



Highlights

- Desktop performance gaming hard drive
- Performance storage available in up to 10TB¹ capacities
- Designed for gamers, system builders, and creative professionals.
- Western Digital's StableTrac™ and Dynamic Cache Technology increase reliability and optimize performance
- An industry-leading 5-year limited warranty²

Ideal for:

- High-performance PC systems
- Desktops
- All-In-One PCs
- Gaming PCs
- Home Media PCs

WD_BLACK™ 3.5-Inch Gaming Hard Drive

Gaming Performance And Capacity

WD_BLACK™ is purpose-built to enhance your PC gaming experience. Available with an impressive 512 MB¹ of DRAM cache on higher capacity models, the WD_BLACK HDD is performance-optimized so you can spend more time gaming and less time loading. Combine a WD_BLACK HDD with a WD_BLACK SSD for a dual-drive configuration that maximizes your gaming experience while letting you keep more of your favorite games. The WD_BLACK HDD gives you fast hard drive speeds, high capacity, and an industry-leading 5-year limited warranty² for an inspiring game storage solution.

Drive Your Game

The WD_BLACK™ HDD is the perfect storage solution for your gaming rig, offering large cache sizes plus large capacities to store your favorite titles and their downloadable content (DLC). Paired with an SSD, the powerful drive delivers exceptional system performance and capacity.

Store More, Play More

With capacities up to 10TB¹, WD_BLACK™ Gaming Hard Drives let you download the latest AAA titles while also keeping your ever-growing catalog of classics and favorites ready to play. Don't compromise on your game collection. Store more and game more with WD_BLACK.

Increased Reliability

The WD_BLACK™ Gaming Hard Drive is equipped with StableTrac™ Technology (2TB¹ and larger models). This secures the motor shaft inside of the hard drive to increase reliability and help reduce impact due to system-induced vibrations from other components such as additional gaming hardware. Stabilizing the platters inside the WD_BLACK drive results in more accurate tracking in a particular sector during read and write operations, optimizing performance and reliability.

Commanding Performance

The WD_BLACK™ drive delivers high-speed read rates and transfers of your games with impressive cache sizes of up to 512 MB¹ of DRAM on our high-capacity models. Western Digital's Dynamic Cache Technology improves caching algorithms in real time to allocate and optimize cache between reads and writes. Spend less time loading and more time winning.

Battle-Tested Dual Processor

When it comes to processing power, more is better for loading today's larger games. The WD_BLACK™ Gaming Hard Drive features a dual-core processor that offers twice the processing capability as a single-core processor to help maximize drive performance for getting into the game faster.

An Industry-Leading 5-Year Limited Warranty

Compared to standard hard drives, our WD_BLACK™ Gaming Hard Drives pass more strenuous and aggressive internal testing over a longer period of time which is why the WD_BLACK drive is backed by an industry-leading 5-year limited warranty².

WD_BLACK™ 3.5-Inch Gaming Hard Drive

Product Specifications

Model Number	WD102FZBX	WD101FZBX	WD8002FZBX	WD8001FZBX	WD8002FZWX	WD6004FZBX	WD6003FZBX
Formatted capacity ¹	10TB	10TB	8TB	8TB	8TB	6TB	6TB
Recording Technology	CMR	CMR	CMR	CMR	CMR	CMR	CMR
Interface	SATA	SATA	SATA	SATA	SATA	SATA	SATA
Form factor	3.5-inch	3.5-inch	3.5-inch	3.5-inch	3.5-inch	3.5-inch	3.5-inch
RoHS compliant ²	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Performance							
Interface transfer rate (max) ³	6 Gb/s	6 Gb/s	6 Gb/s	6 Gb/s	6 Gb/s	6 Gb/s	6 Gb/s
Internal transfer rate (max)	267 MB/s	263 MB/s	267 MB/s	263 MB/s	238 MB/s	267 MB/s	227 MB/s
Cache (MB) ¹	512	256	256	256	128	256	256
RPM	7200	7200	7200	7200	7200	7200	7200
Reliability/Data Integrity							
Load/unload cycles ⁴	300,000	300,000	300,000	300,000	300,000	300,000	300,000
Non-recoverable read errors per bits read	<1 in 10 ¹⁴	<1 in 10 ¹⁴	<1 in 10 ¹⁴	<1 in 10 ¹⁴	<1 in 10 ¹⁴	<1 in 10 ¹⁴	<1 in 10 ¹⁴
Limited warranty ⁵	5	5	5	5	5	5	5
Power Management⁶							
Average Power (W)							
Read/Write	8.8	8.4	6.9	8.2	8.7	6.9	9.1
Idle	8.2	4.6	6.5	4.6	7.9	6.5	7.1
Standby/Sleep	0.3	0.5	0.3	0.45	0.29	0.3	1
Environmental Specifications⁷							
Temperature (°C)							
Operating	5 to 60	5 to 60	5 to 60	5 to 60	5 to 60	5 to 60	5 to 60
Non-operating	-40 to 70	-40 to 70	-40 to 70	-40 to 70	-40 to 70	-40 to 70	-40 to 70
Shock (Gs)							
Operating (2 ms, read/write)	70	30	70	30	30	70	30
Operating (2 ms, read)	70	70	70	70	70	70	70
Non-operating (2 ms)	250	250	300	250	250	300	300
Acoustics (dBA)							
Idle	34	34	29	29	28	29	29
Seek (average)	39	38	36	36	34	36	36
Physical Dimensions							
Height (in./mm, max)	1.028/26.1	1.028/26.2	1.028/26.3	1.028/26.4	1.028/26.5	1.028/26.6	1.028/26.7
Length (in./mm, max)	5.787/147	5.787/148	5.787/149	5.787/150	5.787/151	5.787/152	5.787/153
Width (in./mm, ± .01 in.)	4/101.6	5/101.6	6/101.6	7/101.6	8/101.6	9/101.6	10/101.6
Weight (lb/kg, ± 3%)	1.65/0.75	1.65/0.75	1.58/0.715±10%	1.58/0.72±10%	1.65/0.75	1.58/0.715±10%	1.58/0.72±10%

