



Highlights

- Up to 5,500MB/s³ Sequential Read speeds (4TB¹ model)
- Capacities from 500GB to 4TB⁴
- High Endurance up to 1,200TBW⁵ (4TB¹ model)
- Western Digital® nCache™ 4.0 for fast file copies
- Acronis® True Image™ for Western Digital® Data Migration Software
- 5-year limited warranty¹⁰

WD Blue® SN5000 NVMe™ SSD

Power your intense creative workloads with NVMe™.

The WD Blue® SN5000 NVMe™ SSD is next-generation storage designed for creators and professionals. Fuel your AI-enabled applications and accelerate your workflow with NVMe™, PCIe® Gen4, and Western Digital® nCache™ 4.0 technology. Plus, create without limits with up to 4TB¹ capacity. No matter your creative process, the WD Blue® SN5000 NVMe™ SSD makes every step easier — and shortens the time between ideating and finalizing your creative vision.

Create and store more

Hold more masterpieces and enjoy endless inspiration with up to 4TB¹ capacity.

Boost your creative workflow

Harness AI and streamline your creative workflow with the combined power of PCIe® Gen4, up to 5,500MB/s³ read speeds (4TB¹ model), and Western Digital® nCache™ 4.0 Technology.

Multitask like a pro

Switch smoothly between applications and projects with high-end NVMe™ storage technology.

Endurance for intense workloads

Create confidently with up to 1,200TBW⁵ (4TB¹ model) endurance for ideating, drafting, and finalizing your creative work.

Free Acronis® True Image™ download

Download Acronis® True Image™ for Western Digital® data migration software to transfer your files¹¹.

Stay informed on your drive health

Monitor your SSD's performance and available space with the downloadable Western Digital® Dashboard application. And gain peace of mind with a 5-year limited warranty¹⁰.

WD Blue® SN5000 NVMe™ SSD

Datasheet

NVMe™ SSD

Specifications

Capacity ¹	500GB	1TB	2TB	4TB
Model Number	WDS500G4B0E	WDS100T4B0E	WDS200T4B0E	WDS400T4B0E
Form Factor	M.2 2280			
Interface ²	PCIe® Gen4 16GT/s, up to 4 Lanes			
NAND Type	Western Digital® 3D NAND TLC			Western Digital® 3D NAND QLC
Performance³				
Sequential Read (MB/s) up to (Queues = 32, Threads = 1)	5,000	5,150	5,150	5,500
Sequential Write (MB/s) up to (Queues = 32, Threads = 1)	4,000	4,900	4,850	5,000
Random Read 4KB IOPS up to (Queues=32, Threads=16)	460K	730K	650K	690K
Random Write 4KB IOPS up to (Queues=32, Threads=16)	770K	770K	770K	900K
Power⁴				
Average Active Power	75mW			
Sleep (PS5)	5mW			
Max Average power	6.3mW			
Reliability				
Endurance (TBW) ⁵	300	600	900	1,200
MTTF ⁶	1.75 Million hours			
Limited Warranty ⁹	5 years			
Environmental				
Operating Temperatures ⁸	32°F to 185°F (0°C to 85°C)			
Non-operating Temperatures ⁸	-40°F to 185°F (-40°C to 85°C)			
Operating Vibration	5.0 gRMS, 10–2000 Hz, 3 axes			
Non-Operating Vibration	4.9 gRMS, 7–800 Hz, 3 axes			
Shock	1,500G @ 0.5 ms half sine			
Certifications	BSMI, CAN ICES-3(B)/NMB-3(B), CE, FCC, KCC, Morocco, RCM, TUV, UL, VCCI			
RoHS Compliance ⁷	Yes			
Physical Dimensions				
Length	80 ± 0.15mm			
Width	22 ± 0.15mm			
Height	2.38mm			
Weight	5.7g ± 0.5g			

Product specifications subject to change without notice. Pictures shown may vary from actual products.

¹ 1GB = 1 billion bytes and 1TB = 1 trillion bytes. Actual user capacity may be less depending on operating environment.

² Backward compatible with PCIe Gen4 x2, PCIe Gen3 x4, PCIe Gen3 x2, PCIe Gen3 x1, PCIe Gen2 x4, PCIe Gen2 x2, and PCIe Gen2 x1

³ 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. IOPS = input/output operations per second.

⁴ Average Power is measured using MobileMark™ 2025 on Windows 11 Pro (version 10.0.22621 Build 22H2)

⁵ TBW (terabytes written) values calculated using JEDEC client workload (JESD219) and vary by product capacity.

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 This drive is in compliance with the European Union Directive 2011/65/EU and Directive (EU) 2015/863 on the restriction of the use of certain hazardous substances (RoHS) in electrical and electronic equipment.

⁸ 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.

⁹ Non-operational storage temperature does not guarantee data retention.

¹⁰ 5 years or Max Endurance (TBW) limit, whichever occurs first. See support.WesternDigital.com for regional specific warranty details.

¹¹ Download and installation required. Includes 5-year licenses for your compatible drive. Redeem within 90 days of purchase. May not be combined with other offers. Limited time offer; see Western Digital website for more details. Offer subject to change.



5601 Great Oaks Parkway
San Jose, CA 95119, USA
www.westerndigital.com

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