



2.5-in SSD DATA SHEET

Lightspeed. Solid. Impressive.

## Consistent high performance for the modern data <u>centre</u>.

The Seagate<sup>®</sup> Nytro<sup>®</sup> 5050 series NVMe solid state drive represents the next generation of enterprise SSDs. Engineered for efficiency, high performance, and increased storage density in data centres, Nytro 5050 SSD eliminates performance bottlenecks and significantly improves quality of service (QoS).





## **Best-Fit Applications**

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

**Best-in-class performance** — PCIe Gen4 NVMe SSD doubles the random throughput of the latest SAS SSDs, achieving over ten times the bandwidth of SATA.

Blistering 7.4 GB/s bandwidth and up to 1.7M IOPS removes data bottlenecks and provides consistent response times.

**Boosted capacity in ultra-dense environments** — up to 15 TB<sup>1</sup> supporting U.2 and U.3 interface, and dual ports support active high availability.

**Highly optimised,** the Nytro 5350 withstands read-intensive workloads while the Nytro 5550 is built to endure mixed workloads.

Single or dual interface The 5350 has the choice between dual or single interface that meet your needs

**Quintupled performance** over SATA SSDs with 10x more bandwidth and IOPS over previous generations to get more computing using minimal space, energy and cost.

Low latency and high quality of service deliver improved responsiveness and enhanced user experience.

Effortless serviceability and maintenance with no downtime requirements, and hot-swap capability for easy SSD addition, removal or replacement.

**Hardware-based encryption** Self-Encrypting Drive (SED) models<sup>2</sup> support the TCG standard to help keep valuable data secure.

Operating system friendly to easily integrate with Linux and Microsoft.

Enhanced durability and reliability with 1 and 3 DWPD at 2.5M MTBF — move massive enterprise data for the long haul.

- 1 Available soon. For more information, contact your Seagate sales representative.
- 2 Self-Encrypting Drives (SED) are not available in all models or countries. May require TCG-compliant host or controller support.





Specifications	Nytro 5550H 15 mm — Mixed Use				
Capacity	12.8TB	6.4TB	3.2TB	1.6TB	800GB
Standard Model	XP12800LE70005	XP6400LE70005	XP3200LE70005	XP1600LE70005	XP800LE70005
SED Model <sup>1</sup>	XP12800LE70015	XP6400LE70015	XP3200LE70015	XP1600LE70015	XP800LE70015
FIPS 140-3/Common Criteria Model <sup>1</sup>	XP12800LE70025	XP6400LE70025	XP3200LE70025	XP1600LE70025	XP800LE70025
Features					
Interface (Single Port)	-	-	-	-	-
Interface (Dual Port)	PCIe <sup>®</sup> Gen4 x4 NVMe				
NAND Flash Type	3D eTLC				
Form Factor	2.5 in × 15 mm				
Performance					
Sequential Read (MB/s) Sustained, 128 KB <sup>2</sup>	7400MB/s	7400MB/s	7400MB/s	7400MB/s	7400MB/s
Sequential Write (MB/s) Sustained, 128 KB <sup>2</sup>	7,200	7,200	6,900	3,700	1,900
Random Read (IOPS) Sustained, 4KB <sup>3</sup>	1,700,000	1,700,000	1,700,000	1,550,000	945,000
Random Write (IOPS) Sustained, 4KB <sup>3</sup>	495,000	445,000	460,000	315,000	140,000
Average Read Latency (µs), 4 KB QD1	75	75	75	75	75
Average Write Latency (µs), 4 KB QD1	12	12	12	12	12
Endurance/Reliability					
Lifetime Endurance (Drive Writes per Day)	3	3	3	3	3
Total Bytes Written (TB)	70,000	35,000	17,500	8,700	4,300
Non-recoverable Read Errors per Bits Read	1 per 10E17				
Mean Time Between Failures (MTBF, hours)	2500000 hr				
Limited Warranty (years)	5	5	5	5	5
Power Management					
12V Overall Average Active Power (W)	23	21	20	15	11
Average Idling Power (W)	7 W	6 W	6 W	6 W	5 W
Environmental					
Temperature, Operating Internal (°C)	0 to 70				
Temperature, Non-operating (°C)	-40°C – 85°C				
Temperature Change Rate/Hr, Max (°C)	30°C per hour				
Shock, 0.5ms (Gs)	1500 Gs				
Physical					
Height (mm/in, max)	14.9 mm/0.587 in				
Width (mm/in, max)	70.1 mm/2.760 in				
Depth (mm/in, max)	100.4 mm/3.953 in				
Weight (g/lb, max)	170g/0.38 lb	205g/0.45 lb	205g/0.45 lb	205g/0.45 lb	205g/0.45 lb
Carton Unit Quantity	10	10	10	10	10

<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. 2 Sequential performance measured at queue depth of 32 at beginning of life. System application performance may vary based on host and prior system workload. 3 Random performance measured at queue depth of 256 at beginning of life. System application performance may vary based on host and prior system workload.





