WD Black[™]

DATA SHEET 2.5-INCH PC HARD DRIVES



Highlights

- Specifically designed for small form factor PC's, laptops, and Mac computers
- Performance 2.5-inch hard drives available up to 1TB capacities
- Designed for creative professionals, gamers, and system builders
- An industry-leading 5-year limited warranty
- Enhanced-availability (EA) models for applications needing around-the-clock access to lowertransaction environments

INTERFACE

SATA 6 Gb/s

FORM FACTOR

2.5-inch

MODEL NUMBERS

WD10JPLX WD10JQLX (EA) WD5000LPLX WD3200LPLX WD2500LPLX

PERFORMANCE CLASS

7200 RPM-Class

CAPACITIES

250GB to 1TB

THE WESTERN DIGITAL ADVANTAGE

Western Digital puts our products through extensive Functional Integrity Testing (F.I.T.) prior to any product launch. This testing ensures our products consistently meet the quality and reliability standards of the Western Digital brand. WD also has a detailed Knowledge Base with more than 1,000 helpful articles as well as helpful software and utilities. Our toll-free customer support lines are here to help or you can access our WD Support site for additional details.

WD Black 2.5-inch PC Hard Drives are designed for enthusiasts and creative professionals looking for leading-edge performance. These 2.5-inch PC Hard Drives are perfect for high-performance applications like photo and video editing, gaming, and power PCs.

Great Things Come in Small Packages

WD Black 2.5-inch PC Hard Drives are designed to enhance the PC experience on the desktop at home and the notebook on the road. With up to 1TB of storage running up to 7200 RPM it's the perfect storage solution for a digital artist, video editor, photographer, or gamer. With a 5-year limited warranty, WD Black 2.5-inch PC Hard Drives combine performance and capacity with the reliability of a brand you can trust.

For Creative Professionals

With WD Black 2.5-inch PC Hard Drives your digital portfolio goes where you go. Delivering high-performance storage, WD Black 2.5-inch PC Hard Drives offers the power to create while on the go, so you can apture, offload, and edit without worrying about running out of space.

For Gamers

The perfect storage solution for your gaming rig, WD Black 2.5-inch PC Hard Drives are purpose-built and tested to ensure they can deliver high-performance needed to win. They provide the capacity to store high-resolution games with their associated downloadable content (DLC) and increased cache sizes that reduce load times.

An Industry Leading Warranty

WD Black 2.5-inch PC Hard Drives are tested under more strenuous conditions over a longer period when compared to our standard hard drives. This comprehensive testing ensures an overall quality benchmark for a stable, high performance storage solution backed by an industry leading 5-year limited warranty.

Enhanced Availability (EA)—for 24×7 Access to Data

Western Digital provides an enhanced availability version of the WD Black 2.5-inch PC Hard Drives (WD10JQLX) that allows 24×7 access to data to support applications requiring round-the-clock operation. The WD Black 2.5-inch PC Hard Drives provide high capacity, durability, and low power utilization on a proven platform for quality and reliability. EA models support the stringent demands of "always-on" application in lower-transaction environments.



2.5-INCH PC HARD DRIVES

Specifications

	1TB	500GB	320GB	250GB
Model Number ²	WD10JPLX WD10JQLX (EA) ⁹	WD5000LPLX	WD3200LPLX	WD2500LPLX
Interface	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s
Formatted capacity ¹	1,000,204MB	500,107MB	320,072MB	250,059MB
User sectors per drive	1,953,525,168	976,773,168	625,142,448	488,397,168
Form factor	2.5-inch	2.5-inch	2.5-inch	2.5-inch
Advanced Format (AF)	Yes	Yes	Yes	Yes
RoHS compliant ³	Yes	Yes	Yes	Yes
Performance				
Data transfer rate (max) ² Interface Speed	6 Gb/s	6 Gb/s	6 Gb/s	6 Gb/s
Cache (MB) ¹	32	32	32	32
Performance Class	7200 RPM	7200 RPM	7200 RPM	7200 RPM
Average Drive Ready Time (sec)	3.5	3.8	3.8	3.8
Reliability/Data Integrity				
Load/unload cycles ⁴	600,000	600,000	600,000	600,000
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) ⁵	5	5	5	5
Power Management ⁶				
5VDC ±10% (A, peak) Average power requirements (W) Read/Write Idle Standby and Sleep	1.1 1.8 0.8 0.2	1.07 2.0 0.85 0.25	1.07 2.0 .85 .25	1.07 2.0 0.85 0.25
Environmental Specifications ⁷				
Cemperature (°C) Operating Non-operating	0 to 65 -40 to 65	0 to 60 -40 to 65	0 to 60 -40 to 65	0 to 60 -40 to 65
Acoustics (dBA) ⁸ Idle Seek (average)	25 27	23 35	23 25	23 25
Physical Dimensions				
Height (in./mm, max)	0.374/9.50	0.28/7.0	0.28/7.0	0.28/7.0
Length (in./mm, max)	3.94/100.20	3.94/100.20	3.94/100.20	3.94/100.20
Width (in./mm, ± .01 in.)	2.75/69.85	2.75/69.85	2.75/69.85	2.75/69.85
Weight (lb/kg , ± 10%)	0.25/0.115	0.20/0.92	0.20/0.92	0.20/0.92

Specifications subject to change without notice.

Western Digital.

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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 3 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.

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

³ WD hard drive products manufactured and sold worldwide after June 8, 2011, meet or exceed Restriction of Hazard-ous Substances (RoHS) compliance requirements as mandated by the RoHS Directive 2011/65/EU.

⁴ Controlled unload at ambient condition.

 $^{^{\}rm S}$ See http://support.wdc.com/warranty for regional specific warranty details.

Power measurements at room-ambient temperature.

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

Sound power level.

Designed for low duty cycle, non mission-critical applications in PC, nearline and consumer electronics environments, which vary application to application.