

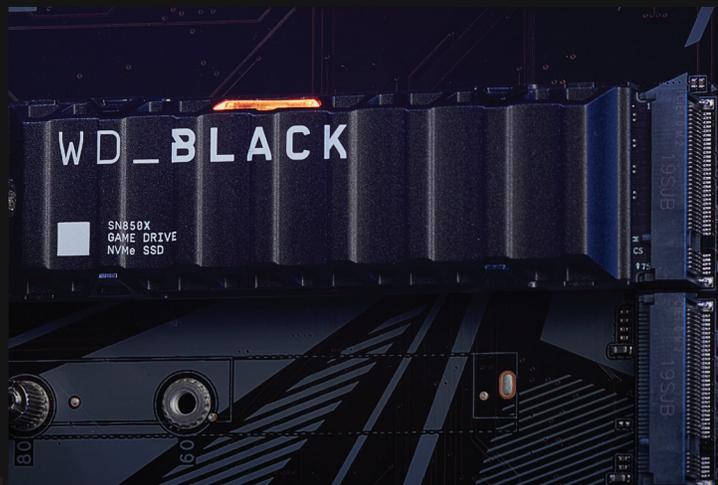
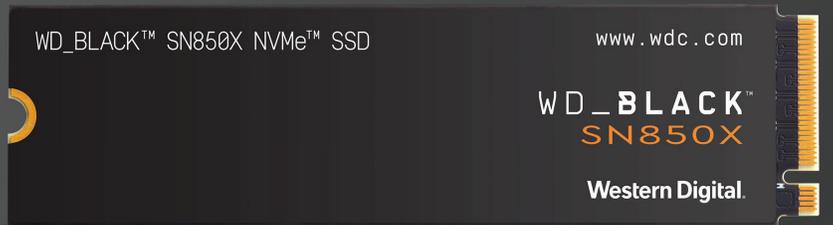
# WD\_BLACK™ SN850X NVMe™ SSD

HIGH-PERFORMANCE  
NVMe™ STORAGE  
WITH PCIe® GEN4  
TECHNOLOGY

Crush load times and slash throttling, lagging, and texture 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-tier performance and ridiculously short load times.
- 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.
- The WD\_BLACK Dashboard monitors your drive's health, controls your RGB style and can automatically detect games to turn on Game Mode 2.0. [Windows® only]
- Predictive Loading, Overhead Balancing, and Adaptive Thermal Management features come to the SN850X to juice up your gaming performance.
- Supports future games developed for Microsoft's DirectStorage technology for faster load times.

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.

## MORE ROOM FOR MORE GAMES

Today's A-list titles can take up 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.

## MORE CONTROL

The WD\_BLACK Dashboard monitors the health of your drive, control of RGB lighting and exclusively on the SN850X, Game Mode 2.0 [Windows® only].

## 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.

## FORWARD LOOKING

A new suite of features comes with the SN850X including Predictive Loading, Overhead Balancing and Adaptive Thermal Management.

## DIRECTSTORAGE SUPPORTED

Supports Microsoft's DirectStorage technology for future games that improves load times.

# 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:

PCIe® Gen4 16GT/s, up to 4 Lanes

## DIMENSIONS:

### NON-HEATSINK

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

### HEATSINK

LENGTH: 80 ± 0.20mm  
 WIDTH: 22 ± 0.15mm  
 HEIGHT: 8.80mm  
 WEIGHT: 24g ± 3g

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

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

## PERFORMANCE<sup>1</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]

## SECURITY SPECIFICATIONS

- TCG Opal v2.01<sup>8</sup>

## SYSTEM COMPATIBILITY:

- Computer with M.2 [M-key] port, capable of taking M.2 2280 form factor
- Windows® 11, 10, Windows 8.1
- PlayStation® 5 [Heatsink model only]<sup>9</sup>

## LIMITED WARRANTY:

5 Years<sup>10</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> PCIe Gen4 storage technology requires a compatible motherboard. WD\_BLACK SN850X is backwards-compatible with PCIe Gen3.

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

<sup>5</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. Test Conditions: Performance is based on the CrystalDiskMark™ 8.0.1 benchmark using a 1000MB LBA range AMD™ Ryzen 9 5950X 16-core processor, BIOS 4204.

Microsoft® Windows® 10 Pro x64 2009 [19043.1023] using Microsoft StorNVMe™ driver, secondary drive.

<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 80°C.

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

<sup>8</sup> The Trusted Computing Group (TCG) is a not-for-profit international standards organization that applies hardware-based encryption to solid state drives

<sup>9</sup> For PlayStation™ 5 firmware compatibility, please visit <http://wdblack.com/SN850HS-PS5>

<sup>10</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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