate Instant Secure Erase (ISE) Model | XS15360SE70075 | XS7680SE70075 | XS3840SE70075 | XS1920SE70075 | XS960SE70075 |
| Features | | | | | |
| Interface (Dual Port) | 12 Gb/s SAS | 12 Gb/s SAS | 12 Gb/s SAS | 12 Gb/s SAS | 12 Gb/s SAS |
| NAND Flash Type | 3D eTLC | 3D eTLC | 3D eTLC | 3D eTLC | 3D eTLC |
| Form Factor | 2.5 in x 15mm | 2.5 in x 15mm | 2.5 in x 15mm | 2.5 in x 15mm | 2.5 in x 15mm |
| Performance—Single Port 12Gb/s | | | | | |
| Sequential Read (MB/s) Sustained, 128KB ² | 1050 | 1100 | 1100 | 1100 | 1100 |
| Sequential Write (MB/s) Sustained, 128KB ² | 950 | 1050 | 1050 | 1050 | 1050 |
| Random Read (IOPS) Sustained, 4KB ² | 125,000 | 195,000 | 195,000 | 195,000 | 190,000 |
| Random Write (IOPS) Sustained, 4KB ² | 15,000 | 80,000 | 80,000 | 70,000 | 60,000 |
| Random 30% Write (IOPS) Sustained, 4KB ² | 60,000 | 150,000 | 150,000 | 135,000 | 115,000 |
| Performance—Dual Port 12Gb/s | | | | | |
| Sequential Read (MB/s) Sustained, 128KB ² | 2100 | 2200 | 2200 | 2200 | 2150 |
| Sequential Write (MB/s) Sustained, 128KB ² | 1100 | 1800 | 1800 | 1550 | 1300 |
| Random Read (IOPS) Sustained, 4KB ² | 165,000 | 250,000 | 250,000 | 250,000 | 250,000 |
| Random Write (IOPS) Sustained, 4KB ² | 20,000 | 80,000 | 80,000 | 70,000 | 60,000 |
| Random 30% Write (IOPS) Sustained, 4KB ² | 60,000 | 170,000 | 170,000 | 160,000 | 130,000 |
| Endurance/Reliability | | | | | |
| Lifetime Endurance (Drive Writes per Day) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Total Bytes Written (TB) | 28,000 | 14,000 | 7000 | 3500 | 1700 |
| Nonrecoverable Read Errors per Bits Read | 1 per 10E17 | 1 per 10E17 | 1 per 10E17 | 1 per 10E17 | 1 per 10E17 |
| Mean Time Between Failures (MTBF, hrs) | 2.5 Million | 2.5 Million | 2.5 Million | 2.5 Million | 2.5 Million |
| Annualized Failure Rate (AFR) | 0.35% | 0.35% | 0.35% | 0.35% | 0.35% |
| Limited Warranty (years) | 5 | 5 | 5 | 5 | 5 |
| Power Management | | | | | |
| +5/+12V Max Start Current (A) | 0.75/0.24 | 0.80/0.26 | 0.72/0.23 | 0.74/0.2 | 0.76/0.27 |
| Average Idle Power (W) | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 |
| Physical | | | | | |
| Height (in/mm, max) ³ | 0.591/15.00 | 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 | 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 | 3.955/100.45 |
| Weight (lb/gm) | 0.3638/165 | 0.3638/165 | 0.3638/165 | 0.3638/165 | 0.3638/165 |
| 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 3550—Mixed Workloads | | | |
|---|----------------------------|---------------|---------------|---------------|
| Capacity | 6.4TB | 3.2TB | 1.6TB | 800GB |
| Standard Model | XS6400LE70045 | XS3200LE70045 | XS1600LE70045 | XS800LE70045 |
| Standard Seagate Secure SED Model ¹ | XS6400LE70055 | XS3200LE70055 | XS1600LE70055 | XS800LE70055 |
| Seagate Secure FIPS 140-2/Common Criteria Mode ¹ | XS6400LE70065 | XS3200LE70065 | XS1600LE70065 | XS800LE70065 |
| Seagate Instant Secure Erase (ISE) Model | XS6400LE70075 | XS3200LE70075 | XS1600LE70075 | XS800LE70075 |
| Features | | | | |
| Interface (Dual Port) | 12 Gb/s SAS | 12 Gb/s SAS | 12 Gb/s SAS | 12 Gb/s SAS |
| NAND Flash Type | 3D eTLC | 3D eTLC | 3D eTLC | 3D eTLC |
| Form Factor | 2.5 in x 15mm | 2.5 in x 15mm | 2.5 in x 15mm | 2.5 in x 15mm |
| Performance—Single Port 12Gb/s | | | | |
| Sequential Read (MB/s) Sustained, 128KB ² | 1100 | 1100 | 1100 | 1100 |
| Sequential Write (MB/s) Sustained, 128KB ² | 1050 | 1050 | 1050 | 1050 |
