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# WD Blue™

## Mobile Hard Drives

WD Blue hard drives deliver solid performance and reliability while providing you with all the space you need to hold an enormous amount of photos, videos and files. These drives are designed for use as primary drives in notebooks and external enclosures.

| INTERFACE | FORM FACTOR | HEIGHT | INTERFACE CONNECTOR | ROTATIONAL SPEED | CAPACITIES |
|---|---|---|---|---|---|
| SATA 6 Gb/s<br>SATA 3 Gb/s | 2.5-inch | 5 mm to 9.5 mm | SFF-8784 Edge Connector (5 mm height)<br>SATA Connector (7 to 9.5 mm height) | 5400 RPM | 250 GB to 1 TB |

MODEL NUMBERS

| | | |
|---|---|---|
| WD10SPCX | WD5000MPCK | WD3200LPVX |
| WD10JPVX | WD5000LPVX | WD3200BPVT |
| WD7500LPCX | WD5000LPVT | WD2500LPVX |
| WD7500BPVX | WD5000BPVT | WD2500BPVT |
| WD7500BPVT | WD5000BPVX | |

## Product Features

**New ultra-slim design**
Accomplishing unprecedented feats in engineering at only 5 mm thin, these drives enable a world of possibilities and applications. (WD5000MPCK model only).

**Low power consumption**
State-of-the-art seeking algorithms and advanced power management features ensure low power consumption and long battery life.

**Quiet**
In a notebook drive, silence is golden. WD's exclusive noise reducing technologies yield one of the quietest 2.5-inch hard drives on the market.

**The original**
WD Blue drives are designed and manufactured with the proven technology found in WD's original award-winning hard drives.

**WD quality**
Built to the highest standards of quality and reliability, these drives offer the features and capacity ideal for your everyday computing needs.

**Available SATA 6 Gb/s interface**
The SATA 6 Gb/s interface provides greater flexibility for use with the latest chipsets as well as backwards compatibility to legacy systems with SATA 3 Gb/s requirements. (xPVX, xPCX, and MPCK models only).

**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.

**Compatible**
Our latest generation of 7 mm 2.5-inch mobile drives is designed for thin and light mobile applications, and is also compatible with most standard 9.5 mm bays. (xPCX, LPVT, and LPVX models only).

**StableTrac™**
Motor shaft affixed to the baseplate and top cover stabilizes platters for accurate tracking during read and write operations, yielding higher drive data throughput in harsh shock and vibration environments. Supporting the top cover with the shaft also increases robustness to pinch forces. (WD5000MPCK model only).

**Dual actuator technology**
A head positioning system with two actuators that improves positional accuracy over the data track(s). (WD5000MPCK model only).

**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.

## Applications

WD Blue hard drives are tested and recommended for use in notebooks, netbooks and external enclosures.*

* 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.