Specifications	Nytro 5350H 15 mm — Read Intensive				
Capacity	15.36TB	7.68TB	3.84TB	1.92TB	
Standard Model	XP15360SE70005	XP7680SE70005	XP3840SE70005	XP1920SE70005	
SED Model <sup>1</sup>	XP15360SE70015	XP7680SE70015	XP3840SE70015	XP1920SE70015	
FIPS 140-3/Common Criteria Model <sup>1</sup>	XP15360SE70025	XP7680SE70025	XP3840SE70025	XP1920SE70025	
Features	•		•	•	
Interface (Single Port)	-	-	-	-	
Interface (Dual Port)	PCIe <sup>®</sup> Gen4 x4 NVMe	PCIe <sup>®</sup> Gen4 x4 NVMe	PCIe <sup>®</sup> Gen4 x4 NVMe	PCIe <sup>®</sup> Gen4 x4 NVMe	
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					
Sequential Read (MB/s) Sustained, 128 KB <sup>2</sup>	7400MB/s	7400MB/s	7400MB/s	7400MB/s	
Sequential Write (MB/s) Sustained, 128 KB <sup>2</sup>	7,200	7,200	6,900	3,700	
Random Read (IOPS) Sustained, 4KB <sup>3</sup>	1,700,000	1,700,000	1,700,000	1,550,000	
Random Write (IOPS) Sustained, 4KB <sup>3</sup>	195,000	195,000	195,000	125,000	
Average Read Latency (µs), 4 KB QD1	75	75	75	75	
Average Write Latency (µs), 4 KB QD1	12	12	12	12	
Endurance/Reliability					
Lifetime Endurance (Drive Writes per Day)	1	1	1	1	
Total Bytes Written (TB)	28,000	14,000	7,000	3,500	
Non-recoverable Read Errors per Bits Read	1 per 10E17	1 per 10E17	1 per 10E17	1 per 10E17	
Mean Time Between Failures (MTBF, hours)	2500000 hr	2500000 hr	2500000 hr	2500000 hr	
Limited Warranty (years)	5	5	5	5	
Power Management					
12V Overall Average Active Power (W)	23	21	20	15	
Average Idling Power (W)	7 W	6 W	6 W	6 W	
Environmental					
Temperature, Operating Internal (°C)	0 to 70	0 to 70	0 to 70	0 to 70	
Temperature, Non-operating (°C)	-40°C – 85°C	-40°C – 85°C	-40°C – 85°C	-40°C – 85°C	
Temperature Change Rate/Hr, Max (°C)	30°C per hour	30°C per hour	30°C per hour	30°C per hour	
Shock, 0.5ms (Gs)	1500 Gs	1500 Gs	1500 Gs	1500 Gs	
Physical				·	
Height (mm/in, max)	14.9 mm/0.587 in	14.9 mm/0.587 in	14.9 mm/0.587 in	14.9 mm/0.587 in	
Width (mm/in, max)	70.1 mm/2.760 in	70.1 mm/2.760 in	70.1 mm/2.760 in	70.1 mm/2.760 in	
Depth (mm/in, max)	100.4 mm/3.953 in	100.4 mm/3.953 in	100.4 mm/3.953 in	100.4 mm/3.953 in	
Weight (g/lb, max)	170g/0.38 lb	205g/0.45 lb	205g/0.45 lb	205g/0.45 lb	
Carton Unit Quantity	10	10	10	10	

<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. 2 Sequential performance measured at queue depth of 32 at beginning of life. System application performance may vary based on host and prior system workload. 3 Random performance measured at queue depth of 256 at beginning of life. System application performance may vary based on host and prior system workload.





