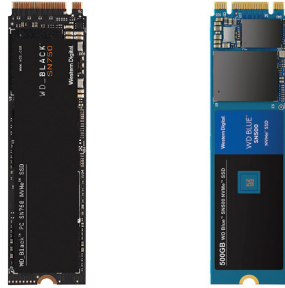


NVMe vs. SATA

NVMe

A communications protocol optimized specifically to handle high bandwidth transfer speeds.

Supports up to 1GB/s per lane
(PCIe Gen 3.0)



WD Black SN750 M.2 NVMe SSD

WD Blue SN500 M.2 NVMe SSD

SATA

Communications protocol optimized for spinning magnetic disk.

Supports up to 600MB/s transfer rate
(SATA 6Gb/s)



WD Blue 3D NAND SATA 2.5" and M.2 SATA SSD

Up to 6X the performance compared to our SATA!



	WD Black SN750 NVMe ¹	WD Blue SN500 NVMe ²	WD Blue SATA ³
Sequential Read Up to Sequential Data ● = 100 MB/second	3,470MB/s	1,700MB/s	560MB/s
Sequential Write Up to Sequential Data ● = 100 MB/second	3,000MB/s	1,450MB/s	530MB/s
Random Read Up to	515k	275k	95k
Random Write Up to	560k	300k	84k
Maximum Queue Depth	64k queues, 64k commands	64k queues, 64k commands	1 queue, 32 commands

What is NVMe?

A serial connection for high bandwidth transfer speeds and low latency

Who needs NVMe SSDs?



GAMER

- Landscape-rich games
- Fast level loading



AUDIO/VIDEO PROFESSIONAL

- High volume recording
- Live Streaming



DESIGNER

- Large image rendering
- Intensive graphic editing



BUSINESS

- High speed file transfer
- Fast boot up & launch

¹ 1TB WD Black SN750 NVMe SSD measured using CrystalDiskMark 6.02, 1000MB LBA range on ASUS Z270-A desktop with Intel® i7-7700K 4.2GHz, 8GB 2133MHz DDR4. Windows 10 Pro 64-bit RS4 Build 17134.112 using Microsoft StorNVMe driver, secondary drive. Performance may vary based on host device. Megabyte (MB) = 1 million bytes. IOPS = input/output operations per second.

² 500GB WD Blue SN500 NVMe SSD measured using CrystalDiskMark 5.2.2 benchmark using a 1000MB LBA range ASUS Z170A desktop with Intel® i7-6700K 4.0GHz, 8GB 2133MHz DDR4. Windows 10 Pro 64-bit using Microsoft StorNVMe driver, secondary drive.

³ 500GB WD Blue 3D NAND SATA SSD measured using CrystalDiskMark 5.2.2, 1000MB LBA range, on Desktop with Intel Z170 chipset with Intel® i7-6700K 4.0GHz, 8GB 2133MHz DDR4. Windows 10 with Intel iRST version 15.2.0.1020, secondary drive.

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