



# WD Caviar® Blue™

## Desktop Hard Drives

WD Caviar Blue hard drives are available with either SATA or PATA interface in a variety of cache sizes with a multitude of available features to deliver rock solid performance and ultra-cool and quiet operation perfect for family and business computing.



### INTERFACES

SATA 6 Gb/s and 3 Gb/s  
PATA 100 MB/s

### WIDTH/HEIGHT

3.5-inch/1-inch

### ROTATIONAL SPEED

7200 RPM

### CAPACITIES

80 GB to 1 TB

### MODEL NUMBERS

SATA 6 Gb/s	
WD10EZEX	WD5000AZKX
WD10EALX	WD5000AAKX
WD7500AZEX	WD3200AAKX
WD7500AALX	WD2500AAKX

SATA 3 Gb/s  
WD5000AAKS

PATA 100 MB/s  
WD3200AAJB  
WD2500AAJB  
WD1600AAJB  
WD800AAJB

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

## Product Features

### The original

These drives are built utilizing the proven technology of the original award-winning WD Caviar 3.5-inch hard drives for desktop computers.

### Value

Built to the highest standards of quality and reliability, these drives offer features and capacity at an affordable price.

### Cool operation

WD continues to develop new and innovative ways to keep drives cool while they are operating which helps protect the drive and the data stored on it.

### Compatible

We perform tests on hundreds of systems and a multitude of platforms in our FIT Lab™ to give our customers confidence that our drives will work in their systems.

### 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.

### IntelliSeek™

Calculates optimum seek speeds to lower power consumption, noise and vibration.

## Applications

- Family and business computing.
- Desktop / Consumer RAID Environments - WD Caviar Blue Hard Drives are tested and recommended for use in consumer-type RAID applications (RAID-0 / RAID-1).
  - Business Critical RAID Environments – WD Caviar Blue Hard Drives are not recommended for and are not warranted for use in RAID environments utilizing Enterprise HBAs and/or expanders and in multi-bay chassis, as they are not designed for, nor tested in, these specific types of RAID applications. For all Business Critical RAID applications, please consider WD's Enterprise Hard Drives that are specifically designed with RAID-specific, time-limited error recovery (TLER), are tested extensively in 24x7 RAID applications, and include features like enhanced RAFF technology and thermal extended burn-in testing.