Capacity	Specifications	Nytro 5550M 15 mm — Mixed Use				
SED   Model   XP12800LE70045   XP12800LE70045   XP12800LE70045   XP12800LE70045   XP12800LE70055   XP128000B   X	Capacity	12.8TB	6.4TB	3.2TB	1.6TB	800GB
Times	Standard Model	XP12800LE70035	XP6400LE70035	XP3200LE70035	XP1600LE70035	XP800LE70035
Interface (Single Port)	SED Model <sup>↑</sup>	XP12800LE70045	XP6400LE70045	XP3200LE70045	XP1600LE70045	XP800LE70045
Interface (Single Port)	FIPS 140-3/Common Criteria Model	XP12800LE70055	XP6400LE70055	XP3200LE70055	XP1600LE70055	XP800LE70055
Interface (Dual Port)	Features					
NAND Flash Type   3D eTLC   3D eTL	Interface (Single Port)	-	-	-	-	-
Form Factor   2.5 in x 15 mm   2.5 in	Interface (Dual Port)	PCIe <sup>®</sup> Gen4 x4 NVMe				
Performance   Sequential Read (MBis) Sustained, 128 KB   6,200   7200MBis   7400MBis	NAND Flash Type	3D eTLC				
Sequential Read (MB/s) Sustained, 128 KB2   6,200   7200MB/s   7400MB/s   7	Form Factor	2.5 in × 15 mm				
Sequential Write (MBs) Sustained, 128 KB <sup>2</sup> 2,600 3.400 3,400 1,900 945,000 1,000,000 1,150,000 1,150,000 945,000 945,000 1,000,000 1,150,000 1,150,000 1,150,000 945,000 1,000,000 1,150,	Performance					
Random Read (IOPS) Sustained, 4KB	Sequential Read (MB/s) Sustained, 128 KB <sup>2</sup>	6,200	7200MB/s	7400MB/s	7400MB/s	7400MB/s
Random Write (IOPS) Sustained, 4KB <sup>1</sup> 200,000 250,000 250,000 250,000 250,000 140,000 Average Read Latency (µs), 4 KB QD1 90 90 90 90 90 90 90 Average Write Latency (µs), 4 KB QD1 12 12 12 12 12 12 12 12 12 12 12 12 12	Sequential Write (MB/s) Sustained, 128 KB <sup>2</sup>	2,600	3,400	3,400	3,400	1,900
Average Read Latency (µs), 4 KB QD1 90 90 90 90 90 90 90 90 Average Write Latency (µs), 4 KB QD1 12 12 12 12 12 12 12 12 12 12 12 12 12	Random Read (IOPS) Sustained, 4KB <sup>3</sup>	1,000,000	1,200,000	1,150,000	1,150,000	945,000
Average Write Latency (µs), 4 KB QD1 12 12 12 12 12 12 12 12 12 12 12 12 12	Random Write (IOPS) Sustained, 4KB <sup>3</sup>	200,000	250,000	250,000	230,000	140,000
Endurance (Prive Writes per Day)   3   3   3   3   3   3   3   3   3	Average Read Latency (μs), 4 KB QD1	90	90	90	90	90
Lifetime Endurance (Drive Writes per Day)  3 3 3 3 3 3  Total Bytes Written (TB) 70,000 35,000 17,500 8,700 4,300  Non-recoverable Read Errors per Bits Read 1 per 10E17  Mean Time Between Failures (MTBF, hours) 2500000 hr 25000	Average Write Latency (μs), 4 KB QD1	12	12	12	12	12
Total Bytes Written (TB) 70,000 35,000 17,500 8,700 4,300  Non-recoverable Read Errors per Bits Read 1 per 10E17  Mean Time Between Failures (MTBF, hours) 2500000 hr 25000000 hr 2500000 hr 25000000 hr 2500000 hr 25000000 hr 2500000 hr 2500000 hr 25000000 hr 25000000 hr 25000000 hr 25000000 hr 25000000 hr 25000000 hr 2500000 hr 25000000 hr 2500000 hr 25000000 hr 2500000 hr 25000000 hr 2500000 hr 25000000 hr 2500000 hr 2500000 hr 25000000 hr 2500000 hr 2500000 hr 25000000 hr 2500000 hr 250000000 hr 2500000 hr 2500000 hr 2500000 hr 2500000 hr 2500000 hr 25	Endurance/Reliability					
