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WD_BLACK™ SN750 NVMe™ SSD

Product Highlights

- Read speeds up to 3,470MB/s[2] (1TB heatsink model only) for improved load times.
- Available in capacities ranging from 250GB to 4TB[1].
- Sleek heatsink design to customize and intensify your gaming rig while helping to maintain peak performance[3].
- An exclusive WD_BLACK™ SSD dashboard[4] with gaming mode improves game performance.

Space To Play

The WD_BLACK SN750 NVMe SSD is available in capacities ranging from 250GB – 4TB[1]. At the core of the WD_BLACK drive is its revolutionary NAND technology. By doubling the storage density from its previous generation, our 3D NAND pushes the limitations of storage and showcases the amazing feat of NAND innovation. This means extended capacity up to 4TB[1] on a single-sided drive that's roughly the size of a gumstick, enough to store your large files and video games.

Level Up to NVMe SSD Performance

The WD_BLACK™ SN750 NVMe™ SSD delivers top-tier performance for gaming and hardware enthusiasts who are looking to build or upgrade their PC. Available in capacities up to 4TB[1], the WD_BLACK SN750 NVMe SSD rivals some of the best performing drives on the market to help give gamers that competitive edge.

Performance Matters

Live life in the fast lane, whether you're looking to boost your system's overall responsiveness or load games and levels quickly, the WD_BLACK drive cuts down on your wait time to get back into action and gets you ahead of the game.

Our fastest computing NVMe SSD (1TB heatsink model) can deliver speeds more than six times faster than our fastest SATA SSD (up to 3,470MB/s[2] vs. 560MB/s[2]) to give hardcore gamers the competitive edge they need.

Sleek Heatsink Design

Every system is not created equal. From different graphics cards and CPUs to DRAM and storage, PCs all differ in performance and appearance. The WD_BLACK SSD's sleek and modern heatsink model goes well with desktop PC builds that support the M.2 form factor and is the perfect component to complement systems with RGB lighting and other cooling technologies, such as water cooling[3].

The EKWB heatsink is designed to help keep the WD_BLACK NVMe SSD running at peak performance for longer sustained periods. It's sleek and non-intrusive design not only gives your system a boost in appearance, but also helps your drive maintain optimal levels of performance with its passive cooling features.

The WD_BLACK SSD Dashboard[4]

The WD_BLACK SSD Dashboard gives you the ability to optimize performance by enabling the gaming mode feature. This disables the low power mode function on the SSD, which keeps your drive firing on all cylinders during intense gaming sessions.

1 As used for storage capacity, one gigabyte (GB) = one billion bytes and one terabyte (TB) = one trillion bytes. Total accessible capacity varies depending on operating environment.
2 Megabyte per second (MB/s) = one million bytes per second. Based on internal testing; performance may vary depending upon host device, usage conditions, drive capacity, and other factors.
3 Heatsink option not available for the 250GB or 4TB versions of WD_BLACK™ SN750 NVMe™ SSD. Heatsink model recommended for desktop PC only.
4 Available for download at www.westerndigital.com.

WD_BLACK SN750 NVMe SSD (Without Heatsink)

Specification

Interface M.2 2280[1,2]	PCIe Gen3 8 Gb/s, up to 4 Lanes				
Formatted Capacity[3]	250GB, 500GB, 1TB, 2TB, 4TB				

Performance[2]

	250GB	500GB	1TB	2TB	4TB
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 4KB IOPS up to (Queues=32, Threads=8)	220K	420K	515K	480K	550K
Random Write 4KB IOPS up to (Queues=32, Threads=8)	180K	380K	560K	540K	520K
Endurance[4] (TBW)	200	300	600	1,200	2,400

Power

	250GB	500GB	1TB	2TB	4TB
Peak Power (10us)	2.8A	2.8A	2.8A	2.8A	2.8A
PS3 (low power)[5]	70mW	70mW	100mW	100mW	100mW
Sleep (PS4) (low power)[5]	3.5mW	3.5mW	3.5mW	5mW	5mW

Reliability

MTTF[6]	1,750,000 hours (Telcordia SR-332, GB, 40°C)

Product Safety/Regulatory

Operating Temperatures[7]	32°F to 158°F (0°C to 70°C)
Non-operating Temperatures[8]	-67°F to 185°F (-55°C to 85°C)
Certifications	UL, TUV, CE, BSMI, FCC, KCC, RCM, Morocco, VCCI
Limited Warranty (years)[9]	5 years

Physical Dimensions — M.2 2280

Form Factor	M.2 2280-S3-M
Length	80 ± 0.15mm
Width	22 ± 0.15mm
Height	2.38mm
Weight	7.5g ± 1g

Ordering Information[3]

