

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 2.5-inch 5 mm to 9.5 mm SFF-8784 Edge Connector (5 mm height) 5400 RPM 250 GB to 1 TB

SATA Connector (7 to 9.5 mm height)

MODEL NUMBERS

SATA 3 Gb/s

 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.



Specifications	1 TB	1 TB	750 GB	750 GB	500 GB	500 GB
Model number ¹	WD10SPCX	WD10JPVX	WD7500LPCX	WD7500BPVX WD7500BPVT	WD5000BPVX	WD5000LPVX WD5000LPVT
Interface	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s (BPVX) SATA 3 Gb/s (BPVT)	SATA 6 Gb/s	SATA 6 Gb/s (LPVX) 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 Interface speed	6 Gb/s	6 Gb/s	6 Gb/s	6 Gb/s (BPVX) 3 Gb/s (BPVT)	6 Gb/s	6 Gb/s (LPVX) 3 Gb/s (LPVT)
Internal transfer rate (max)	140 MB/s	144 MB/s	140 MB/s	138 MB/s	144 MB/s	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) 4.0 (BPVT)	3.0	2.8 (LPVX) <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			
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) 0.975 (BPVT)	1.00	1.00 (LPVX) 0.900 (LPVT)
Average power requirements (W) Read/Write Idle Standby/Sleep	1.7 0.57 0.18	1.4 0.59 0.18	1.7 0.57 0.18	1.6 0.65 0.20	1.4 0.59 0.18	1.4 0.55 0.13
Environmental Specifications ⁶						
Temperature (°C) Operating Non-operating	0 to 60 -40 to 65	0 to 60 -40 to 65	0 to 60 -40 to 65			
Shock (Gs) Operating (2 ms, read) Non-operating	350 1000 (2 ms)	400 1000 (2 ms)	350 1000 (2 ms)	350 1000 (2 ms)	400 1000 (2 ms)	400 1000 (2 ms)
Acoustics (dBA) ⁷ Idle Seek (average)	20	24 25	20 21	24 25	24 25	17 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

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

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 expectly, one megabyte (MB) = one million bytes per second, and gigabit per second, and gigabit per second. Effective maximum SATA 3 Gb/s transfer rate calculated according to the Serial ATA specification published by the SATA-10 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 manufactured and sold worldwide after June 8, 2011, meet or exceed Restriction of Hazardous Substances (RoHS) compliance requirements as manufactured and sold worldwide after June 8, 2011, meet or exceed Restriction of Hazardous Substances (RoHS) compliance requirements as manufactured and sold worldwide after June 8, 2011, meet or exceed Restriction of Hazardous Substances (RoHS) compliance requirements as manufactured and sold worldwide after June 8, 2011, meet or exceed Restriction of Hazardous Substances (RoHS) compliance requirements as manufactured and sold worldwide after June 8, 2011, meet or exceed Restriction of Hazardous Substances (RoHS) compliance requirements as manufactured and sold worldwide after June 8, 2011, meet or exceed Restriction of Hazardous Substances (RoHS) compliance requirements as manufactured and sold worldwide after June 8, 2011, meet or exceed Restriction of Hazardous Substances (RoHS) compliance requirements as manufactured and sold worldwide after June 8, 2011, meet or exceed Restriction of Hazardous Substances (RoHS) compliance requirements as manufactured and sold worldwide after June 8, 2011, meet or exceed Restriction of Hazardous Substances (RoHS) compliance requirements and the sold worldwide after the sold of t

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.



WD Blue[™]

Specifications	500 GB	500 GB	320 GB	320 GB	250 GB	250 GB
Model number ¹	WD5000MPCK	WD5000BPVT	WD3200LPVX	WD3200BPVT	WD2500LPVX	WD2500BPV7
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						
Interface speed	6 Gb/s	3 Gb/s	6 Gb/s	3 Gb/s	6 Gb/s	3 Gb/s
Internal transfer rate (max)	145 MB/s	136 MB/s	147 MB/s	116 MB/s	147 MB/s	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 cycles4	600,000	600,000	600,000	600,000	600,000	600,000
Non-recoverable read errors per bits read	<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)						
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 Specifications ⁶						
Temperature (°C)	0 to 60	0 to 60	0 to 60	0 to 60	0 +0 60	0 to 60
Operating Non-operating	0 to 60 -40 to 65	-40 to 65	-40 to 65	0 to 60 -40 to 65	0 to 60 -40 to 65	0 to 60 -40 to 65
Shock (Gs)	-40 10 00	-40 (0 00	-40 10 00	-40 10 00	-40 10 00	-40 10 05
Operating (2 ms, read)	400	350	400	350	400	350
Non-operating	1000 (2 ms)					
Acoustics (dBA) ⁷	. 300 (2 1110)	1 300 (2 11.0)	. 500 (2)	. 300 (2)	. 300 (2)	
Idle	15	22	17	22	17	22
Seek (average)	17	25	22	25	22	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

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For service and literature:

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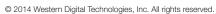








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³ W.D hard drive products manufactured and sold worldwide after June 8, 2011, meet or exceed Restriction of Hazardous Substances (RoHS) compliance requirements as mandated by the RoHS Directive 2011/65/EU.

⁴ Controlled unload at ambient condition.

 $^{^{5}\,}$ The term of the limited warranty may vary by region. Visit support.wd.com/warranty for details.

 $^{^{\}rm 6}\,$ No non-recoverable errors during operating tests or after non-operating tests.