Non-recoverable Read Errors per Bits Read   1 per 10E17	Lifetime Endurance (Drive Writes per Day)	3	3	3	3	3
Mean Time Between Failures (MTBF, hours)         2500000 hr         25000000 hr         25000000000000000000000000000000000000	Total Bytes Written (TB)	70,000	35,000	17,500	8,700	4,300
Limited Warranty (years)   5   5   5   5   5   5   5   5   5	Non-recoverable Read Errors per Bits Read	1 per 10E17				
Power Management   12V Overall Average Active Power (W)   15   15   15   14   11   11   11   Average Idling Power (W)   7 W   6 W   6 W   6 W   5 W   5 W   Environmental	Mean Time Between Failures (MTBF, hours)	2500000 hr				
12V Overall Average Active Power (W)  15  15  15  14  11  Average Idling Power (W)  7 W  6 W  6 W  6 W  6 W  5 W  Environmental  Temperature, Operating Internal (°C)  10 to 70  0 to 70  10 t	Limited Warranty (years)	5	5	5	5	5
Average Idling Power (W) 7 W 6 W 6 W 6 W 5 W  Environmental  Temperature, Operating Internal (°C) 0 to 70 0 to 70 0 to 70 0 to 70  Temperature, Non-operating (°C) -40°C -85°C -40°C -85°C -40°C -85°C -40°C -85°C  Temperature Change Rate/Hr, Max (°C) 30°C per hour 30°C	Power Management					
Environmental  Temperature, Operating Internal (°C)	12V Overall Average Active Power (W)	15	15	15	14	11
Temperature, Operating Internal (°C)         0 to 70	Average Idling Power (W)	7 W	6 W	6 W	6 W	5 W
Temperature, Non-operating (°C)         -40°C – 85°C	Environmental					
Temperature Change Rate/Hr, Max (°C)         30°C per hour         30°C per hour         30°C per hour         30°C per hour           Shock, 0.5ms (Gs)         1500 Gs         1500 Gs         1500 Gs         1500 Gs         1500 Gs           Physical           Height (mm/in, max)         14.9 mm/0.587 in         10.1 mm/2.760 in         70.1 mm/2.760 in	Temperature, Operating Internal (°C)	0 to 70				
Shock, 0.5ms (Gs)         1500 Gs         1500 Gs         1500 Gs         1500 Gs           Physical           Height (mm/in, max)         14.9 mm/0.587 in         17.1 mm/2.760 in         70.1 mm	Temperature, Non-operating (°C)	-40°C – 85°C				
Physical           Height (mm/in, max)         14.9 mm/0.587 in         70.1 mm/2.760 in         100.4 mm/3.953 in	Temperature Change Rate/Hr, Max (°C)	30°C per hour				
Height (mm/in, max)         14.9 mm/0.587 in           Width (mm/in, max)         70.1 mm/2.760 in	Shock, 0.5ms (Gs)	1500 Gs				
Width (mm/in, max)         70.1 mm/2.760 in         70.1 mm/2.760 i	Physical					
Depth (mm/in, max)         100.4 mm/3.953 in	Height (mm/in, max)	14.9 mm/0.587 in				
Weight (g/lb, max)         170g/0.38 lb         205g/0.45 lb         205g/0.45 lb         205g/0.45 lb	Width (mm/in, max)	70.1 mm/2.760 in				
	Depth (mm/in, max)	100.4 mm/3.953 in				
Carton Unit Quantity 10 10 10 10 10	Weight (g/lb, max)	170g/0.38 lb	205g/0.45 lb	205g/0.45 lb	205g/0.45 lb	205g/0.45 lb
	Carton Unit Quantity	10	10	10	10	10

