WD Blue™

PRODUCT BRIEF



Product Highlights

- Storage built to Western Digital's high standards of quality and reliability
- Manufactured with Western Digital's awardwinning desktop and mobile hard drive technology
- · Available in a broad range of capacities
- Tested in our F.I.T. Lab™ for ultimate compatibility
- Free Acronis™ True Image™ WD Edition software available for download

INTERFACE
SATA 6 Gb/s

FORM FACTOR
2.5-inch

PERFORMANCE CLASS
5400 RPM Class

MODEL NUMBERS
WD20SPZX
WD10SPZX
WD5000LPCX
WD5000LPCX
WD5000LQVX
WD3200LPCX
WD3200LPVX

CAPACITIES
320GB to 2TB

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 highest quality and reliability standards of the Western Digital brand.

Western Digital 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 Western Digital Support site for additional details.

Western Digital WD Blue 2.5-inch HDD

WD Quality

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

The Original

WD Blue 2.5-inch PC Hard Drives are designed and manufactured with the proven technology found in WD's original award-winning hard drives.

Compatible

The 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.

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.

Low Power Consumption

State-of-the-art seeking algorithms and advanced power management features help ensure low power consumption.

Quiet

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

Upgrading Your Drive is Easy

Acronis[™] True Image[™] WD Edition cloning software is available as a free download on the WD Support site enabling you to copy all your data to a new drive. You don't have to reinstall your operating system to get all the benefits of a new drive.

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

Western Digital provides enhanced availability models of WD Blue 2.5-inch PC Hard Drives (WD5000LQVX) that deliver 24×7 access to information for data-intensive applications requiring round-the-clock operation. WD Blue EA models support the stringent demands of "always-on" applications in lower-transaction environments and come with a 3-year standard warranty.

Western Digital WD Blue[™] 2.5-inch HDD

PRODUCT BRIEF

Specifications

	2TB	1TB	500GB	500GB	320GB	320GB
Model Number ²	WD20SPZX	WD10SPZX	WD5000LPCX	WD5000LPVX WD5000LQVX	WD3200LPCX	WD3200LPVX
Recording Technology ¹⁰	SMR	SMR	CMR	CMR	CMR	CMR
Formatted capacity ¹	2TB	1TB	500 GB	500 GB	320 GB	320 GB
Form factor	2.5-inch	2.5-inch	2.5-inch	2.5-inch	2.5-inch	2.5-inch
Advanced Format (AF)	Yes	Yes	Yes	Yes	Yes	Yes
RoHS compliant ³	Yes	Yes	Yes	Yes	Yes	Yes
Performance						
Data transfer rate (max) ¹ Interface speed	6 Gb/s	6 Gb/s	6 Gb/s	6 Gb/s	6 Gb/s	6 Gb/s
Cache (MB) ¹	128	128	16	8	16	8
Performance Class	5400 RPM	5400 RPM	5400 RPM	5400 RPM	5400 RPM	5400 RPM
Average drive ready time (sec)	3.5	2.8	2.8	2.8	2.8	2.8
Reliability/Data Integrity						
Load/unload cycles	600,000	600,000	600,000	600,000	600,000	600,000
Non-recoverable read errors per bits read	<1 in 1014	<1 in 1014	<1 in 1014	<1 in 1014	<1 in 1014	<1 in 1014
Limited warranty (years)	2	2	2	2	2	2
Power Management ⁶						
Average power requirements (W) Read/Write Idle Standby and Sleep	1.7 0.5 0.1	1.5 0.5 0.1	1.4 0.55 0.16	1.4 0.5 0.20	1.4 0.55 0.16	1.4 0.55 0.13
Environmental Specifications	7					
Temperature (°C, on the base cast	ting)					
Operating Non-operating	0 to 60 -40 to 65	0 to 60 -40 to 65	0 to 60 -40 to 65			
Acoustics (dBA)8 Idle Seek (average)	23 24	19 21	17 22	19 21	17 22	17 22
Physical Dimensions						
Height (in./mm, max)	0.28/7.0	0.28/7.0	0.27/6.8	0.27/6.8	0.27/6.8	0.27/6.8
Length (in./mm, max)	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, ± .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%)	0.20/0.09	0.20/0.09	0.20/0.09	0.21/0.095	0.20/0.09	0.20/0.09

 $^{^{1} \}text{As used for storage capacity, one gigabyte (GB)} = \text{one billion bytes and one terabyte (TB)} = \text{one trillion bytes.} \text{ Total accessible capacity varies depending on operating environment.} \text{ As used for buffer or cache, one megabyte (MB)} = \text{(MB/S)} = \text{one million bytes per second,} \text{ (MB/S)} = \text{one million bytes per second,} \text{ (MB/S)} = \text{one million bytes per second,} \text{ (MB/S)} = \text{one billion bits per second.} \text{ Effective maximum SATA 6 Gb/s transfer rate calculated according to the Serial ATA specification published by the SATA-IO organization as of the date of this specification sheet. Visit www.sata-io.org for details.} \\$

Western Digital.

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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.

Controlled unload at ambient condition.

⁵ See http://support.wdc.com/warranty for regional specific warranty details.

⁶ Power measurements at room-ambient temperature.
⁷ No non-recoverable errors during operating tests or after non-operating tests.

⁸ Sound power level.

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

 $^{^{\}rm 10}$ Implementation of SMR for these products is device-managed SMR