PUT YOUR LIFE ON IT®



# WD Caviar Blue

Specifications <sup>1</sup>	1 TB	1 TB	750 GB	750 GB	500 GB	500 GB	500 GB
Model number	WD10EZEX	WD10EALX	WD7500AALX	WD7500AZEX	WD5000AZKX	WD5000AAKX	WD5000AAKS
Interface	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 3 Gb/s
Formatted capacity	1,000,204 MB	1,000,204 MB	750,156 MB	750,156 MB	500,107 MB	500,107 MB	500,107 MB
User sectors per drive	1,953,525,169	1,953,525,169	1,465,149,168	1,465,149,168	976,773,168	976,773,168	976,773,168
SATA latching connector	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Form factor	3.5-inch	3.5-inch	3.5-inch	3.5-inch	3.5-inch	3.5-inch	3.5-inch
RoHS compliant <sup>2</sup>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Performance</b>							
Data transfer rate (max)							
Buffer to host	6 Gb/s	6 Gb/s	6 Gb/s	6 Gb/s	6 Gb/s	6 Gb/s	3 Gb/s
Host to/from drive (sustained)	150 MB/s	126 MB/s	126 MB/s	150 MB/s	150 MB/s	126 MB/s	126 MB/s
Cache (MB)	64	32	32	64	16	16	16
Rotational speed (RPM)	7200	7200	7200	7200	7200	7200	7200
<b>Reliability/Data Integrity</b>							
Load/unload cycles <sup>3</sup>	300,000	300,000	300,000	300,000	300,000	300,000	300,000
Non-recoverable read errors per bits read	<1 in 10 <sup>14</sup>	<1 in 10 <sup>14</sup>	<1 in 10 <sup>14</sup>	<1 in 10 <sup>14</sup>	<1 in 10 <sup>14</sup>	<1 in 10 <sup>14</sup>	<1 in 10 <sup>14</sup>
Limited warranty (years) <sup>4</sup>	2	2	2	2	2	2	2
<b>Power Management</b>							
12VDC peak (A, ±10%)	2.5	2.8	2.8	2.5	2.5	1.77	1.77
Average power requirements (W)							
Read/Write	6.8	7.3	7.3	6.8	6.8	6.0	5.4
Idle	6.1	6.1	6.1	6.1	6.1	5.6	4.9
Standby	1.2	0.7	1.2	0.8	1.2	0.9	0.7
Sleep	1.2	0.7	1.2	0.8	1.2	0.9	0.7
<b>Environmental Specifications<sup>5</sup></b>							
Temperature (°C)							
Operating	0 to 60	0 to 60	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	-40 to 70	-40 to 65
Shock (Gs)							
Operating (2 ms, read/write)	30	30	30	30	30	30	30
Operating (2 ms, read)	65	65	65	65	65	65	65
Non-operating (1 ms)	350	300	300	350	350	350	350
Average acoustics (dBA) <sup>6</sup>							
Idle mode	28	28	28	28	28	29	29
Performance seek mode	29	33	33	29	29	30	30
<b>Physical Dimensions</b>							
Height (in./mm, max)	1.028/25.4	1.028/25.4	1.028/25.4	1.028/25.4	1.028/25.4	1.028/25.4	1.028/25.4
Length (in./mm, max)	5.787/147	5.787/147	5.787/147	5.787/147	5.787/147	5.787/147	5.787/147
Width (in./mm, ± .01 in.)	4/101.6	4/101.6	4/101.6	4/101.6	4/101.6	4/101.6	4/101.6
Weight (lb./kg, ± 10%)	0.97/0.44	1.52/0.69	1.52/0.69	0.97/0.44	0.97/0.44	0.99/0.45	0.99/0.45

<sup>1</sup>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](http://www.sata-io.org) for details.

<sup>2</sup>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.

<sup>3</sup>Controlled unload at ambient condition.

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

<sup>5</sup>No non-recoverable errors during operating tests or after non-operating tests.

<sup>6</sup>Sound power level.



# WD Caviar Blue

Specifications <sup>1</sup>	320 GB	320 GB	250 GB	250 GB	160 GB	80 GB
Model number	WD3200AAKX	WD3200AAJB	WD2500AAKX	WD2500AAJB	WD1600AAJB	WD800AAJB
Interface	SATA 6 Gb/s	PATA 100 MB/s	SATA 6 Gb/s	PATA 100 MB/s	PATA 100 MB/s	PATA 100 MB/s
Formatted capacity	320,072 MB	320,072 MB	250,059 MB	250,059 MB	160,041 MB	80,026 MB
User sectors per drive	625,142,448	625,142,448	488,397,168	488,397,168	312,581,808	156,301,488
SATA latching connector	Yes	No	Yes	No	No	No
Form factor	3.5-inch	3.5-inch	3.5-inch	3.5-inch	3.5-inch	3.5-inch
RoHS compliant <sup>2</sup>	Yes	Yes	Yes	Yes	Yes	Yes
<b>Performance</b>						
Data transfer rate (max) Buffer to host Host to/from drive (sustained)	6 Gb/s 126 MB/s	100 MB/s <sup>3</sup> 126 MB/s	6 Gb/s 126 MB/s	100 MB/s <sup>3</sup> 126 MB/s	100 MB/s <sup>3</sup> 126 MB/s	100 MB/s <sup>3</sup> 126 MB/s
Cache (MB)	16	8	16	8	8	8
Rotational speed (RPM)	7200	7200	7200	7200	7200	7200
<b>Reliability/Data Integrity</b>						
Load/unload cycles <sup>4</sup>	300,000	300,000	300,000	300,000	300,000	300,000
Non-recoverable read errors per bits read	<1 in 10 <sup>14</sup>	<1 in 10 <sup>14</sup>	<1 in 10 <sup>14</sup>	<1 in 10 <sup>14</sup>	<1 in 10 <sup>14</sup>	<1 in 10 <sup>14</sup>
Limited warranty (years) <sup>5</sup>	2	2	2	2	2	2
<b>Power Management</b>						
12VDC peak (A, ±10%)	1.77	1.77	1.77	1.77	1.77	1.77
Average power requirements (W) Read/Write Idle Standby Sleep	6.0 5.6 0.9 0.9	5.36 4.92 0.73 0.73	6.0 5.6 0.9 0.9	5.4 4.9 0.7 0.7	5.4 4.9 0.7 0.7	5.4 4.9 0.7 0.7
<b>Environmental Specifications<sup>6</sup></b>						
Temperature (°C) Operating Non-operating	0 to 60 -40 to 70	0 to 60 -40 to 65	0 to 60 -40 to 70	0 to 60 -40 to 65	0 to 60 -40 to 65	0 to 60 -40 to 65
Shock (Gs) Operating (2 ms, read/write) Operating (2 ms, read) Non-operating (1 ms)	30 65 350	30 65 350	30 65 350	30 65 350	30 65 350	30 65 350
Average acoustics (dBA) <sup>7</sup> Idle mode Performance seek mode	29 30	29 30	29 30	29 30	29 30	29 30
<b>Physical Dimensions</b>						
Height (in./mm, max)	1.028/25.4	1.028/25.4	1.028/25.4	1.028/25.4	1.028/25.4	1.028/25.4
Length (in./mm, max)	5.787/147	5.787/147	5.787/147	5.787/147	5.787/147	5.787/147
Width (in./mm, ±.01 in.)	4/101.6	4/101.6	4/101.6	4/101.6	4/101.6	4/101.6
Weight (lb./kg, ± 10%)	0.99/0.45	0.95/0.43	0.99/0.45	0.95/0.43	0.95/0.43	0.95/0.43