<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. 2 Sequential performance measured at queue depth of 32 at beginning of life. System application performance may vary based on host and prior system workload. 3 Random performance measured at queue depth of 256 at beginning of life. System application performance may vary based on host and prior system workload.





Specifications	Nytro 5350M 15 mm — Read Intensive				
Capacity	15.36TB	7.68TB	3.84TB	1.92TB	
Standard Model	XP15360SE70035	XP7680SE70035	XP3840SE70035	XP1920SE70035	
SED Model <sup>1</sup>	XP15360SE70045	XP7680SE70045	XP3840SE70045	XP1920SE70045	
FIPS 140-3/Common Criteria Model	XP15360SE70055	XP7680SE70055	XP3840SE70055	XP1920SE70055	
Features					
Interface (Single Port)	-	-	-	-	
Interface (Dual Port)	PCIe <sup>®</sup> Gen4 x4 NVMe	PCIe <sup>®</sup> Gen4 x4 NVMe	PCle <sup>®</sup> Gen4 x4 NVMe	PCIe <sup>®</sup> Gen4 x4 NVMe	
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	`				
Sequential Read (MB/s) Sustained, 128 KB <sup>2</sup>	6200MB/s	7400MB/s	7400MB/s	7400MB/s	
Sequential Write (MB/s) Sustained, 128 KB <sup>2</sup>	2,600	3,400	3,400	3,400	
Random Read (IOPS) Sustained, 4KB <sup>3</sup>	1,000,000	1,200,000	1,150,000	1,150,000	
Random Write (IOPS) Sustained, 4KB <sup>3</sup>	85,000	105,000	115,000	90,000	
Average Read Latency (μs), 4 KB QD1	90	90	90	90	
Average Write Latency (µs), 4 KB QD1	12	12	12	12	
Endurance/Reliability					
Lifetime Endurance (Drive Writes per Day)	1	1	1	1	
Total Bytes Written (TB)	28,000	14,000	7,000	3,500	
Non-recoverable Read Errors per Bits Read	1 per 10E17	1 per 10E17	1 per 10E17	1 per 10E17	
Mean Time Between Failures (MTBF, hours)	2500000 hr	2500000 hr	2500000 hr	2500000 hr	
Limited Warranty (years)	5	5	5	5	
Power Management	`				
12V Overall Average Active Power (W)	15	15	15	14	
Average Idling Power (W)	7 W	6 W	6 W	6 W	
Environmental					
Temperature, Operating Internal (°C)	0 to 70	0 to 70	0 to 70	0 to 70	
Temperature, Non-operating (°C)	-40°C – 85°C	-40°C – 85°C	-40°C – 85°C	-40°C – 85°C	
Temperature Change Rate/Hr, Max (°C)	30°C per hour	30°C per hour	30°C per hour	30°C per hour	
Shock, 0.5ms (Gs)	1500 Gs	1500 Gs	1500 Gs	1500 Gs	
Physical					
Height (mm/in, max)	14.9 mm/0.587 in	14.9 mm/0.587 in	14.9 mm/0.587 in	14.9 mm/0.587 in	
Width (mm/in, max)	70.1 mm/2.760 in	70.1 mm/2.760 in	70.1 mm/2.760 in	70.1 mm/2.760 in	
Depth (mm/in, max)	100.4 mm/3.953 in	100.4 mm/3.953 in	100.4 mm/3.953 in	100.4 mm/3.953 in	
Weight (g/lb, max)	170g/0.38 lb	205g/0.45 lb	205g/0.45 lb	205g/0.45 lb	
Carton Unit Quantity	10	10	10	10	
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<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. 2 Sequential performance measured at queue depth of 32 at beginning of life. System application performance may vary based on host and prior system workload. 3 Random performance measured at queue depth of 256 at beginning of life. System application performance may vary based on host and prior system workload.





Specifications	Nytro 5550M 7 mm — Mixed Use			
Capacity	6.4TB	3.2TB	1.6TB	800GB
Standard Model	XP6400LE10005	XP3200LE10005	XP1600LE10005	XP800LE10005
SED Model <sup>1</sup>	XP6400LE10015	XP3200LE10015	XP1600LE10015	XP800LE10015
FIPS 140-3/Common Criteria Model	XP6400LE10025	XP3200LE10025	XP1600LE10025	XP800LE10025
Features				
Interface (Single Port)	-	-	-	-
Interface (Dual Port)	PCIe <sup>®</sup> Gen4 x4 NVMe			
NAND Flash Type	3D eTLC	3D eTLC	3D eTLC	3D eTLC
Form Factor	2.5 in × 7 mm	2.5 in × 7mm	2.5 in × 7 mm	2.5 in × 7 mm
Performance				
Sequential Read (MB/s) Sustained, 128 KB <sup>2</sup>	6000MB/s	6000MB/s	6000MB/s	6000MB/s
Sequential Write (MB/s) Sustained, 128 KB <sup>2</sup>	2,700	2,600	2,600	1,900
Random Read (IOPS) Sustained, 4KB <sup>3</sup>	950,000	950,000	950,000	945,000
Random Write (IOPS) Sustained, 4KB <sup>3</sup>	180,000	200,000	190,000	140,000
Average Read Latency (µs), 4 KB QD1	90	90	90	90
Average Write Latency (µs), 4 KB QD1	12	12	12	12
Endurance/Reliability				
Lifetime Endurance (Drive Writes per Day)	3	3	3	3
Total Bytes Written (TB)	35,000	17,500	8,700	4,300
Non-recoverable Read Errors per Bits Read	1 per 10E17	1 per 10E17	1 per 10E17	1 per 10E17
Mean Time Between Failures (MTBF, hours)	2500000 hr	2500000 hr	2500000 hr	2500000 hr
Limited Warranty (years)	5	5	5	5
Power Management				
12V Overall Average Active Power (W)	12.5	12.5	12.5	11
Average Idling Power (W)	5 W	5 W	5 W	5 W
Environmental				
Temperature, Operating Internal (°C)	0 to 70	0 to 70	0 to 70	0 to 70
Temperature, Non-operating (°C)	-40°C – 85°C	-40°C – 85°C	-40°C – 85°C	-40°C – 85°C
Temperature Change Rate/Hr, Max (°C)	30°C per hour	30°C per hour	30°C per hour	30°C per hour
Shock, 0.5ms (Gs)	1500 Gs	1500 Gs	1500 Gs	1500 Gs
Physical				
Height (mm/in, max)	7.1 mm/0.280 in	7.1 mm/0.280 in	7.1 mm/0.280 in	7.1 mm/0.280 in
Width (mm/in, max)	70.1 mm/2.760 in	70.1 mm/2.760 in	70.1 mm/2.760 in	70.1 mm/2.760 in
Depth (mm/in, max)	100.4 mm/3.953 in	100.4 mm/3.953 in	100.4 mm/3.953 in	100.4 mm/3.953 in
Weight (g/lb, max)	105g/0.23 lb	105g/0.23 lb	105g/0.23 lb	105g/0.23 lb
Carton Unit Quantity	10	10	10	10

