# IRONWOLF NAS

**SEAGATE**

## Tough. Ready. Scalable.
# IronWolf 110 SSD

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



3.84TB
SATA 6Gb/s
IronWolf® 110 SSD
ZA3840NM10001

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 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 Rescue Data Recovery Services

1 Coming soon on enabled NAS

### Key Features and Benefits

- SATA 6Gb/s interface for easy deployment
- Seagate DuraWrite™ lossless data-reduction technology
- Optimised with AgileArray firmware tuned specifically for NAS
- Power loss data protection circuit
- Enterprise-class reliability with 2M-hr. 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

## + Rescue
### DATA RECOVERY SERVICES

| Specifications | | | | | |
|---|---|---|---|---|---|
| Capacity | 3.84 TB | 1.92 TB | 960 GB | 480 GB | 240 GB |
| Standard Model | ZA3840NM10001 | ZA1920NM10001 | ZA960NM10001 | ZA480NM10001 | ZA240NM10001 |
| **Features** | | | | | |
| Interface | SATA 6 Gb/s | SATA 6 Gb/s | SATA 6 Gb/s | SATA 6 Gb/s | SATA 6 Gb/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 QD32[1] | 560 | 560 | 560 | 560 | 560 |
| Sequential Write (MB/s) Sustained, 128 KB QD32[1] | 535 | 535 | 535 | 485 | 230 |
| Random Read (IOPS) Sustained, 4 KB QD32[1] | 85000 | 90000 | 90000 | 80000 | 55000 |
| Random Write (IOPS) Sustained, 4 KB QD32[1] | 20000 | 20000 | 20000 | 15,000 | 8,000 |
| **Endurance/Reliability** | | | | | |
| Total Bytes Written (TBW, 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) | 2000000 | 2000000 | 2000000 | 2000000 | 2000000 |
| Rescue Data Recovery Services (years)[2] | 2 | 2 | 2 | 2 | 2 |
| Warranty, Limited (years) | 5 | 5 | 5 | 5 | 5 |
| **Power Management** | | | | | |
| Power Supply | 5V + 12V | 5V + 12V | 5V + 12V | 5V | 5V |
| +5/+12V Active Max Average Power (W)[3] | 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 to 70 | 0 to 70 | 0 to 70 | 0 to 70 | 0 to 70 |
| Temperature, Non-operating (°C) | –40 to 85 | –40 to 85 | –40 to 85 | –40 to 85 | –40 to 85 |
| 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 (in/mm, max) | 7.00 mm/0.276 in | 7.00 mm/0.276 in | 7.00 mm/0.276 in | 7.00 mm/0.276 in | 7.00 mm/0.276 in |
| Width (in/mm, max) | 70.10 mm/2.760 in | 70.10 mm/2.760 in | 70.10 mm/2.760 in | 70.10 mm/2.760 in | 70.10 mm/2.760 in |
| Depth (in/mm, 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) | 82 g/0.180 lb | 77 g/0.169 lb | 77 g/0.169 lb | 75 g/0.165 lb | 75 g/0.165 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 Rescue Data Recovery Services not available in all countries. Contact your Seagate sales representative for further details. Register an IronWolf drive to activate your 2-year Rescue Services at seagate.com/register.

3 3.84 TB, 1.92 TB, and 960 GB capacity points require 12V in addition to 5V power.

# IRONWOLF NAS

| Ordering Information | | | |
|---|---|---|---|
| **Specifications** | | | |
| Retail Packaging | Box Dimensions | Master Carton Dimensions[1] | Pallet Dimensions |
| Depth/Length (in/mm) | 1.004 in/25.50 mm | 260.0 in/10.236 mm | 47.992 in/1219.00 mm |
| Width (in/mm) | 4.350 in/110.50 mm | 163.0 in/6.417 mm | 40.000 in/1016.00 mm |
| Height (in/mm) | 5.344 in/135.75 mm | 113.0 in/4.449 mm | 46.181 in/1173.00 mm |
| Weight (lb/kg) | 0.279 lb/0.127 kg | 3.201 lb/1.455 kg | 519.860 lb/236.300 kg |
| **Quantities** | | | |
| Boxes per Master Carton | 10 | | |
| Master Cartons per Pallet | 160 | | |
| Pallet Layers | 8 | | |

| System Requirements | What's Included |
|---|---|
| • Windows® 10, Windows 8.1, Windows 7 <br> • Linux | • Seagate® IronWolf® 110 SSD |

| Region | Model Number | Capacity | Limited Warranty (years) | UPC Code | EAN Code | Multi-Pack UPC |
|---|---|---|---|---|---|---|
| WW | ZA3840NM10011 | 3.84 TB | 5 | 763649134061 | 8719706016674 | 10763649134068 |
| WW | ZA1920NM10011 | 1.92 TB | 5 | 763649134054 | 8719706016667 | 10763649134051 |
| WW | ZA960NM10011 | 960GB | 5 | 763649134047 | 8719706016650 | 10763649134044 |
| WW | ZA480NM10011 | 480GB | 5 | 763649134030 | 8719706016643 | 10763649134037 |
| WW | ZA240NM10011 | 240GB | 5 | 763649134023 | 8719706016636 | 10763649134020 |

1 Inner dimensions

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