WD_BLACK™ 3.5-Inch Gaming Hard Drive

Product Specifications

Model Number	WD6004FZWX	WD4006FZBX	WD4005FZBX	WD2003FZEX	WD1003FZEX	WD5003AZEX
Formatted capacity ¹	6TB	4TB	4TB	2TB	1TB	500GB
Recording Technology	CMR	CMR	CMR	CMR	CMR	CMR
Interface	SATA	SATA	SATA	SATA	SATA	SATA
Form factor	3.5-inch	3.5-inch	3.5-inch	3.5-inch	3.5-inch	3.5-inch
RoHS compliant ²	Yes	Yes	Yes	Yes	Yes	Yes
Performance						
Interface transfer rate (max) ³	6 Gb/s	6 Gb/s	6 Gb/s	6 Gb/s	6 Gb/s	6 Gb/s
Internal transfer rate (max)	229 MB/s	267 MB/s	202 MB/s	164 MB/s	150 MB/s	150 MB/s
Cache (MB) ¹	128	256	256	64	64	64
RPM	7200	7200	7200	7200	7200	7200
Reliability/Data Integrity						
Load/unload cycles ⁴	300,000	300,000	300,000	300,000	300,000	300,000
Non-recoverable read errors per bits read	<1 in 10 ¹⁴	<1 in 10 ¹⁴	<1 in 10 ¹⁴	<1 in 10 ¹⁴	<1 in 10 ¹⁴	<1 in 10 ¹⁴
Limited warranty ⁵	5	5	5	5	5	5 years
Power Management⁶						
Average Power (W)						
Read/Write	8.7	5.8	9.1	9.5	6.8	6.8
Idle	7.9	5.4	5.8	8.1	6.1	6.1
Standby/Sleep	0.29	0.3	1	1.3	0.8	0.8
Environmental Specifications⁷						
Temperature (°C)						
Operating	5 to 60	5 to 60	5 to 60	5 to 60	5 to 60	5 to 60
Non-operating	-40 to 70	-40 to 70	-40 to 70	-40 to 70	-40 to 70	-40 to 70
Shock (Gs)						
Operating (2 ms, read/write)	30	70	30	30	30	30
Operating (2 ms, read)	70	70	70	70	70	70
Non-operating (2 ms)	300	300	300	300	350	350
Acoustics (dBA)						
Idle	28	29	29	29	29	29
Seek (average)	34	36	36	34	30	30
Physical Dimensions						
Height (in./mm, max)	1.028/26.8	1.028/26.9	1.028/26.10	1.028/26.11	1.028/26.12	1.028/26.13
Length (in./mm, max)	5.787/154	5.787/155	5.787/156	5.787/157	5.787/158	5.787/159
Width (in./mm, ± .01 in.)	11/101.6	12/101.6	13/101.6	14/101.6	15/101.6	16/101.6
Weight (lb/kg, ± 3%)	1.65/0.75	1.58/0.715±10%	1.58/0.72±10%	1.32/0.60	0.99/0.45	0.95/0.43

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

² 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 in electrical and electronic equipment.

³ Up to stated speed. 1 MB/s = 1 million bytes per second. Based upon read speed, unless otherwise stated. Performance may vary depending upon host device, usage conditions, drive capacity and other factors.

⁴ Controlled unload at ambient condition.

⁵ See <http://support.wd.com/warranty> for regional specific warranty details.

⁶ Power measurements at room-ambient temperature.

⁷ No non-recoverable errors during operating tests or after non-operating tests.



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