

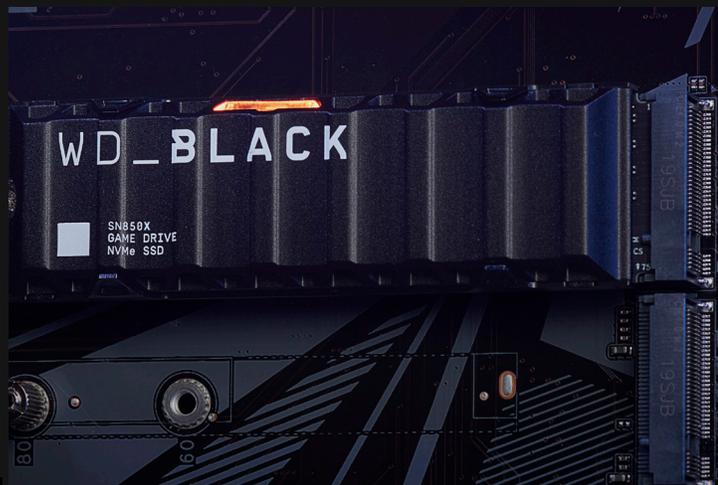
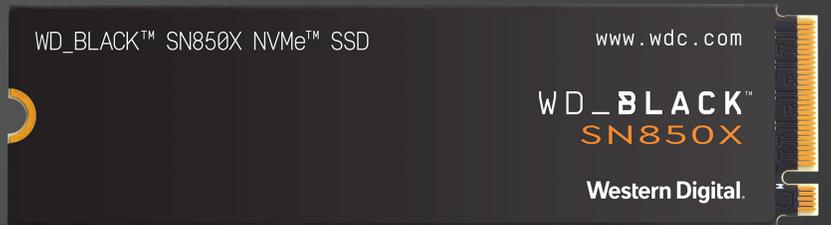
# WD\_BLACK™ SN850X NVMe™ SSD

HIGH-PERFORMANCE  
NVMe™ STORAGE  
WITH PCIe® GEN4  
TECHNOLOGY

Crush load times and slash throttling, lagging, and model pop-ins with the WD\_BLACK™ SN850X NVMe™ SSD, the purpose-built gaming drive that lets you compete at your absolute peak.



Heatsink model intended for desktop PCs and PlayStation™ 5 (Playstation™ 5 system software version 21.02-04.00.00 or higher required) only.



- Get the ultimate gaming edge over your competition with insane speeds up to 7,300 MB/s<sup>1</sup> for top-level performance and ridiculously short load times.
- Soup up your gaming experience with extremely low latency that loads graphics fast with minimal stutter and lagging for smooth, satisfying action.
- A range of capacities from 1TB to 4TB<sup>2</sup> means you get to keep more of today's games that can take up 200GB<sup>2</sup> or more of storage.
- The 1TB and 2TB<sup>2</sup> drives offer optional RGB lighting plus a heatsink to help maintain peak performance through the most intense gaming sessions.
- Game Mode 2.0 serves up even more PC performance-boosting features like load prediction to ready game assets for fast in-game loading.
- Output approaching the limits of the PCIe® Gen4<sup>3</sup> interface helps you get ultra-fast performance out of your storage and system components.

# WD\_BLACK

## PRODUCT FEATURES

### GET THE ULTIMATE GAMING EDGE

Insane speeds up to 7,300 MB/s<sup>1</sup> deliver top-tier performance with ridiculously short load times for the elite gaming experience you've been waiting for.

### SOUP UP YOUR RIG

Extremely low latency loads graphics fast with minimal stutter and lagging for an incredibly smooth, satisfying gaming experience.

### MORE ROOM FOR MORE GAMES

Today's A-list titles can take up to 200GB<sup>2</sup> or more of storage. A range of capacities from 1TB to 4TB<sup>2</sup> means you get to keep more games at the ready and get into the action fast.