<sup>1</sup> 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](http://www.sata-io.org) for details.

<sup>2</sup> 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.

<sup>3</sup> Maximum burst rate running the Mode 5 Ultra ATA transfer mode.

<sup>4</sup> Controlled unload at ambient condition.

<sup>5</sup> The term of the limited warranty may vary by region. Visit <http://support.wdc.com/warranty> for details.

<sup>6</sup> No non-recoverable errors during operating tests or after non-operating tests.

<sup>7</sup> Sound power level.

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



**WD Caviar® Blue™**  
Desktop Hard Drives  
Value and reliability for everyday computing.



**WD Caviar® Green™**  
Desktop Hard Drives  
Cool, quiet, eco-friendly.



**WD Caviar® Black™**  
Desktop Hard Drives  
Maximum performance for power computing.

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## A Commitment to Quality

Western Digital customers – ranging from the world’s largest computer makers to the individual user saving a music collection – require exacting quality and performance from our data storage products. Rigorous testing helps ensure that these standards are met.

WD team members are dedicated to testing drives, ensuring they adhere to rigorous quality standards covering hundreds of performance characteristics. About 1,000 PCs in WD’s Functional Integrity Testing (F.I.T.) Lab put WD drives through the paces around the clock. Other groups up the ante, simulating extreme real-world conditions including high and low temperatures, shaking, electronic and magnetic interference and even torturous drop testing. Only after a new drive family passes these rigorous tests does it get shipped.

This comprehensive approach to testing ensures that the customer gets a drive of the highest quality that is F.I.T. Lab certified for its intended application.

## A Name You Can Trust

As digital storage expands beyond traditional computer and server environments and into almost every aspect of your life, you need a company you can trust.

We are committed to providing our customers with reliable, high-performance storage products and superior customer support and services.

**Experience** – WD is one of the data storage industry’s pioneers and longtime leaders.

**Performance** – WD is consistently a leader in technology and product innovation and is one of the best performing companies worldwide.

**Quality** – WD performs rigorous in-house testing to assure quality and reliability.

**Data Integrity** – All WD drives feature Data Lifeguard™ embedded error detection and repair features that automatically detect, isolate, and repair problem areas that may develop over extended use of the hard drive.

**Customer Support** – WD stands behind our products with telephone support and state-of-the-art online services that include a comprehensive knowledge base and express RMA service.

WD understands the importance of the data trusted to our drives. We focus our passion, knowledge and innovation on products that reliably keep your information and content safe and secure from loss.