Lightspeed. Solid. Impressive.
Nytro 1000 SATA SSD Series

The Seagate® Nytro® 1000 SATA SSD Series is a cost-effective, enterprise-grade solution for data centre and cloud server applications. It is designed to deliver high, sustained, and consistent performance for improved QoS and enhanced user experience.

SSDs with the SATA storage interface meet the high performance and reliability requirements without disrupting legacy storage infrastructures or involving additional investments in software and hardware.

Optimised for Performance, Integration, and Cost

Boost the performance of applications that require faster random access performance

Maintain fast, consistent performance for read-intensive and mixed workloads

Take advantage of easy deployment and more processing power without investment in new hardware

Require less energy to run 24×7, and save on cooling and overall energy cost

Wide Range of Storage and Security Options

Receive endurance, security, and capacity options for enterprise applications

Choose the capacity and endurance to fit a range of application and workload needs

Achieve peace of mind through Seagate Secure™ data protection

Enterprise-Grade Feature Set

Maintain high data integrity in the event of unexpected power loss

Leverage Seagate's reliability and system compatibility test infrastructure

Attain end-to-end data protection with Seagate SHIELD™ and Seagate RAISE technologies

Key Features and Benefits

- SATA 6 Gb/s interface for easy deployment
- Seagate DuraWrite™ lossless data reduction technology
- Tunable capacity for performance- or capacity-optimised SSD solutions
- Seagate Secure options
- Power loss data protection circuit
- Enterprise-class reliability with 2M-hr. MTBF and a 5-year limited warranty

Best-Fit Applications

- Public and private cloud
- Web servers
- Tiered storage analytics
- Databases (OLTP)

Specifications	Nytro 1351 SATA SSD — Light Endurance				
Capacity	3.84 TB	1.92 TB	960GB	480GB	240GB
Standard Model Numbers	XA3840LE10063	XA1920LE10063	XA960LE10063	XA480LE10063	XA240LE10003
Seagate Secure™ SED Model (TCG Enterprise)	—	XA1920LE10083	XA960LE10083	XA480LE10083	—
Seagate Secure™ SED Model (TCG OPAL)	—	XA1920LE10103	XA960LE10103	XA480LE10103	—
Features					
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
NAND Flash Type	3D TLC	3D TLC	3D TLC	3D TLC	3D TLC
Form Factor	2.5 in × 7 mm	2.5 in × 7 mm	2.5 in × 7 mm	2.5 in × 7 mm	2.5 in × 7 mm
Performance					
Sequential Read (MB/s) Sustained, 128 KB[1]	560	560	560	560	560
Sequential Write (MB/s) Sustained, 128 KB[1]	535	535	535	535	320
Random Read (IOPS) Sustained, 4 KB QD32[1]	85,000	94,000	90,000	75,000	55,000
Random R70R (IOPS) Sustained. 4KB QD32[1]	60,000	65,000	50,000	40,000	32,000
Random Write (IOPS) Sustained, 4 KB QD32[1]	45,000	50,000	55,000	50,000	28,000
Average Read Latency (µs), 4 KB QD1[1]	175	160	155	155	155
Average Write Latency (µs), 4 KB QD1[1]	40	35	40	40	40
Endurance/Reliability					
Lifetime Endurance (Drive Writes per Day)	1	1	1	1	1
Total Bytes Written (TB)	7,000	3,500	1,750	875	435
Non-recoverable 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, hours)	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
Limited Warranty (years)	5	5	5	5	5
Power Management					
+5/+12V Overall Average Active Power (W)[2]	3.5	3.4	3.2	2.7	2.3
Average Idling Power (W)	1.2	1.2	1.2	1.1	1.1
Environmental					
Temperature, Operating Internal (°C)	0°C – 70°C	0°C – 70°C	0°C – 70°C	0°C – 70°C	0°C – 70°C
Temperature, Non-operating (°C)	-40°C – 85°C	-40°C – 85°C	-40°C – 85°C	-40°C – 85°C	-40°C – 85°C
Temperature Change Rate/Hr, Max (°C)	20	20	20	20	20
Shock, 0.5 ms (Gs)	1,000	1,000	1,000	1,000	1,000
Physical					
Height (mm/in, max)	7 mm/0.276 in	7 mm/0.276 in	7 mm/0.276 in	7 mm/0.276 in	7 mm/0.276 in
Width (mm/in, max)	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/2.76 in
Depth (mm/in, max)	100.25 mm/3.947 in	100.25 mm/3.947 in	100.25 mm/3.947 in	100.25 mm/3.947 in	100.25 mm/3.947 in
Weight (lb/g)	77 g/0.169 lb	77 g/0.169 lb	77 g/0.169 lb	77 g/0.169 lb	77 g/0.169 lb
Carton Unit Quantity	10	10	10	10	10