### HEATSINK FOR THE WIN

The WD\_BLACK™ SN850X NVMe™ SSD 1TB and 2TB<sup>2</sup> drives have an optional heatsink version that not only looks awesome but also helps your rig maintain peak performance through the most intense gaming sessions.

### GAME MODE 2.0

The latest version of Game Mode serves up even more PC performance-boosting features like load prediction to ready game assets for fast in-game loading.

### NEAR-MAX PCIe® GEN4<sup>3</sup> SPEEDS

The WD\_BLACK™ SN850X NVMe™ SSD delivers output approaching the limits of the PCIe® Gen4 interface to help you get ultra-fast performance out of your storage and system components.

## PRODUCT SPECIFICATIONS

#### CAPACITIES<sup>2</sup> AND MODELS:

4TB	WDS400T2X0E-00BCA0
2TB	WDS200T2X0E-00BCA0
1TB	WDS100T2X0E-00BCA0
2TB Heatsink	WDS200T2XHE-00BCA0
1TB Heatsink	WDS100T2XHE-00BCA0

#### INTERFACE<sup>3</sup>:

PCIe® Gen4 16GT/s, up to 4 Lanes

#### DIMENSIONS:

##### NON-HEATSINK

LENGTH [max]: 80 ± 0.15mm  
 WIDTH [max]: 22 ± 0.15mm  
 HEIGHT [max]: 2.38mm  
 WEIGHT [max]: 7.5g ± 1g

##### HEATSINK

LENGTH [max]: 80 ± 0.20mm  
 WIDTH [max]: 23.40 ± 0.20mm  
 HEIGHT [max]: 8.80 ± 0.20mm  
 WEIGHT [max]: 24g ± 3g

#### ENDURANCE<sup>4</sup> [TBW]:

4TB: 2400  
 2TB: 1200  
 1TB: 600

#### PERFORMANCE<sup>5</sup>:

- Sequential Read:
  - 4TB: 7,300MB/s
  - 2TB: 7,300MB/s
  - 1TB: 7,300MB/s
- Sequential Write:
  - 4TB: 6,600MB/s
  - 2TB: 6,600MB/s
  - 1TB: 6,300MB/s
- Random Read:
  - 4TB: 1,200K IOPS
  - 2TB: 1,200K IOPS
  - 1TB: 800K IOPS
- Random Write:
  - 4TB: 1,100K IOPS
  - 2TB: 1,100K IOPS
  - 1TB: 1,100K IOPS

#### OPERATING SPECIFICATIONS:

- Operating Temperature<sup>6</sup>:  
32°F to 185°F [0°C to 85°C]
- Non-operating Temperature<sup>7</sup>:  
-40°F to 185°F [-40°C to 85°C]

#### SYSTEM COMPATIBILITY:

- Computer with M.2 [M-key] port, capable of taking M.2 2280 form factor
- Windows® 11, 10, 8.1
- PlayStation® 5 [Heatsink model only]<sup>8</sup>

#### LIMITED WARRANTY:

5 Years<sup>9</sup>

<sup>1</sup> 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.

<sup>2</sup> 1GB = 1 billion bytes and 1TB = 1 trillion bytes. Actual user capacity may be less depending on operating environment.

<sup>3</sup> Backward compatible with PCIe Gen3 x4, PCIe Gen3 x2, PCIe Gen3 x1, PCIe Gen2 x4, PCIe Gen2 x2 and PCIe Gen2 x1

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

<sup>5</sup> Test Conditions: Performance is based on the CrystalDiskMark™ 8.0.1 benchmark using a 1000MB LBA range on AMD Ryzen 9 5950X 16-core processor, BIOS 4204, Microsoft® Windows® 11 Pro x64 2009 [19043.1023] using Microsoft StorNVMe™ driver, secondary drive. 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>6</sup> 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.

<sup>7</sup> Non-operational storage temperature does not guarantee data retention.

<sup>8</sup> For PS5™ firmware compatibility, please visit <http://wdblack.com/SN850HS-PS5>

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

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