

DATA SHEET Tough. Ready. Scalable. IronWolf 110 SSD



SEAGATE

The Seagate<sup>®</sup> IronWolf<sup>®</sup> 110 SSD is designed for everything business NAS, with 24×7 performance to handle multi-user environments across a wide range of capacities.



#### Key Features and Benefits

- SATA 6 Gb/s interface for easy deployment
- Seagate DuraWrite<sup>™</sup> lossless data reduction technology
- Tunable capacity for performanceor capacity-optimised SSD solutions
- Power loss data protection circuit
- Enterprise-class reliability with 2Mhr. MTBF and a 5-year limited warranty

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

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

Take your NAS to the next level with the IronWolf 110 SATA SSD, providing pure performance in all-flash array or tiered cache NAS-enabled systems. This enterprise-grade SSD gives you increased durability and peace of mind.

# **Optimised to Be Tough**

Boost the performance of NAS, which requires faster random access performance

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

Choose built-in drive monitoring with enabled NAS with IronWolf Health  $\ensuremath{\mathsf{Management}}^1$ 

## Always Accessible, Always Ready

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

Acquire the capacity and endurance to fit a range of applications and workloads

## Scalable for Data Growth in NAS

Leverage a wide portfolio to fit your growing business needs

Depend on a 5-year limited warranty and included 2-year Data Recovery Services plan

1 Coming soon on enabled NAS







Specifications					
Capacity	3.84 TB	1.92 TB	960GB	480GB	240GB
Standard Model Numbers	ZA3840NM10001	ZA1920NM10001	ZA960NM10001	ZA480NM10001	ZA240NM10001
Features					
Interface	SATA 6 Gb/s				
NAND Flash Type	3D TLC				
Form Factor	2.5 in × 7 mm				
Performance					
Sequential Read (MB/s) Sustained, 128 KB QD32 <sup>1</sup>	560	560	560	560	560
Sequential Write (MB/s) Sustained, 128 KB QD32 <sup>1</sup>	535	535	535	535	345
Random Read (IOPS) Sustained, 4 KB QD32 <sup>1</sup>	85,000	90,000	90,000	75,000	55,000
Random R70R (IOPS) Sustained. 4KB QD321	60,000	65,000	50,000	40,000	30,000
Random Write (IOPS) Sustained, 4 KB QD32 <sup>1</sup>	45,000	50,000	55,000	50,000	30,000
Average Read Latency (µs), 4 KB QD1 <sup>1</sup>	175	160	155	155	155
Average Write Latency (µs), 4 KB QD1 <sup>1</sup>	40	35	40	40	40
Endurance/Reliability					
Total Bytes Written (TB)	7,000	3,500	1,750	875	435
Non-recoverable Read Errors per Bits Read	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 Active Max Average 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				
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				
Width (mm/in, max)	70.1 mm/2.76 in				
Depth (mm/in, max)	100.25 mm/3.947 in				
Weight (lb/g)	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, and 960 GB capacity points require 12V in addition to 5V power.

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