| Random Read (IOPS) Sustained, 4KB ² | 195,000 | 195,000 | 195,000 | 190,000 |
| Random Write (IOPS) Sustained, 4KB ² | 130,000 | 130,000 | 130,000 | 105,000 |
| Random 30% Write (IOPS) Sustained, 4KB ² | 175,000 | 175,000 | 165,000 | 135,000 |
| Performance—Dual Port 12Gb/s | | | | |
| Sequential Read (MB/s) Sustained, 128KB ² | 2200 | 2200 | 2200 | 2150 |
| Sequential Write (MB/s) Sustained, 128KB ² | 1800 | 1800 | 1700 | 1300 |
| Random Read (IOPS) Sustained, 4KB ² | 250,000 | 250,000 | 250,000 | 250,000 |
| Random Write (IOPS) Sustained, 4KB ² | 135,000 | 130,000 | 130,000 | 105,000 |
| Random 30% Write (IOPS) Sustained, 4KB ² | 220,000 | 220,000 | 220,000 | 160,000 |
| Endurance/Reliability | | | | |
| Lifetime Endurance (Drive Writes per Day) | 3.0 | 3.0 | 3.0 | 3.0 |
| Total Bytes Written (TB) | 35,000 | 17,500 | 8,700 | 4,400 |
| Nonrecoverable Read Errors per Bits Read | 1 per 10E17 | 1 per 10E17 | 1 per 10E17 | 1 per 10E17 |
| Mean Time Between Failures (MTBF, hrs) | 2.5 Million | 2.5 Million | 2.5 Million | 2.5 Million |
| 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) | 0.81/0.23 | 0.75/0.26 | 0.78/0.24 | 0.76/0.25 |
| Average Idle Power (W) | 4.6 | 4.6 | 4.6 | 4.6 |
| 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).



| Specifications | Nytro 3750—Write Intensive | | | |
|---|----------------------------|---------------|---------------|---------------|
| Capacity | 3.2TB | 1.6TB | 800GB | 400GB |
| Standard Model | XS3200ME70045 | XS1600ME70045 | XS800ME70045 | XS400ME70045 |
| Standard Seagate Secure SED Model ¹ | XS3200ME70055 | XS1600ME70055 | XS800ME70055 | XS400ME70055 |
| Seagate Secure FIPS 140-2/Common Criteria Mode ¹ | XS3200ME70065 | XS1600ME70065 | XS800ME70065 | XS400ME70065 |
| Seagate Instant Secure Erase (ISE) Model | XS3200ME70075 | XS1600ME70075 | XS800ME70075 | XS400ME70075 |
| Features | | | | |
| Interface (Dual Port) | 12 Gb/s SAS | 12 Gb/s SAS | 12 Gb/s SAS | 12 Gb/s SAS |
| 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—Single Port 12Gb/s | | | | |
| Sequential Read (MB/s) Sustained, 128KB ² | 1100 | 1100 | 1100 | 1100 |
| Sequential Write (MB/s) Sustained, 128KB ² | 1050 | 1050 | 1050 | 1050 |
| Random Read (IOPS) Sustained, 4KB ² | 195,000 | 195,000 | 195,000 | 190,000 |
| Random Write (IOPS) Sustained, 4KB ² | 200,000 | 200,000 | 200,000 | 160,000 |
| Random 30% Write (IOPS) Sustained, 4KB ² | 200,000 | 200,000 | 200,000 | 160,000 |
| Performance—Dual Port 12Gb/s | | | | |
| Sequential Read (MB/s) Sustained, 128KB ² | 2200 | 1400 | 2200 | 2150 |
| Sequential Write (MB/s) Sustained, 128KB ² | 1800 | 1800 | 1700 | 1300 |
| Random Read (IOPS) Sustained, 4KB ² | 250,000 | 250,000 | 250,000 | 250,000 |
| Random Write (IOPS) Sustained, 4KB ² | 210,000 | 210,000 | 220,000 | 180,000 |
| Random 30% Write (IOPS) Sustained, 4KB ² | 250,000 | 250,000 | 240,000 | 190,000 |
| Endurance/Reliability | | | | |
| Lifetime Endurance (Drive Writes per Day) | 10.0 | 10.0 | 10.0 | 10.0 |
| Total Bytes Written (TB) | 58,400 | 29,200 | 14,600 | 7300 |
| Nonrecoverable Read Errors per Bits Read | 1 per 10E17 | 1 per 10E17 | 1 per 10E17 | 1 per 10E17 |
| Mean Time Between Failures (MTBF, hrs) | 2.5 Million | 2.5 Million | 2.5 Million | 2.5 Million |
| 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) | 0.81/0.26 | 0.74/0.25 | 0.75/0.23 | 0.73/0.23 |
| Average Idle Power (W) | 4.6 | 4.6 | 4.6 | 4.6 |
| 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).

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