WD_
BLACK™

■ WD_BLACK™ SN850X NVMe™ SSD

M.2 2280 NVMe™ SSD
GAME DRIVE

BUILT FOR ELITE GAMING.

Crush load times and slash throttling, lagging, and texture pop-ins with the WD_BLACK™ SN850X NVMe™ SSD. Available in capacities of up to 1TB through 8TB[1], this gaming drive is built for top-tier performance. With 7,300MB/s[2] speeds [1TB - 4TB models] and a heatsink option to maintain performance, you can enjoy your favorite games without worrying about lag. Plus, the downloadable WD_BLACK™ Dashboard [Windows® only] can automatically turn on Game Mode 2.0 features. The WD_BLACK™ SN850X NVMe™ SSD delivers a smooth, fast experience—and the innovations that let you compete at your absolute peak.

KEY FEATURES

- **TRANSFORM YOUR PC.** Get top-tier performance and ridiculously short load times for your gaming PC or workstation with insane speeds up to 7,300 MB/s[2] [1TB - 4TB models].

- **MORE ROOM, MORE GAMES.** Capacities up to 8TB[1] mean you get to download more games — and stop deleting your favorites.

- **HEATSINK FOR THE WIN.** All capacities have an optional heatsink version to help maintain peak performance through your most intense gaming sessions.

- **DO MORE WITH DASHBOARD.** The downloadable WD_BLACK™ Dashboard [Windows® only] monitors your drive's health, lets you customize your RGB lighting [heatsink versions only], and can automatically detect games to turn on Game Mode 2.0.

- **FUTURE-FORWARD FEATURES.** The WD_BLACK™ SN850X boasts a powerful suite of features, including Predictive Loading, Overhead Balancing, and Adaptive Thermal Management [ATM].[3]

- **DIRECTSTORAGE SUPPORT.** Improve load times and get precious time back with Microsoft® DirectStorage technology.

Western Digital®
innovation

PRODUCT FEATURES

GAIN THE ULTIMATE GAMING EDGE
Insane speeds up to 7,300MB/s[2] [1TB - 4TB models] deliver top-tier performance with ridiculously short load times — for the elite gaming experience you've been waiting for.

HEATSINK FOR THE WIN
All capacities have an optional heatsink version that's not only eye-catching, but also helps your rig maintain peak performance through your most intense gaming sessions.

MORE ROOM FOR MORE GAMES
Capacities up to 8TB[1] mean you get to keep more games at the ready — and get into the action even faster.

DO MORE WITH WD_BLACK™ DASHBOARD
The downloadable WD_BLACK™ Dashboard [Windows® only] monitors your drive's health, lets you customize your RGB lighting, and, exclusively on the SN850X SSD, enables Game Mode 2.0 to transform your gaming experience.

FUTURE-FORWARD FEATURES
The WD_BLACK™ SN850X SSD boasts a powerful suite of features, including Predictive Loading, Overhead Balancing, and Adaptive Thermal Management [ATM].[3]

DIRECTSTORAGE SUPPORTED
Improve load times and get precious time back with Microsoft® DirectStorage technology.

PRODUCT SPECIFICATIONS

	8TB	4TB	2TB	1TB
CAPACITIES[1]:				
MODELS WITH HEATSINK:	WDS800T2XHE	WDS400T2XHE	WDS200T2XHE	WDS100T2XHE
MODELS WITHOUT HEATSINK:	WDS800T2X0E	WDS400T2X0E	WDS200T2X0E	WDS100T2X0E
INTERFACE[4]	PCIE® GEN4 16GT/S, UP TO 4 LANES			
NAND	WESTERN DIGITAL® TLC 3D NAND			
PERFORMANCE[2]				
Sequential Read [up to]:	7,200MB/S	7,300MB/S	7,300MB/S	7,300MB/S
Sequential Write [up to]:	6,600MB/S	6,600MB/S	6,600MB/S	6,300MB/S
Random Read [up to]:	1,200K IOPS	1,200K IOPS	1,200K IOPS	800K IOPS
Random Write [up to]:	1,200K IOPS	1,100K IOPS	1,100K IOPS	1,100K IOPS
ENDURANCE[5] [TBW]	4,800	2,400	1,200	600
DIMENSIONS	LENGTH:	WIDTH:	HEIGHT:	WEIGHT:
1 & 2TB MODELS WITHOUT HEATSINK:	80 ± 0.15MM	22 ± 0.15MM	2.38MM	7.5G ± 1G
4 & 8TB MODELS WITHOUT HEATSINK:	80 ± 0.15MM	22 ± 0.15MM	3.88MM	8.6G ± 1G
1 & 2TB MODELS WITH HEATSINK:	80 ± 0.20MM	23.40 ± 0.40MM	8.90 ± 0.40MM	24G ± 3G
4 & 8TB MODELS WITH HEATSINK:	80 ± 0.20MM	24.46 ± 0.48MM	10.31 ± 0.50MM	30.4G ± 3G
SECURITY SPECIFICATIONS	TCG OPAL V2.01			
SYSTEM COMPATIBILITY	Computer with M.2 [M-key] port, capable of taking M.2 2280 form factor Windows® 10+ PlayStation®5 [Heatsink model only]			
LIMITED WARRANTY[6]	5 YEARS			
RoHS COMPLIANCE	YES			
OPERATING TEMPERATURE[7]	32°F TO 185°F [0°C TO 85°C]			
NON OPERATING TEMPERATURE[8]	-40°F TO 185°F [-40°C TO 85°C]			

[1] 1TB = one trillion bytes. Actual user capacity may be less depending on operating environment.
[2] Based on read speed, unless otherwise stated. 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.
[3] Requires the downloadable WD_BLACK™ Dashboard [Windows® only]
[4] PCIe® Gen4 storage technology requires a compatible motherboard. Backwards compatible with PCIe® Gen3 x4, PCIe® Gen3 x2, PCIe® Gen3 x1, PCIe® Gen2 x4, PCIe® Gen2 x2 and PCIe® Gen2 x1.
[5] TBW [terabytes written] values calculated using JEDEC client workload [JESD219] and vary by product capacity.
[6] 5 years or Max Endurance [TBW] limit, whichever occurs first. See support.wdc.com for region-specific warranty details.
[7] Operational temperature is defined as temperature reported by the drive. Note that drive temperature readings are expected to be higher than ambient temperature when the SSD is placed inside a system. The SSD box package is rated up to 60°C.
[8] Non-operational storage temperature does not guarantee data retention.

D018-000947-AA00 June 2024