



## Product Highlights

- Robust system responsiveness and exceptional I/O performance
- Tackle NAS workloads with exceptional reliability and endurance
- Tame tough projects like virtualization and collaborative editing
- Perfect for multitasking applications with multiple users
- Scale your NAS device with huge capacities up to 4TB<sup>1</sup>
- Purpose-built and tested to be compatible with popular NAS systems

## WD Red™ SN700 NVMe™ SSD

### NVMe Solid-State Drive for NAS Devices

Tackle extreme workloads in high-intensity NAS environments with the fast-caching WD Red™ SN700 NVMe™ SSD. This powerful drive is engineered to support 24/7 environments and always-on applications with the ultimate in reliability and endurance. Its robust system responsiveness and exceptional I/O performance are perfect for multi-user, multitasking applications, letting you tame your SMB's toughest projects from virtualization to collaborative editing to intensive database storage with efficient caching—all while helping to lower your TCO. Take your small-to-medium business to the next level with NVMe technology, fast speeds and huge capacities in a drive purpose-built and tested for NAS. That's the power of WD Red.

### Accelerate Your NAS

The fast-caching power of the WD Red SN700 NVMe SSD delivers robust system responsiveness and exceptional I/O performance compared to our SATA SSDs.

### Built to Last

Tackle 24/7 NAS workload environments with reliability and endurance of up to 5100 TBW (4TB<sup>1</sup> model), backed by a 5-year limited warranty<sup>2</sup>.

### Step Up to NVMe

Tame your SMB's toughest projects—from virtualization to collaborative editing to intensive database storage with efficient caching—with storage designed to outperform while helping to lower your TCO.

### Perfect for SMBs

Even in smaller operations, multiple people working at the same time can tax a NAS device. NVMe caching easily handles random workloads in multi-user, multitasking applications to let small-to-medium businesses do more.

### Scale Up to Keep Up

Keep ahead of the data explosion with huge capacities up to 4TB<sup>1</sup>.

### Optimize Your Workflow

Purpose-built and tested to be compatible with many of today's most popular NAS systems for maximum flexibility to optimize your workflow.

## Specifications

### General Specifications

Formatted Capacity <sup>1</sup>	250GB	500GB	1TB	2TB	4TB
Model Number	WDS250G1R0C	WDS500G1R0C	WDS100T1R0C	WDS200T1R0C	WDS400T1R0C
Form Factor	M.2 2280-S3-M	M.2 2280-S3-M	M.2 2280-S3-M	M.2 2280-S3-M	M.2 2280-D5-M
Interface <sup>2</sup>	PCIe Gen3 8 Gb/s, up to 4 Lanes	PCIe Gen3 8 Gb/s, up to 4 Lanes	PCIe Gen3 8 Gb/s, up to 4 Lanes	PCIe Gen3 8 Gb/s, up to 4 Lanes	PCIe Gen3 8 Gb/s, up to 4 Lanes
Length	80 ± 0.15mm	80 ± 0.15mm	80 ± 0.15mm	80 ± 0.15mm	80 ± 0.15mm
Width	22 ± 0.15mm	22 ± 0.15mm	22 ± 0.15mm	22 ± 0.15mm	22 ± 0.15mm
Height	2.38mm	2.38mm	2.38mm	2.38mm	2.38mm
Weight	7.5g ± 1g	7.5g ± 1g	7.5g ± 1g	7.5g ± 1g	9.57g ± 1g

### Performance<sup>3</sup>

Sequential Read up to (MB/s) (Queues=32, Threads=1)	3,100	3,430	3,430	3,400	3,400
Sequential Write up to (MB/s) (Queues=32, Threads=1)	1,600	2,600	3,000	2,900	3,100
Random Read up to 4KB (IOPS) (Queues = 32, Threads = 1)	220K	420K	515K	480K	550K
Random Write up to 4KB (IOPS) (Queues = 32, Threads = 1)	180K	380K	560K	540K	520K
Endurance (TBW) <sup>4</sup>	500	1,000	2,000	2,500	5,100

### Power<sup>5</sup>

Peak Power (10µs)	2.8A	2.8A	2.8A	2.8A	2.8A
PS3 (low power)	70mW	70mW	100mW	100mW	100mW
PS4 (Sleep)(low power)	3.5mW	3.5mW	3.5mW	5mW	5mW

### Reliability

MTTF (hours) <sup>6</sup>	1,750,000 hours (Telcordia SR-332, GB, 40°C)
---------------------------	--

### Environmental

Operating Temperatures <sup>7</sup>	32°F to 158°F (0°C to 70°C)	32°F to 158°F (0°C to 70°C)	32°F to 158°F (0°C to 70°C)	32°F to 158°F (0°C to 70°C)	32°F to 158°F (0°C to 70°C)
Non-Operating Temperatures <sup>8</sup>	-67°F to 185°F (-55°C to 85°C)	-67°F to 185°F (-55°C to 85°C)	-67°F to 185°F (-55°C to 85°C)	-67°F to 185°F (-55°C to 85°C)	-67°F to 185°F (-55°C to 85°C)
Certifications	FCC, UL, TUV, KCC, BSMI, VCCI, C-Tick	FCC, UL, TUV, KCC, BSMI, VCCI, C-Tick	FCC, UL, TUV, KCC, BSMI, VCCI, C-Tick	FCC, UL, TUV, KCC, BSMI, VCCI, C-Tick	FCC, UL, TUV, KCC, BSMI, VCCI, C-Tick
Limited Warranty <sup>9</sup>	5 years	5 years	5 years	5 years	5 years

<sup>1</sup> As used for storage capacity, 1GB = 1 billion bytes and 1TB = one trillion bytes. Actual user capacity may be less depending on operating environment.

<sup>2</sup> Backwards compatible with PCIe Gen3 x2, PCIe Gen2 x4, PCIe Gen2 x2, PCIe Gen2 x1, and PCIe Gen3 x1.

<sup>3</sup> 1 MB/s = 1 million bytes per second. Based on internal testing; performance may vary depending upon host device, usage conditions, drive capacity, and other factors.

<sup>4</sup> TBW (terabytes written) values calculated using JEDEC client workload (JESD219) and vary by product capacity.

<sup>5</sup> Measured using MobileMark™ 2014 on HP EliteBook X360 1030 G2 with i7-7600U, 8GB RAM.

Windows 10 Pro 64-bit RS3 using Microsoft StorNVMe driver, Primary drive.

<sup>6</sup> MTTF = Mean Time To Failure based on internal testing using Telcordia stress part testing.

<sup>7</sup> Operational temperature as reported by device (composite temperature).

<sup>8</sup> Non-operational storage temperature does not guarantee data retention.

<sup>9</sup> 5 years or Max Endurance (TBW) limit, whichever occurs first. See support.WesternDigital.com for regional specific warranty details.

## Western Digital