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| Specifications | 1 TB | 1 TB | 750 GB | 750 GB | 500 GB | 500 GB |
|---|---|---|---|---|---|---|
| Model number[1] | WD10SPCX | WD10JPVX | WD7500LPCX | WD7500BPVX<br>WD7500BPVT | WD5000BPVX | WD5000LPVX<br>WD5000LPVT |
| Interface | SATA 6 Gb/s | SATA 6 Gb/s | SATA 6 Gb/s | SATA 6 Gb/s (BPVX)<br>SATA 3 Gb/s (BPVT) | SATA 6 Gb/s | SATA 6 Gb/s (LPVX)<br>SATA 3 Gb/s (LPVT) |
| Formatted capacity[2] | 1,000,204 MB | 1,000,204 MB | 750,156 MB | 750,156 MB | 500,107 MB | 500,107 MB |
| User sectors per drive | 1,953,525,168 | 1,953,525,168 | 1,465,149,168 | 1,465,149,168 | 976,773,168 | 976,773,168 |
| Advanced Format (AF) | Yes | Yes | Yes | Yes | Yes | Yes |
| Form factor | 2.5-inch | 2.5-inch | 2.5-inch | 2.5-inch | 2.5-inch | 2.5-inch |
| RoHS compliant[3] | Yes | Yes | Yes | Yes | Yes | Yes |
| **Performance** | | | | | | |
| Data transfer rates<br>Interface speed<br>Internal transfer rate (max) | <br>6 Gb/s<br>140 MB/s | <br>6 Gb/s<br>144 MB/s | <br>6 Gb/s<br>140 MB/s | <br>6 Gb/s (BPVX)<br>3 Gb/s (BPVT)<br>138 MB/s | <br>6 Gb/s<br>144 MB/s | <br>6 Gb/s (LPVX)<br>3 Gb/s (LPVT)<br>147 MB/s |
| Cache (MB) | 16 | 8 | 16 | 8 | 8 | 8 |
| Average latency (ms) | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 |
| Rotational speed (RPM) | 5400 | 5400 | 5400 | 5400 | 5400 | 5400 |
| Average drive ready time (sec) | 2.8 | 3.0 | 2.8 | 3.0 (BPVX)<br>4.0 (BPVT) | 3.0 | 2.8 (LPVX)<br><3.5 (LPVT) |
| **Reliability/Data Integrity** | | | | | | |
| Load/unload cycles[4] | 600,000 | 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 $10^{14}$ | <1 in $10^{14}$ |
| Limited warranty (years)[5] | 2 | 2 | 2 | 2 | 2 | 2 |
| **Power Management** | | | | | | |
| 5VDC ±10% (A, peak) | 1.00 | 1.00 | 1.00 | 1.00 (BPVX)<br>0.975 (BPVT) | 1.00 | 1.00 (LPVX)<br>0.900 (LPVT) |
| Average power requirements (W)<br>Read/Write<br>Idle<br>Standby/Sleep | <br>1.7<br>0.57<br>0.18 | <br>1.4<br>0.59<br>0.18 | <br>1.7<br>0.57<br>0.18 | <br>1.6<br>0.65<br>0.20 | <br>1.4<br>0.59<br>0.18 | <br>1.4<br>0.55<br>0.13 |
| **Environmental Specifications**[6] | | | | | | |
| Temperature (°C)<br>Operating<br>Non-operating | <br>0 to 60<br>-40 to 65 | <br>0 to 60<br>-40 to 65 | <br>0 to 60<br>-40 to 65 | <br>0 to 60<br>-40 to 65 | <br>0 to 60<br>-40 to 65 | <br>0 to 60<br>-40 to 65 |
| Shock (Gs)<br>Operating (2 ms, read)<br>Non-operating | <br>350<br>1000 (2 ms) | <br>400<br>1000 (2 ms) | <br>350<br>1000 (2 ms) | <br>350<br>1000 (2 ms) | <br>400<br>1000 (2 ms) | <br>400<br>1000 (2 ms) |
| Acoustics (dBA)[7]<br>Idle<br>Seek (average) | <br>20<br>21 | <br>24<br>25 | <br>20<br>21 | <br>24<br>25 | <br>24<br>25 | <br>17<br>22 |
| **Physical Dimensions** | | | | | | |
| Height (in./mm) | 0.28/7.0 | 0.374/9.50 | 0.28/7.0 | 0.374/9.50 | 0.28/7.0 | 0.28/7.0 |
| Length (in./mm) | 3.94/100.20 | 3.94/100.20 | 3.94/100.20 | 3.94/100.20 | 3.94/100.20 | 3.94/100.20 |
| Width (in./mm) | 2.75/69.85 | 2.75/69.85 | 2.75/69.85 | 2.75/69.85 | 2.75/69.85 | 2.75/69.85 |
| Weight (lb./kg, ± 10%) | 0.21/0.09 | 0.27/0.12 | 0.21/0.09 | 0.34/0.15 | 0.25/0.12 | 0.20/0.09 |

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

2 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.