1 Performance data is based on testing under certain workload conditions and is subject to change. Performance assumes that a typical enterprise data workload has 80% entropy.

2 3.84 TB, 1.92 TB, 960 GB capacity points require 12V in addition to 5V power.

Specifications	Nytro 1551 SATA SSD — Mainstream Endurance				
Capacity	3.84 TB	1.92 TB	960GB	480GB	240GB
Standard Model Numbers	XA3840ME10063	XA1920ME10063	XA960ME10063	XA480ME10063	XA240ME10003
Seagate Secure™ SED Model (TCG Enterprise)	—	XA1920ME10083	XA960ME10083	XA480ME10083	—
Seagate Secure™ SED Model (TCG OPAL)	—	XA1920ME10103	XA960ME10103	XA480ME10103	—
Features					
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
NAND Flash Type	3D TLC	3D TLC	3D TLC	3D TLC	3D TLC
Form Factor	2.5 in × 7 mm	2.5 in × 7 mm	2.5 in × 7 mm	2.5 in × 7 mm	2.5 in × 7 mm
Performance					
Sequential Read (MB/s) Sustained, 128 KB[1]	560	560	560	560	560
Sequential Write (MB/s) Sustained, 128 KB[1]	535	535	535	535	320
Random Read (IOPS) Sustained, 4 KB QD32[1]	85,000	94,000	90,000	75,000	55,000
Random R70R (IOPS) Sustained. 4KB QD32[1]	60,000	65,000	50,000	40,000	32,000
Random Write (IOPS) Sustained, 4 KB QD32[1]	45,000	50,000	55,000	50,000	28,000
Average Read Latency (µs), 4 KB QD1[1]	175	160	155	155	155
Average Write Latency (µs), 4 KB QD1[1]	40	35	40	40	40
Endurance/Reliability					
Lifetime Endurance (Drive Writes per Day)	3	3	3	3	3
Total Bytes Written (TB)	21,000	10,500	5,250	2,600	1,300
Non-recoverable 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, hours)	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
Limited Warranty (years)	5	5	5	5	5
Power Management					
+5/+12V Overall Average Active Power (W)[2]	3.5	3.4	3.2	2.7	2.3
Average Idling Power (W)	1.2	1.2	1.2	1.1	1.1
Environmental					
Temperature, Operating Internal (°C)	0°C – 70°C	0°C – 70°C	0°C – 70°C	0°C – 70°C	0°C – 70°C
Temperature, Non-operating (°C)	-40°C – 85°C	-40°C – 85°C	-40°C – 85°C	-40°C – 85°C	-40°C – 85°C
Temperature Change Rate/Hr, Max (°C)	20	20	20	20	20
Shock, 0.5 ms (Gs)	1,000	1,000	1,000	1,000	1,000
Physical					
Height (mm/in, max)	7 mm/0.276 in	7 mm/0.276 in	7 mm/0.276 in	7 mm/0.276 in	7 mm/0.276 in
Width (mm/in, max)	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/2.76 in
Depth (mm/in, max)	100.25 mm/3.947 in	100.25 mm/3.947 in	100.25 mm/3.947 in	100.25 mm/3.947 in	100.25 mm/3.947 in
Weight (lb/g)	77 g/0.169 lb	77 g/0.169 lb	77 g/0.169 lb	77 g/0.169 lb	77 g/0.169 lb
Carton Unit Quantity	10	10	10	10	10

1 Performance data is based on testing under certain workload conditions and is subject to change. Performance assumes that a typical enterprise data workload has 80% entropy.

2 3.84 TB, 1.92 TB, 960 GB capacity points require 12V in addition to 5V power.

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