



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	WIDTH/HEIGHT	INTERFACE CONNECTOR	ROTATIONAL SPEED	CAPACITIES
SATA 6 Gb/s SATA 3 Gb/s	2.75 in./0.28 in. to 0.374 in. 69.85 mm/5 mm to 9.5 mm	SFF-8784 Edge Connector (5 mm height) SATA Connector (7 to 9.5 mm height)	5400 RPM	250 GB to 1 TB
MODEL NUMBERS				
WD10SPCX WD10JPVX WD10LPVT WD7500LPCX WD7500BPVX	WD7500BPVT WD5000MPCK WD5000LPVX WD5000LPVT WD5000BPVT	WD3200LPVX WD3200LPVT WD3200BPVT WD2500LPVX WD2500LPVT	WD2500BPVT	<i>Note: Not all products may be available in all regions of the world.</i>

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 operating systems 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.



WD BLUE™

Specifications	1 TB	1 TB	750 GB	750 GB	500 GB
Model number	WD10SPCX	WD10JPVX WD10JPVT	WD7500LPCX	WD7500BPVX WD7500BPVT	WD5000LPVX WD5000LPVT
Interface	SATA 6 Gb/s	SATA 6 Gb/s (JPVX) SATA 3 Gb/s (JPVT)	SATA 6 Gb/s	SATA 6 Gb/s (BPVX) SATA 3 Gb/s (BPVT)	SATA 6 Gb/s (LPVX) SATA 3 Gb/s (LPVT)
Formatted capacity ¹	1,000,204 MB	1,000,204 MB	750,156 MB	750,156 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
Advanced Format (AF)	Yes	Yes	Yes	Yes	Yes
Form factor	2.5-inch	2.5-inch	2.5-inch	2.5-inch	2.5-inch
RoHS compliant ²	Yes	Yes	Yes	Yes	Yes
Performance					
Data transfer rates					
Interface speed	6 Gb/s	6 Gb/s (JPVX) 3 Gb/s (JPVT)	6 Gb/s	6 Gb/s (BPVX) 3 Gb/s (BPVT)	6 Gb/s (LPVX) 3 Gb/s (LPVT)
Internal transfer rate (max)	140 MB/s	144 MB/s	140 MB/s	138 MB/s	147 MB/s
Cache (MB)	16	8	16	8	8
Average latency (ms)	5.5	5.5	5.5	5.5	5.5
Rotational speed (RPM)	5400	5400	5400	5400	5400
Average drive ready time (sec)	2.8	3.0 (JPVX) / <3.5 (JPVT)	2.8	3.0 (BPVX) / 4.0 (BPVT)	2.8 (LPVX) / <3.5 (LPVT)
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	2	2	2	2	2
Power Management					
5VDC ±10% (A, peak)	1.00	1.00 (JPVX) / 0.900 (JPVT)	1.00	1.00 (BPVX) / 0.975 (BPVT)	1.00 (LPVX) / 0.900 (LPVT)
Average power requirements (W)					
Read/Write	1.7	1.4	1.7	1.6	1.4
Idle	0.57	0.59	0.57	0.65	0.55
Standby/Sleep	0.18	0.18	0.18	0.20	0.13
Environmental Specifications					
Temperature (°C)					
Operating	0 to 60	0 to 60	0 to 60	0 to 60	0 to 60
Non-operating	-40 to 65	-40 to 65	-40 to 65	-40 to 65	-40 to 65
Shock (Gs)					
Operating (2 ms, read)	350	400	350	350	400
Non-operating	1000 (2 ms)	1000 (2 ms)	1000 (2 ms)	1000 (2 ms)	1000 (2 ms)
Acoustics (dBA) ⁶					
Idle	20	24	20	24	17
Seek (average)	21	25	21	25	22
Physical Dimensions					
Height (in./mm, max)	0.28/7.0	0.374/9.50	0.28/7.0	0.374/9.50	0.28/7.0
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%)	0.21/0.09	0.27/0.12	0.21/0.09	0.34/0.15	0.20/0.09

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 8, 2011, 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 support.wd.com/warranty for details.

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

⁶ Sound power level.



WD BLUE™

Specifications	500 GB	500 GB	320 GB	320 GB	250 GB	250 GB
Model number	WD5000MPCK	WD5000BPVT	WD3200LPVX WD3200LPVT	WD3200BPVT	WD2500LPVX WD2500LPVT	WD2500BPVT
Interface	SATA 6 Gb/s	SATA 3 Gb/s	SATA 6 Gb/s (LPVX) SATA 3 Gb/s (LPVT)	SATA 3 Gb/s	SATA 6 Gb/s (LPVX) SATA 3 Gb/s (LPVT)	SATA 3 Gb/s
Formatted capacity ¹	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 ²	Yes	Yes	Yes	Yes	Yes	Yes
Performance						
Data transfer rates						
Interface speed	6 Gb/s	3 Gb/s	6 Gb/s (LPVX) 3 Gb/s (LPVT)	3 Gb/s	6 Gb/s (LPVX) 3 Gb/s (LPVT)	3 Gb/s
Internal transfer rate (max)	145 MB/s	136 MB/s	147 MB/s (LPVX) 109 MB/s (LPVT)	116 MB/s	147 MB/s (LPVX) 109 MB/s (LPVT)	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 (LPVX) / <3.5 (LPVT)	4.0	2.8 (LPVX) / <3.5 (LPVT)	4.0
Reliability/Data Integrity						
Load/unload cycles ³	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) ⁴	2	2	2	2	2	2
Power Management						
5VDC ±10% (A, peak)	0.900	0.950	1.00 (LPVX) / 0.900 (LPVT)	1.00	1.00 (LPVX) / 0.900 (LPVT)	1.00
Average power requirements (W)						
Read/Write	1.5	1.6	1.4	2.5	1.4	2.5
Idle	0.55	0.65	0.55	0.85	0.55	0.85
Standby/Sleep	0.15	0.20	0.13	0.20	0.13	0.20
Environmental Specifications⁵						
Temperature (°C)						
Operating	0 to 60	0 to 60	0 to 60	0 to 60	0 to 60	0 to 60
Non-operating	-40 to 65	-40 to 65	-40 to 65	-40 to 65	-40 to 65	-40 to 65
Shock (Gs)						
Operating (2 ms, read)	400	350	400	350	400	350
Non-operating	1000 (2 ms)	1000 (2 ms)	1000 (2 ms)	1000 (2 ms)	1000 (2 ms)	1000 (2 ms)
Acoustics (dBA) ⁶						
Idle	15	22	17	22	17	22
Seek (average)	17	25	22	25	22	25
Physical Dimensions						
Height (in./mm, max)	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, max)	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, ± .01 in.)	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 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.

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

⁶ Sound power level.

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

WD BLUE™
Everyday StorageWD GREEN™
Cool & Quiet StorageWD BLACK™
Performance Storage

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

For service and literature:

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

800.ASK.4WDC
(800.275.4932)
800.832.4778
+800.6008.6008
00800.27549338

+31.880062100

North America

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



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