



WD Black™

Mobile Hard Drives

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



INTERFACE

SATA 3 Gb/s

WIDTH/HEIGHT

2.75 in./0.37 in.
69.85 mm/9.5 mm

CAPACITIES

160 GB to 750 GB

MODEL NUMBERS

WD7500BPKT WD2500BEKT
WD5000BPKT WD1600BEKT
WD3200BEKT

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

Product Features

High performance electronics

WD Black drives feature a dual processor and dynamic cache for maximum read and write speeds.

- **Dual processor** — Twice the processing power to maximize performance.
- **Dynamic cache** — WD's dynamic caching algorithm improves performance in real time by optimizing cache allocation between reads and writes. For example, if there's an overwhelming percentage of read traffic as opposed to write traffic, the drive automatically allocates more cache for read data, which reduces congestion and improves overall drive performance.

Rock-solid mechanical architecture

Enhanced reliability features help protect the drive and the data stored on it.

- **NoTouch™ ramp load technology**
The recording head never touches the disk media ensuring significantly less wear to the recording head and media, as well as better drive protection in transit.

Maximum performance

Sophisticated performance enhancing features deliver the speed you need for demanding applications like photo and video editing and Internet gaming.

No compromises

High performance, high capacity, high reliability, and cutting-edge technology make up WD Black, the ideal drive for those who demand only the best.

Industry-leading warranty

WD Black carries the highest available warranty protection on the market, a 5-year limited warranty.

Upgrading your drive is easy

Acronis® True Image™ WD Edition Software, available as a free download on the WD Support site, enables you to copy all your data to a new drive so you don't have to reinstall your operating system to get all the benefits of a new drive.

Applications

- Power computing applications such as video and photo editing, and maxed out gaming computers.
- WD Black hard drives are tested and recommended for use in notebook computers.*

*WD hard drives are designed and tested for use in specific applications and environments. This ensures that your hard drive is compatible with and functions properly in your application. Our hard drives are warranted against defects in materials and workmanship in the system for which they were designed. Use in systems other than for what the hard drive was designed could result in compatibility problems that affect proper function, unrelated to material and/or workmanship defects. For best results, be sure to select the appropriate product for your application by consulting our product spec sheets on our website at www.wd.com or by calling our customer support line where we would be happy to help you through the selection process.

The WD Advantage

WD puts our products through extensive Functional Integrity Testing (F.I.T) 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 helpful software and utilities. Our customer support lines have longer 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.

PUT YOUR LIFE ON IT®



| Specifications ¹ | 750 GB | 500 GB | 320 GB | 250 GB | 160 GB |
|---|------------------------|------------------------|------------------------|------------------------|------------------------|
| Model number | WD7500BPKT | WD5000BPKT | WD3200BEKT | WD2500BEKT | WD1600BEKT |
| Interface | SATA 3 Gb/s | SATA 3 Gb/s | SATA 3 Gb/s | SATA 3 Gb/s | SATA 3 Gb/s |
| Formatted capacity | 750,156 MB | 500,107 MB | 320,072 MB | 250,059 MB | 160,041 MB |
| User sectors per drive | 1,465,149,168 | 976,773,168 | 625,142,448 | 488,397,168 | 312,581,808 |
| Form factor | 2.5-inch | 2.5-inch | 2.5-inch | 2.5-inch | 2.5-inch |
| Advanced Format (AF) | Yes | Yes | No | No | No |
| RoHS compliant ² | Yes | Yes | Yes | Yes | Yes |
| Performance | | | | | |
| Data transfer rate (max) | | | | | |
| Buffer to host | 3 Gb/s | 3 Gb/s | 3 Gb/s | 3 Gb/s | 3 Gb/s |
| Host to/from drive (sustained) | 180 MB/s | 160 MB/s | 147 MB/s | 115 MB/s | 115 MB/s |
| Cache (MB) | 16 | 16 | 16 | 16 | 16 |
| Rotational speed (RPM) | 7200 | 7200 | 7200 | 7200 | 7200 |
| Average drive ready time (sec) | 4 | 4 | 4 | 4 | 4 |
| Reliability/Data Integrity | | | | | |
| Load/unload cycles ³ | 600,000 | 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 | <1 in 10 ¹⁴ |
| Limited warranty (years) ⁴ | 5 | 5 | 5 | 5 | 5 |
| Power Management | | | | | |
| 5VDC ±10% (A, peak) | 1.15 | 1.15 | 1.75 | 1.75 | 1.75 |
| Average power requirements (W) | | | | | |
| Read/Write | 1.75 | 1.75 | 1.75 | 1.75 | 1.75 |
| Idle | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| Standby | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Sleep | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Environmental Specifications⁵ | | | | | |
| Temperature (°C) | | | | | |
| Operating | 0 to 60 | 0 to 60 | 0 to 60 | 0 to 60 | 0 to 60 |
| Non-operating | -40 to 70 | -40 to 70 | -40 to 70 | -40 to 70 | -40 to 70 |
| Shock (Gs) | | | | | |
| Operating (2 ms) | 350 | 350 | 350 | 350 | 350 |
| Non-operating (2 ms) | 1000 | 1000 | 1000 | 1000 | 1000 |
| Acoustics (dBA) ⁶ | | | | | |
| Idle | 28 | 28 | 22 | 22 | 22 |
| Seek (average) | 28 | 28 | 25 | 25 | 25 |
| Physical Dimensions | | | | | |
| Height (in./mm, max) | 0.374/9.50 | 0.374/9.50 | 0.374/9.50 | 0.374/9.50 | 0.374/9.50 |
| Length (in./mm, max) | 3.94/100.20 | 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 | 2.75/69.85 |
| Weight (lb./kg, ± 10%) | 0.25/0.115 | 0.25/0.115 | 0.23/0.106 | 0.23/0.106 | 0.23/0.106 |

¹ 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 WD hard drive products manufactured and sold worldwide after June 1, 2006, meet or exceed Restriction of Hazardous Substances (RoHS) compliance requirements as mandated by the RoHS Directive 2011/65/EU.

³ Controlled unload at ambient condition.

⁴ The term of the limited warranty may vary by region. Visit <http://support.wdc.com/warranty> for details.

⁵ No non-recoverable errors during operating tests or after non-operating tests.

⁶ Sound power level.

WD Black is part of WD's complete lineup of internal hard drives.



WD Blue™
Mobile Hard Drives
for everyday computing.



WD Green™
Mobile Hard Drives
for energy efficient applications.



WD Black™
Mobile Hard Drives
for performance users.

Western Digital
3355 Michelson Drive, Suite 100
Irvine, California 92612
U.S.A.

For service and literature:

<http://support.wdc.com>
www.wdc.com

800.ASK.4WDC
800.832.4778
+800.6008.6008
00800.27549338

+31.880062100

North America
Spanish
Asia Pacific
Europe
(toll free where available)
Europe/Middle East/Africa



Learn more about WD Black Mobile hard drives

Canada ICES-003 Class B / NMB-003 Classe B



Western Digital, WD, the WD logo, and Put Your Life On It are registered trademarks in the U.S. and other countries; and WD Blue, WD Green, WD Black, NoTouch, and FIT Lab are trademarks of Western Digital Technologies, Inc. Other marks may be mentioned herein that belong to other companies. Product specifications subject to change without notice.

© 2012 Western Digital Technologies, Inc. All rights reserved.