



Highlights

- Desktop performance gaming hard drive
- Performance storage available in up to 10TB¹ capacities
- 2X DRAM cache up to 256 MiB¹ for faster read operations
- Designed for gamers, system builders, and professionals
- Western Digital's StableTrac™ and Dynamic Cache Technology increase reliability and optimize performance
- Industry-leading 5-year limited warranty²

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 256 MiB¹ 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.

An Industry-Leading 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 BRIEF

3.5-INCH PC HARD DRIVE

Specifications

	10TB	8TB	8TB	6TB	6TB
Model Number³	WD101FZBX	WD8001FZBX	WD8002FZWX	WD6004FZWX	WD6003FZBX
Recording technology	CMR	CMR	CMR	CMR	CMR
Formatted capacity ¹	10TB	8TB	8TB	6TB	6TB
Form factor	3.5-inch	3.5-inch	3.5-inch	3.5-inch	3.5-inch
Advanced Format (AF)	Yes	Yes	Yes	Yes	Yes
RoHS compliant ⁴	Yes	Yes	Yes	Yes	Yes
Performance					
Interface transfer rate (max)	6 Gb/s	6 Gb/s	6 Gb/s	6 Gb/s	6 Gb/s
Buffer to host	263 MB/s	263 MB/s	238 MB/s	229 MB/s	227 MB/s
Host to/from drive (sustained)					
Cache (MiB) ¹	256	256	128	128	256
Performance class	7200 RPM	7200 RPM	7200 RPM	7200 RPM	7200 RPM
Reliability/Data Integrity					
Load/unload cycles ⁵	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
Limited warranty (years) ²	5	5	5	5	5
Power Management⁶					
Average power requirements (W)					
Read/Write	8.4	8.2	8.7	8.7	9.1
Idle	4.6	4.6	7.9	7.9	7.1
Standby and Sleep	0.5	0.45	0.29	0.29	1.0
Environmental Specifications⁷					
Temperature (°C)					
Operating	5 to 55	5 to 55	5 to 55	5 to 55	5 to 55
Non-operating	-40 to 70	-40 to 70	-40 to 70	-40 to 70	-40 to 70
Shock (Gs)					
Operating (2 ms, read/write)	30	30	30	30	30
Operating (2 ms, read)	70	70	70	70	70
Non-operating (2 ms)	250	250	250	300	300
Acoustics (dBA) ⁸					
Idle	34	29	28	28	29
Seek (average)	38	36	34	34	36
Physical Dimensions					
Height (in./mm, max)	1.028/26.1	1.028/26.1	1.028/26.1	1.028/26.1	1.028/26.1
Length (in./mm, max)	5.787/147	5.787/147	5.787/147	5.787/147	5.787/147
Width (in./mm, ± .01 in.)	4/101.6	4/101.6	4/101.6	4/101.6	4/101.6
Weight (lb/kg)	1.65/0.75	1.58/0.72	1.65/0.75	1.65/0.75	1.58/0.72 ± 3%

Specifications subject to change without notice.

¹ As used for storage capacity, 1GB = one billion bytes and 1TB = one trillion bytes. Actual user capacity may be less depending on operating environment. Memory capacity for cache is indicated in mebibytes (MiB) and one MiB is equal to 1,048,576 bytes.

² See <http://support.wd.com/warranty> for regional specific warranty details.

³ Not all products may be available in all regions of the world.

⁴ 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.

⁵ Controlled unload at ambient condition.

⁶ Power measurements at room-ambient temperature.

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

⁸ Sound power level.

WD_BLACK™ 3.5-Inch Gaming Hard Drive

PRODUCT BRIEF

3.5-INCH PC HARD DRIVE

Specifications

	4TB	2TB	1TB	500GB
Model Number³	WD4005FZBX	WD2003FZEX	WD1003FZEX	WD5003AZEX
Recording technology	CMR	CMR	CMR	CMR
Formatted capacity ¹	4TB	2TB	1TB	500GB
Form factor	3.5-inch	3.5-inch	3.5-inch	3.5-inch
Advanced Format (AF)	Yes	Yes	Yes	Yes
RoHS compliant ⁴	Yes	Yes	Yes	Yes
Performance				
Interface transfer rate (max)	6 Gb/s	6 Gb/s	6 Gb/s	6 Gb/s
Buffer to host	202 MB/s	164 MB/s	150 MB/s	150 MB/s
Host to/from drive (sustained)				
Cache (MiB) ¹	256	64	64	64
Performance class	7200 RPM	7200 RPM	7200 RPM	7200 RPM
Reliability/Data Integrity				
Load/unload cycles ⁵	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
Limited warranty (years) ²	5	5	5	5
Power Management⁶				
Average power requirements (W)				
Read/Write	9.1	9.5	6.8	6.8
Idle	5.8	8.1	6.1	6.1
Standby and Sleep	1.0	1.3	0.8	0.8
Environmental Specifications⁷				
Temperature (°C)				
Operating	5 to 55	5 to 55	5 to 55	5 to 55
Non-operating	-40 to 70	-40 to 70	-40 to 70	-40 to 70
Shock (Gs)				
Operating (2 ms, read/write)	30	30	30	30
Operating (2 ms, read)	70	70	70	70
Non-operating (2 ms)	300	300	350	350
Acoustics (dBA) ⁸				
Idle	29	29	29	29
Seek (average)	36	34	30	30
Physical Dimensions				
Height (in./mm, max)	1.028/26.1	1.028/26.1	1.028/26.1	1.028/26.1
Length (in./mm, max)	5.787/147	5.787/147	5.787/147	5.787/147
Width (in./mm, ± .01 in.)	4/101.6	4/101.6	4/101.6	4/101.6
Weight (lb/kg)	1.58/0.72 ± 10%	1.32/0.60	0.99/0.45	0.95/0.43

Specifications subject to change without notice.

¹ As used for storage capacity, 1GB = one billion bytes and 1TB = one trillion bytes. Actual user capacity may be less depending on operating environment. Memory capacity for cache is indicated in mebibytes (MiB) and one MiB is equal to 1,048,576 bytes.

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