<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. 2 Sequential performance measured at queue depth of 32 at beginning of life. System application performance may vary based on host and prior system workload. 3 Random performance measured at queue depth of 256 at beginning of life. System application performance may vary based on host and prior system workload.





Specifications	Nytro 5350M 7 mm — Read Intensive			
Capacity	7.68TB	3.84TB	1.92TB	
Standard Model	XP7680SE10005	XP3840SE10005	XP1920SE10005	
SED Model <sup>1</sup>	XP7680SE10015	XP3840SE10015	XP1920SE10015	
FIPS 140-3/Common Criteria Model <sup>1</sup>	XP7680SE10025	XP3840SE10025	XP1920SE10025	
Features				
Interface (Single Port)	-	-	-	
Interface (Dual Port)	PCIe <sup>®</sup> Gen4 x4 NVMe	PCIe <sup>®</sup> Gen4 x4 NVMe	PCIe <sup>®</sup> Gen4 x4 NVMe	
NAND Flash Type	3D eTLC	3D eTLC	3D eTLC	
Form Factor	2.5 in × 7 mm	2.5 in × 7 mm	2.5 in × 7 mm	
Performance				
Sequential Read (MB/s) Sustained, 128 KB <sup>2</sup>	6000MB/s	6000MB/s	6000MB/s	
Sequential Write (MB/s) Sustained, 128 KB <sup>2</sup>	2,700	2,600	2,600	
Random Read (IOPS) Sustained, 4KB <sup>3</sup>	950,000	950,000	950,000	
Random Write (IOPS) Sustained, 4KB <sup>3</sup>	95,000	80,000	80,000	
Average Read Latency (µs), 4 KB QD1	90	90	90	
Average Write Latency (µs), 4 KB QD1	12	12	12	
Endurance/Reliability				
Lifetime Endurance (Drive Writes per Day)	1	1	1	
Total Bytes Written (TB)	14,000	7,000	3,500	
Non-recoverable Read Errors per Bits Read	1 per 10E17	1 per 10E17	1 per 10E17	
Mean Time Between Failures (MTBF, hours)	2500000 hr	2500000 hr	2500000 hr	
Limited Warranty (years)	5	5	5	
Power Management				
12V Overall Average Active Power (W)	12.5	12.5	12.5	
Average Idling Power (W)	5 W	5 W	5 W	
Environmental				
Temperature, Operating Internal (°C)	0 to 70	0 to 70	0 to 70	
Temperature, Non-operating (°C)	-40°C − 85°C	-40°C – 85°C	-40°C – 85°C	
Temperature Change Rate/Hr, Max (°C)	30°C per hour	30°C per hour	30°C per hour	
Shock, 0.5ms (Gs)	1500 Gs	1500 Gs	1500 Gs	
Physical				
Height (mm/in, max)	7.1 mm/0.280 in	7.1 mm/0.280 in	7.1 mm/0.280 in	
Width (mm/in, max)	70.1 mm/2.760 in	70.1 mm/2.760 in	70.1 mm/2.760 in	
Depth (mm/in, max)	100.4 mm/3.953 in	100.4 mm/3.953 in	100.4 mm/3.953 in	
Weight (g/lb, max)	105g/0.23 lb	105g/0.23 lb	105g/0.23 lb	
Carton Unit Quantity	10	10	10	

<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. 2 Sequential performance measured at queue depth of 32 at beginning of life. System application performance may vary based on host and prior system workload. 3 Random performance measured at queue depth of 256 at beginning of life. System application performance may vary based on host and prior system workload.