	250GB	500GB	1TB	2TB	4TB
Model Numbers Without Heatsink	WDS250G3X0C	WDS500G3X0C	WDS100T3X0C	WDS200T3X0C	WDS400T3X0C

1   Backward compatible with PCIe Gen3 x2, PCIe Gen3 x1, PCIe Gen2 x4, PCIe Gen2 x2, and PCIe Gen2 x1.
2   As used for transfer rate or interface, megabyte per second (MB/s) = one million bytes per second, megabit per second (Mb/s) = one million bits per second, and gigabit per second (Gb/s) = one billion bits per second. IOPS = input/output operations per second. Performance will vary depending on your hardware and software components and configurations.
3   Not all products may be available in all regions of the world. As used for storage capacity, one gigabyte (GB) = one billion bytes, and one terabyte (TB) = one trillion bytes. Total accessible capacity varies depending on operating environment.
4   TBW (terabytes written) values calculated using JEDEC client workload (JESD219) and vary by product capacity.
5   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.
6   MTTF = Mean Time To Failure based on internal testing using Telcordia stress part testing (Telcordia SR-332, GB, 25°C). MTTF is based on a sample population and is estimated by statistical measurements and acceleration algorithms. MTTF does not predict an individual drive's reliability and does not constitute a warranty.
7   Operational temperature as reported by device (composite temperature).
8   Non-operational storage temperature does not guarantee data retention.
9   5 years or Max Endurance (TBW) limit, whichever occurs first. See support.wdc.com for regional specific warranty details.

WD BLACK SN750 NVMe SSD (Heatsink)

Specification

Interface M.2 2280[1,2]		PCIe Gen3 8 Gb/s, up to 4 Lanes	
Formatted Capacity[3]		500GB, 1TB, 2TB	

Performance[2]

	500GB	1TB	2TB
Sequential Read up to (MB/s) (Queues=32, Threads=1)	3,430	3,470	3,400
Sequential Write up to (MB/s) (Queues=32, Threads=1)	2,600	3,000	2,900
Random Read 4KB IOPS up to (Queues=32, Threads=8)	420K	515K	480K
Random Write 4KB IOPS up to (Queues=32, Threads=8)	380K	560K	550K
Endurance[4] (TBW)	300	600	1,200

Power

	500GB	1TB	2TB
Peak Power (10us)	2.8A	2.8A	2.8A
PS3 (low power)[5]	70mW	100mW	100mW
Sleep (PS4) (low power)[5]	3.5mW	3.5mW	5mW

Reliability

MTTF[6]	1,750,000 hours (Telcordia SR-332, GB, 40°C)

Product Safety/Regulatory

Operating Temperatures[7]	32°F to 158°F (0°C to 70°C)
Non-operating Temperatures[8]	-67°F to 185°F (-55°C to 85°C)
Certifications	UL, TUV, CE, BSMI, FCC, KCC, RCM, Morocco, VCCI
Limited Warranty (years)[9]	5 years

Physical Dimensions

	M.2 2280 with Heatsink
Form Factor	M.2 2280 D5-M with heatsink
Length	80 ± 0.15mm
Width	24.2 ± 0.30mm
Height	8.10mm
Weight	9.57g ± 1g

Ordering Information[3]

	500GB	1TB	2TB
Model Numbers With Heatsink[10]	WDS500G3XHC	WDS100T3XHC	WDS200T3XHC

1   Backward compatible with PCIe Gen3 x2, PCIe Gen3 x1, PCIe Gen2 x4, PCIe Gen2 x2, and PCIe Gen2 x1.
2   As used for transfer rate or interface, megabyte per second (MB/s) = one million bytes per second, megabit per second (Mb/s) = one million bits per second, and gigabit per second (Gb/s) = one billion bits per second. IOPS = input/output operations per second. Performance will vary depending on your hardware and software components and configurations.
3   Not all products may be available in all regions of the world. As used for storage capacity, one gigabyte (GB) = one billion bytes, and one terabyte (TB) = one trillion bytes. Total accessible capacity varies depending on operating environment.
4   TBW (terabytes written) values calculated using JEDEC client workload (JESD219) and vary by product capacity.
5   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.
6   MTTF = Mean Time To Failure based on internal testing using Telcordia stress part testing (Telcordia SR-332, GB, 25°C). MTTF is based on a sample population and is estimated by statistical measurements and acceleration algorithms. MTTF does not predict an individual drive's reliability and does not constitute a warranty.
7   Operational temperature as reported by device (composite temperature).
8   Non-operational storage temperature does not guarantee data retention.
9   5 years or Max Endurance (TBW) limit, whichever occurs first. See support.wdc.com for regional specific warranty details.
10 The M.2 2280 with heatsink version is not recommended for laptops.

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