



DATA SHEET

Tough. Ready. Scalable.

# **IronWolf 510 SSD**

Built for NAS, Seagate<sup>®</sup> IronWolf<sup>®</sup> 510 delivers high-endurance performance and caching speeds of up to 3150MB/s—or 3GB/s for NVMe-compatible systems. With capacities of up to 1.92TB, it's the go-to solution for creative pros and businesses needing 24×7 multiuser storage.





## Key Advantages

Tap into the power of SSD cache tiering and make 24×7 loading for multiple users a smooth, easy process.

Easily tackle the high-endurance requirements of NAS with 1 DWPD.

Offering best-in-class performance, IronWolf 510 SSD ensures low lag and low down time in multi-user environments.

Seagate has your back in almost every situation when it comes to a failed drive with three years of Rescue Data Recovery Services.

Enjoy long-term reliability with 1.8M hours MTBF in a PCle form factor.

Choose from an extensive portfolio of capacity options including 240GB, 480GB, 960GB, and 1.92TB.

#### **Best-Fit Applications**

- Tiered caching on enabled NAS
- Creative pro NAS
- Small, medium enterprise NAS







Specifications			İ		
Capacity	1.92TB	960GB	480GB	240GB	
Standard Model	ZP1920NM30001	ZP960NM30001	ZP480NM30001	ZP240NM30001	
Features					
Interface	PCIe G3 ×4, NVMe 1.3	PCIe G3 ×4, NVMe 1.3	PCIe G3 ×4, NVMe 1.3	PCIe G3 ×4, NVMe 1.3	
NAND Flash Type	3D TLC	3D TLC	3D TLC	3D TLC	
Form Factor	M.2 2280-D2	M.2 2280-D2	M.2 2280-S2	M.2 2280-S2	
Performance					
Sequential Read (MB/s)	3,150	3,150	2,650	2,450	
Sustained, 128KB QD32 <sup>1</sup>	0,100	0,100	2,000		
Sequential Write (MB/s)	850	1,000	600	290	
Sustained, 128KB QD32		1,000	000		
Random Read (IOPS)	270,000	345,000	193,000	100,000	
(QD32T4) <sup>1</sup>	, -, -, -, -, -, -, -, -, -, -, -, -,	2 . 2,000			
Random Write (IOPS)	25,000	28,000	20,000	12,000	
(QD32T4) <sup>1</sup>	-,,	-,	-,	,	
Random Read (IOPS)	290,000	380,000	199,000	100,000	
(QD32T8) <sup>1</sup>			,		
Random Write (IOPS)	27,000	29,000	21,000	13,000	
(QD32T8) <sup>T</sup>	·	·			
Endurance/Reliability					
Total Bytes Written (TB)	3,500	1,750	875	435	
Nonrecoverable Read Errors per Bits Read	1 per 10E16	1 per 10E16	1 per 10E16	1 per 10E16	
Mean Time Between Failures (MTBF, hours)	1,800,000	1,800,000	1,800,000	1,800,000	
Rescue Data Recovery	3	3	3	3	
Services (years) <sup>2</sup>	<u> </u>	3	3	J	
Warranty, Limited (years)	5	5	5	5	
Power Management					
Power Supply	3.3V	3.3V	3.3V	3.3V	
Active Max Average Power (W)	6.0	6.0	6.0	5.3	
Average Idle Power (W)	2.0	1.95	1.83	1.75	
Environmental					
Temperature, Operating Internal(°C)	0 to 70	0 to 70	0 to 70	0 to 70	
Temperature, Nonoperating (°C)	-40 to 85	-40 to 85	-40 to 85	-40 to 85	
Shock, 0.5ms (Gs)	1500	1500	1500	1500	
Physical					
Height (in/mm, max)	0.140in/3.58mm	0.140in/3.58mm	0.087in/2.23mm	0.087in/2.23mm	
Width (in/mm, max)	0.872in/22.15mm	0.872in/22.15mm	0.872in/22.15mm	0.872in/22.15mm	
Depth (in/mm, max)	3.16in/80.15mm	3.16in/80.15mm	3.16in/80.15mm	3.16in/80.15mm	
Weight (lb/g)	0.018lb/8.3g	0.017lb/8.1g	0.015lb/6.9g	0.014lb/6.5g	
Carton Unit Quantity	10	10	10	10	

<sup>1</sup> Performance data is based on testing under certain workload conditions and is subject to change.

<sup>2</sup> Rescue Data Recovery Services not available in all countries. Contact your Seagate sales representative for further details. Register an IronWolf 510 SSD to activate your 3-year Rescue Services plan at seagate.com/register.





Ordering Information								
Specifications								
Retail Packaging		Box Dimensions	Master Carton Dimensions	Pallet Dimensions				
Depth/Length (in/mm)		0.944in/24mm	6.023in/153mm	48in/1219mm				
Width (in/mm)		4.291in/109mm	11.496in/292mm	20in/508mm				
Height (in/mm)		6.102in/155mm	5.511in/140mm	28inch/706mm				
Weight (lb/kg)		0.14lb/0.062kg	1.9lb/0.88kg	103lb/46.34kg				
Quantities								
Boxes per Master Carton	10							
Master Cartons per Pallet	48							
Pallet Layers	4							

#### System Requirements

What's Included

• Windows<sup>®</sup> 10, Windows 8.1

• Seagate<sup>®</sup> IronWolf<sup>®</sup> 510 SSD

Linux

Region	Model Number	Capacity	Limited Warranty (years)	UPC Code	EAN Code	Multi-Pack UPC
ww	ZP1920NM30011	1.92TB	5	763649135983	8719706018357	10763649135980
ww	ZP960NM30011	960GB	5	763649135976	8719706018340	10763649135973
ww	ZP480NM30011	480GB	5	763649135969	8719706018333	10763649135966
ww	ZP240NM30011	240GB	5	763649135952	8719706018326	10763649135959

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