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

4 Controlled unload at ambient condition.

5 The term of the limited warranty may vary by region. Visit support.wd.com/warranty for details.

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

7 Sound power level.

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# WD Blue™

| Specifications | 500 GB | 500 GB | 320 GB | 320 GB | 250 GB | 250 GB |
|---|---|---|---|---|---|---|
| Model number[1] | WD5000MPCK | WD5000BPVT | WD3200LPVX | WD3200BPVT | WD2500LPVX | WD2500BPVT |
| Interface | SATA 6 Gb/s | SATA 3 Gb/s | SATA 6 Gb/s | SATA 3 Gb/s | SATA 6 Gb/s | SATA 3 Gb/s |
| Formatted capacity[2] | 500,107 MB | 500,107 MB | 320,072 MB | 320,072 MB | 250,059 MB | 250,059 MB |
| User sectors per drive | 976,773,168 | 976,773,168 | 625,142,448 | 625,142,448 | 488,397,168 | 488,397,168 |
| Advanced Format (AF) | Yes | Yes | Yes | Yes | Yes | Yes |
| Form factor | 2.5-inch | 2.5-inch | 2.5-inch | 2.5-inch | 2.5-inch | 2.5-inch |
| RoHS compliant[3] | Yes | Yes | Yes | Yes | Yes | Yes |
| **Performance** | | | | | | |
| Data transfer rates<br>Interface speed<br>Internal transfer rate (max) | <br>6 Gb/s<br>145 MB/s | <br>3 Gb/s<br>136 MB/s | <br>6 Gb/s<br>147 MB/s | <br>3 Gb/s<br>116 MB/s | <br>6 Gb/s<br>147 MB/s | <br>3 Gb/s<br>116 MB/s |
| Cache (MB) | 16 | 8 | 8 | 8 | 8 | 8 |
| Average latency (ms) | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 |
| Rotational speed (RPM) | 5400 | 5400 | 5400 | 5400 | 5400 | 5400 |
| Average drive ready time (sec) | 2.8 | 4.0 | 2.8 | 4.0 | 2.8 | 4.0 |
| **Reliability/Data Integrity** | | | | | | |
| Load/unload cycles[4] | 600,000 | 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 $10^{14}$ | <1 in $10^{14}$ |
| Limited warranty (years)[5] | 2 | 2 | 2 | 2 | 2 | 2 |
| **Power Management** | | | | | | |
| 5VDC ±10% (A, peak) | 0.900 | 0.950 | 1.00 | 1.00 | 1.00 | 1.00 |
| Average power requirements (W)<br>Read/Write<br>Idle<br>Standby/Sleep | <br>1.5<br>0.55<br>0.15 | <br>1.6<br>0.65<br>0.20 | <br>1.4<br>0.55<br>0.13 | <br>2.5<br>0.85<br>0.20 | <br>1.4<br>0.55<br>0.13 | <br>2.5<br>0.85<br>0.20 |
| **Environmental Specifications**[6] | | | | | | |
| Temperature (°C)<br>Operating<br>Non-operating | <br>0 to 60<br>-40 to 65 | <br>0 to 60<br>-40 to 65 | <br>0 to 60<br>-40 to 65 | <br>0 to 60<br>-40 to 65 | <br>0 to 60<br>-40 to 65 | <br>0 to 60<br>-40 to 65 |
| Shock (Gs)<br>Operating (2 ms, read)<br>Non-operating | <br>400<br>1000 (2 ms) | <br>350<br>1000 (2 ms) | <br>400<br>1000 (2 ms) | <br>350<br>1000 (2 ms) | <br>400<br>1000 (2 ms) | <br>350<br>1000 (2 ms) |
| Acoustics (dBA)[7]<br>Idle<br>Seek (average) | <br>15<br>17 | <br>22<br>25 | <br>17<br>22 | <br>22<br>25 | <br>17<br>22 | <br>22<br>25 |
| **Physical Dimensions** | | | | | | |
| Height (in./mm) | 0.20/5.0 | 0.374/9.50 | 0.28/7.0 | 0.374/9.50 | 0.28/7.0 | 0.374/9.50 |
| Length (in./mm) | 3.95/100.30 | 3.94/100.20 | 3.94/100.20 | 3.94/100.20 | 3.94/100.20 | 3.94/100.20 |
| Width (in./mm) | 2.75/69.85 | 2.75/69.85 | 2.75/69.85 | 2.75/69.85 | 2.75/69.85 | 2.75/69.85 |
| Weight (lb./kg, ± 10%) | 0.16/0.07 | 0.22/0.10 | 0.20/0.09 | 0.22/0.10 | 0.20/0.09 | 0.22/0.10 |

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

2 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.

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

4 Controlled unload at ambient condition.

5 The term of the limited warranty may vary by region. Visit support.wd.com/warranty for details.

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

7 Sound power level.

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**For service and literature:**

http://support.wd.com
www.wd.com

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|---|---|
| 800.ASK.4WDC (800.275.4932) | North America |
| 800.832.4778 | Spanish |
| +800.6008.6008 | Asia Pacific |
| 00800.27549338 | Europe (toll free where available) |
| +31.880062100 | Europe/Middle East/Africa |

Learn more about WD Blue Mobile hard drives

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

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