



WD Blue™ SSD

PC SSD (Solid State Drive)

With superior performance and leading-edge reliability, the WD Blue SSD offers digital storage that is optimized for multi-tasking and ready to keep up with your high performance computing needs. Available in both 2.5"/7mm cased and M.2 2280 form factors and with WD's Functional Integrity Testing Lab (FIT Lab™) certification, the WD Blue SSD is compatible with a wide range of computers, so you can be sure you are making the right choice. Combined with the free, downloadable WD SSD Dashboard and a 3-year limited warranty, you can confidently upgrade your system to the WD Blue SSD.



INTERFACE ¹	FORM FACTOR	CAPACITIES
SATA III 6 Gb/s	2.5"/7mm cased M.2 2280	250GB to 1TB

Product Features

Superior performance for high-end computing

For high-end computing applications like gaming, HD media playback, or creative software, WD Blue solid state drives have the speed you need for the performance you want. Tiered caching technology utilizing SLC (single-level cell) and TLC flash technology enables sequential read speeds of up to 545MB/s and sequential write speeds of up to 525MB/s, allowing for fast system boot up, quick application response, and rapid transfer speeds.

Leading-edge reliability

With no moving parts, a solid state drive is designed to help protect against data loss if a drive is accidentally bumped or dropped. And with 1.75M hours MTTF (mean time to failure) and an endurance rating of up to 400 TBW (terabytes written), WD Blue SSDs can help protect data for years to come. WD Blue solid state drives also use several leading error-correction technologies to help protect against data loss and provide lasting reliability.

Maximized multitasking

WD Blue solid state drives are optimized for multitasking and can easily run several resource-heavy applications simultaneously. Run a background virus scan while watching a 4K video and checking your email.

Broad compatibility

Every WD Blue SSD goes through extensive compatibility and reliability testing to ensure it meets the highest standards of the WD brand. With a certification from the WD Functional Integrity Testing Labs (FIT Labs), every WD Blue SSD is verified for compatibility with a wide range of desktop and laptop computers.

Free WD SSD Dashboard

The downloadable WD SSD Dashboard provides a suite of tools so you're always able to check on the health of your solid state drive. Available for free, this WD SSD Dashboard helps you track things like disk model, firmware version, S.M.A.R.T. attributes, or simply find out how much space you have left on your WD Blue SSD.

3-year limited warranty

Every WD Blue SSD comes with a 3-year limited warranty, so you can be confident of your storage when you upgrade or replace any of your drives.

Applications

WD Blue SSDs are available in either a 2.5"/7mm cased or an M.2 2280 model to evolve with smaller and thinner computers. With form factors to accommodate most laptops, desktop PCs, and small form PCs, a WD Blue SSD is ready for the job.

The WD Advantage

WD puts our products through extensive Functional Integrity Testing (FIT) prior to any product launch. This testing ensures our products consistently meet the highest quality and reliability standards of the WD brand.

WD also has a detailed Knowledge Base with more than 1,000 helpful articles as well as software and utilities. Our customer support lines have long operational hours to ensure you get the help you need when you need it. Our toll-free customer support lines are here to help or you can access our WD Support site for additional details.



WD Blue™

Specifications	1TB	500GB	250GB
Model Numbers²			
WD Blue PC SSD 2.5"/7mm cased	WDS100T1BoA	WDS500G1BoA	WDS250G1BoA
WD Blue PC SSD M.2 2280	WDS100T1BoB	WDS500G1BoB	WDS250G1BoB
Interface^{1,3}			
WD Blue PC SSD 2.5"/7mm cased	SATA III 6 Gb/s	SATA III 6 Gb/s	SATA III 6 Gb/s
WD Blue PC SSD M.2 2280	SATA III 6 Gb/s	SATA III 6 Gb/s	SATA III 6 Gb/s
Performance⁴ [4KB QD32]			
Sequential Read up to (MB/s)	545	545	540
Sequential Write up to (MB/s)	525	525	500
Random Read up to (IOPS)	100k	100k	97k
Random Write up to (IOPS)	80k	80k	79k
Endurance (TBW) ⁵	400	200	100
Power⁶			
Avg. Active Power (mW) ⁴	70	70	70
Max Read Operating (mW)	2,850	2,850	2,350
Max Write Operating (mW)	4,400	4,000	3,400
Slumber (mW)	45-52	42-46	42-45
DEVSLEP (mW)	6.0-9.7	6.0-7.7	4.9-6.0
Reliability			
MTTF ⁷	Up to 1.75M hours	Up to 1.75M hours	Up to 1.75M hours
Environmental			
Operating Temperatures	0°C to 70°C	0°C to 70°C	0°C to 70°C
Non-operating Temperatures	-55°C to 85°C	-55°C to 85°C	-55°C to 85°C
Operating Vibration	5.0 gRMS, 10-2000 Hz	5.0 gRMS, 10-2000 Hz	5.0 gRMS, 10-2000 Hz
Non-operating Vibration	4.9 gRMS, 7-800 Hz	4.9 gRMS, 7-800 Hz	4.9 gRMS, 7-800 Hz
Shock	1,500 G @ 0.5 msec half sine	1,500 G @ 0.5 msec half sine	1,500 G @ 0.5 msec half sine
Certifications	FCC, UL, TUV, KC, BSMI, VCCI	FCC, UL, TUV, KC, BSMI, VCCI	FCC, UL, TUV, KC, BSMI, VCCI
Limited Warranty ⁸	3 years	3 years	3 years
Physical Dimensions			
Size: 2.5"/7mm cased	7.00mm x 69.85mm x 100.5mm	7.00mm x 69.85mm x 100.5mm	7.00mm x 69.85mm x 100.5mm
Size: M.2 2280	2.38mm x 22.00mm x 80.0mm	2.23mm x 22.00mm x 80.0mm	2.23mm x 22.00mm x 80.0mm
Weight: 2.5"/7mm cased	59.7g	37.4g	37.4g
Weight: M.2 2280	7±1g	7±1g	7±1g

Specifications subject to change without notice.

¹ Backward compatible to SATA II and I.

² Not all products may be available in all regions of the world.

³ As used for storage capacity, one megabyte (MB) = one million bytes, one gigabyte (GB) = one billion bytes, and one terabyte (TB) = one trillion bytes. Total accessible capacity varies depending on operating environment. As used for buffer or cache, one megabyte (MB) = 1,048,576 bytes. As used for transfer rate or interface, megabyte per second (MB/s) = one million bytes per second, and gigabit per second (Gb/s) = one billion bits per second. Effective maximum SATA 6 Gb/s transfer rate calculated according to the Serial ATA specification published by the SATA-IO organization as of the date of this specification sheet. Visit www.sata-io.org for details.

⁴ Performance is based on the CrystalDiskMark benchmark using a 1000MB LBA range on Gigabyte GA-Z77X-UD5H desktop with Intel Z77 chipset, Intel i7-3770 3.4GHz, 8M, Ivy Bridge, Windows 8 64-bit SP1 using Intel iRST version 11.7.0.1013, secondary drive, C-state off. Performance may vary based on host device. 1 MB = 1,000,000 bytes. IOPS = input/output operations per second.

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

⁶ Measured using the MobileMark™ 2012 benchmark with DIRM (Device Initiated Power Management) enabled.

⁷ MTTF = Mean Time To Failure based on internal testing using Telcordia stress part testing.

⁸ See <http://support.wdc.com> for regional specific warranty details.

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