Saparley	Specifications	Nytro 5350S 15 mm — Read Intensive				
SED Model   XP1500SET0075   XP7800SET0075   XP3840SET0075   XP1920SET0075	Capacity	15.36TB	7.68TB	3.84TB	1.92TB	
February	Standard Model	XP15360SE70065	XP7680SE70065	XP3840SE70065	XP1920SE70065	
PCIs Gravis-Colombin Colombin Colombi	SED Model <sup>1</sup>	XP15360SE70075	XP7680SE70075	XP3840SE70075	XP1920SE70075	
Interface (Single Port)	FIPS 140-3/Common Criteria Model <sup>1</sup>	_	-	-	_	
Interface (Dual Port)	Features					
NAND Flash Type         3D eTLC	Interface (Single Port)	PCIe Gen4 x4 NVMe	PCIe Gen4 x4 NVMe	PCIe Gen4 x4 NVMe	PCIe Gen4 x4 NVMe	
Form Factor   2.5 in x 15 mm   2.5 in	Interface (Dual Port)	-	-	-	-	
Potromance   Pot	NAND Flash Type	3D eTLC	3D eTLC	3D eTLC	3D eTLC	
Soquential Read (MB/s) Sustained, 128 KB <sup>2</sup> 7400MB/s         7400MB/s         7400MB/s         7400MB/s           Sequential Write (MB/s) Sustained, 128 KB <sup>2</sup> 7.290         7.200         6.990         3,700           Random Write (ODFS) Sustained, 4KB <sup>3</sup> 1.700,000         1.700,000         1.550,000           Average Read Latency (µs), 4KB QD1         75         75         75         75           Average Write Latency (µs), 4KB QD1         12         12         12         12         12           Endurance (Dive Writes per Day)         1         1         1         1         1         1           Iteletime Endurance (Dive Writes per Day)         1         <	Form Factor	2.5 in × 15 mm	2.5 in × 15 mm	2.5 in × 15 mm	2.5 in × 15 mm	
Sequential Write (MBrs) Sustained, 128 KB	Performance					
Random Read (ICPS) Sustained, 4KB	Sequential Read (MB/s) Sustained, 128 KB <sup>2</sup>	7400MB/s	7400MB/s	7400MB/s	7400MB/s	
Random Write (IOPS) Sustained, 4KB	Sequential Write (MB/s) Sustained, 128 KB <sup>2</sup>	7,200	7,200	6,900	3,700	
Average Read Latency (µs), 4 KB QD1         75         75         75         75           Average Write Latency (µs), 4 KB QD1         12         12         12         12         12           Endurance (Pollability         Lifetime Endurance (Drive Writes per Day)         1         2         2	Random Read (IOPS) Sustained, 4KB <sup>3</sup>	1,700,000	1,700,000	1,700,000	1,550,000	
Average Write Latency (µs), 4 KB QD1 12 12 12 12 12 12 12 12 12 12 12 12 12	Random Write (IOPS) Sustained, 4KB <sup>3</sup>	195,000	195,000	195,000	125,000	
Endurance (Prive Writes per Day)   1   1   1   1   1   1   1   1   1	Average Read Latency (µs), 4 KB QD1	75	75	75	75	
Lifetime Endurance (Drive Writes per Day) 1 1 1 1 1 1 Total Bytes Written (TB) 28,000 14,000 7,000 3,500 Non-recoverable Read Errors per Bits Read 1 per 10E17 Mean Time Between Failures (MTBF, hours) 2500000 hr 25000000 hr 2500000 hr 2500	Average Write Latency (µs), 4 KB QD1	12	12	12	12	
Total Bytes Written (TB)	Endurance/Reliability					
Non-recoverable Read Errors per Bits Read   1 per 10E17	Lifetime Endurance (Drive Writes per Day)	1	1	1	1	
Mean Time Between Failures (MTBF, hours)         2500000 hr         25000000 hr         25000000 hr         25000000000 hr         25000000000000000000000000000000000000	Total Bytes Written (TB)	28,000	14,000	7,000	3,500	
Limited Warranty (years)   5   5   5   5   5	Non-recoverable Read Errors per Bits Read	1 per 10E17	1 per 10E17	1 per 10E17	1 per 10E17	
Power Management	Mean Time Between Failures (MTBF, hours)	2500000 hr	2500000 hr	2500000 hr	2500000 hr	
12V Overall Average Active Power (W)   23   21   20   15     Average Idling Power (W)   7 W   6 W   6 W   6 W   6 W     Environmental   C	Limited Warranty (years)	5	5	5	5	
Average Idling Power (W)         7 W         6 W         6 W         6 W         6 W           Environmental           Temperature, Operating Internal (°C)         0 to 70         -40°C - 85°C         -40°C - 85°C <t< td=""><td>Power Management</td><td></td><td></td><td></td><td></td></t<>	Power Management					
Environmental           Temperature, Operating Internal (°C)         0 to 70           Temperature, Non-operating (°C)         -40°C – 85°C           Temperature Change Rate/Hr, Max (°C)         30°C per hour           Shock, 0.5ms (Gs)         1,300         1,300         1,300         1,300         1,300         1,300           Physical           Height (mm/in, max)         14.9 mm/0.587 in         10.1 mm/2.760 in         70.1 mm/2.760 in         70.1 mm/2.760 in         70.1 mm/2.760 in         70.1 mm/2.760 in         10.4 mm/3.953 in         100.4 mm/3.953 in	12V Overall Average Active Power (W)	23	21	20	15	
Temperature, Operating Internal (°C)         0 to 70         40°C – 85°C         -40°C – 85°C <td>Average Idling Power (W)</td> <td>7 W</td> <td>6 W</td> <td>6 W</td> <td>6 W</td>	Average Idling Power (W)	7 W	6 W	6 W	6 W	
Temperature, Non-operating (°C)         -40°C - 85°C	Environmental					
Temperature Change Rate/Hr, Max (°C)         30°C per hour         30°C per hour         30°C per hour         30°C per hour           Shock, 0.5ms (Gs)         1,300         1,300         1,300         1,300           Physical           Height (mm/in, max)         14.9 mm/0.587 in         14.9 mm/0.587 in         14.9 mm/0.587 in           Width (mm/in, max)         70.1 mm/2.760 in         70.1 mm/2.760 in         70.1 mm/2.760 in           Depth (mm/in, max)         100.4 mm/3.953 in         100.4 mm/3.953 in         100.4 mm/3.953 in           Weight (g/lb, max)         170g/0.38 lb         205g/0.45 lb         205g/0.45 lb         205g/0.45 lb	Temperature, Operating Internal (°C)	0 to 70	0 to 70	0 to 70	0 to 70	
Shock, 0.5ms (Gs)         1,300	Temperature, Non-operating (°C)	-40°C – 85°C	-40°C – 85°C	-40°C – 85°C	-40°C – 85°C	
Physical           Height (mm/in, max)         14.9 mm/0.587 in         10.1 mm/2.760 in         70.1 mm/2.760 in         70.1 mm/2.760 in         70.1 mm/2.760 in         70.1 mm/2.760 in         100.4 mm/3.953 in	Temperature Change Rate/Hr, Max (°C)	30°C per hour	30°C per hour	30°C per hour	30°C per hour	
Height (mm/in, max)         14.9 mm/0.587 in         14.9 mm/0.587 in         14.9 mm/0.587 in         14.9 mm/0.587 in           Width (mm/in, max)         70.1 mm/2.760 in         70.1 mm/2.760 in         70.1 mm/2.760 in         70.1 mm/2.760 in           Depth (mm/in, max)         100.4 mm/3.953 in         100.4 mm/3.953 in         100.4 mm/3.953 in         100.4 mm/3.953 in           Weight (g/lb, max)         170g/0.38 lb         205g/0.45 lb         205g/0.45 lb         205g/0.45 lb	Shock, 0.5ms (Gs)	1,300	1,300	1,300	1,300	
Width (mm/in, max)         70.1 mm/2.760 in         70.1 mm/2.760 in         70.1 mm/2.760 in         70.1 mm/2.760 in           Depth (mm/in, max)         100.4 mm/3.953 in         100.4 mm/3.953 in         100.4 mm/3.953 in         100.4 mm/3.953 in           Weight (g/lb, max)         170g/0.38 lb         205g/0.45 lb         205g/0.45 lb         205g/0.45 lb	Physical					
Depth (mm/in, max)         100.4 mm/3.953 in           Weight (g/lb, max)         170g/0.38 lb         205g/0.45 lb         205g/0.45 lb         205g/0.45 lb	Height (mm/in, max)	14.9 mm/0.587 in	14.9 mm/0.587 in	14.9 mm/0.587 in	14.9 mm/0.587 in	
Weight (g/lb, max)         170g/0.38 lb         205g/0.45 lb         205g/0.45 lb         205g/0.45 lb	Width (mm/in, max)	70.1 mm/2.760 in	70.1 mm/2.760 in	70.1 mm/2.760 in	70.1 mm/2.760 in	
	Depth (mm/in, max)	100.4 mm/3.953 in	100.4 mm/3.953 in	100.4 mm/3.953 in	100.4 mm/3.953 in	
Carton Unit Quantity         10         10         10         10	Weight (g/lb, max)	170g/0.38 lb	205g/0.45 lb	205g/0.45 lb	205g/0.45 lb	
	Carton Unit Quantity	10	10	10	10	

<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.

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<sup>2</sup> Sequential performance measured at queue depth of 32 at beginning of life. System application performance may vary based on host and prior system workload. 3 Random performance measured at queue depth of 256 at beginning of life. System application performance may vary based on host and prior system workload.