

# WD BLUE<sup>™</sup> Desktop 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 desktops PCs, external enclosures and for certain industrial applications.



**INTERFACE** 

SATA 6 Gb/s PATA 100 MB/s

**MODEL NUMBERS** 

SATA 6 Gb/s WD10EZEX WD10EALX WD7500AZEX

WD5000AAKX WD3200AAKX WD2500AAKX WIDTH/HEIGHT

3.5-inch/1-inch

PATA 100 MB/s WD3200AAJB WD2500AAJB WD1600AAJB WD800AAJB **ROTATIONAL SPEED** 

7200 RPM

**CAPACITIES** 

80 GB to 1 TB

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

## **Product Features**

#### The original

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

#### More options

These drives are available in a broad range of capacities and interfaces so you can be sure there's a drive that's the perfect fit for your system, in more ways than one.

## SATA or PATA interface

While SATA has become the industry standard interface, WD continues to manufacture desktop drives with a PATA interface for unique or legacy 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.

#### 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.

# **Applications**

WD Blue hard drives are tested and recommended for use in desktop PCs, industrial applications, and external enclosures. Desktop drives are not recommended for use in RAID environments. Please consider using WD Red™ hard drives for home and small office 1-5 bay NAS systems and WD enterprise hard drives for rackmount and NAS systems with more than 5 bays.\*

\* 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	500 GB	320 GB
Model number	WD10EZEX	WD10EALX	WD7500AZEX	WD5000AAKX	WD3200AAKX
Interface	SATA 6 Gb/s				
Formatted capacity <sup>1</sup>	1,000,204 MB	1,000,204 MB	750,156 MB	500,107 MB	320,072 MB
User sectors per drive	1,953,525,169	1,953,525,169	1,465,149,168	976,773,168	625,142,448
Advanced Format (AF)	Yes	Yes	Yes	Yes	Yes
Form factor	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
Performance					
Data transfer rate (max)					
Buffer to host	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	150 MB/s	126 MB/s	126 MB/s
Cache (MB)	64	32	64	16	16
Rotational speed (RPM)	7200	7200	7200	7200	7200
Reliability/Data Integrity					
Load/unload cycles <sup>4</sup>	300,000	300,000	300,000	300,000	300,000
Non-recoverable read errors per bits read	<1 in 10 <sup>14</sup>				
Limited warranty (years)5	2	2	2	2	2
Power Management					
5VDC ±10% (A, peak)	2.5	2.8	2.5	1.77	1.77
Average power requirements (W)					
Read/Write	6.8	7.3	6.8	6.0	6.0
Idle	6.1	6.1	6.1	5.6	5.6
Standby/Sleep	1.2	0.7	1.2	0.9	0.9
Environmental Specifications <sup>6</sup>					
Temperature (°C)		0.1.00	0.1.00	0.1.00	0.1.00
Operating	0 to 60				
Non-operating Shock (Gs)	-40 to 70				
Operating (2 ms, write)	30	30	30	30	30
Operating (2 ms, write) Operating (2 ms, read)	65	65	65	65	65
Non-operating (2 ms)	350	300	350	350	350
Acoustics (dBA) <sup>7</sup>			000	1000	1000
Idle	29	28	29	29	29
Seek (average)	30	33	30	30	30
Physical Dimensions					
Height (in./mm, max)	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
Width (in./mm, ± .01 in.)	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

<sup>1</sup> As used for storage capacity, one megabyte (ME) = 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-10 organization as of the date of this specification sheet. Visit www.sata-io.org for details.

<sup>&</sup>lt;sup>2</sup> 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.

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

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

 $<sup>^{\,\,\,\,}</sup>$  The term of the limited warranty may vary by region. Visit support.wd.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.





Specifications	320 GB	250 GB	250 GB	160 GB	80 GB
Model number	WD3200AAJB	WD2500AAKX	WD2500AAJB	WD1600AAJB	WD800AAJB
Interface	PATA 100 MB/s	SATA 6 Gb/s	PATA 100 MB/s	PATA 100 MB/s	PATA 100 MB/s
Formatted capacity <sup>1</sup>	320,072 MB	250,059 MB	250,059 MB	160,041 MB	80,026 MB
User sectors per drive	625,142,448	488,397,168	488,397,168	312,581,808	156,301,488
Advanced Format (AF)	No	Yes	No	No	No
Form factor	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
Performance					
Data transfer rate (max) Buffer to host Host to/from drive (sustained)	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/s³ 126 MB/s	100 MB/s <sup>3</sup> 126 MB/s
Cache (MB)	8	16	8	8	8
Rotational speed (RPM)	7200	7200	7200	7200	7200
Reliability/Data Integrity					
Load/unload cycles <sup>4</sup>	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>
Limited warranty (years)5	2	2	2	2	2
Power Management					
5VDC ±10% (A, peak)	1.77	1.77	1.77	1.77	1.77
Average power requirements (W) Read/Write Idle Standby/Sleep	5.4 4.9 0.7	5.3 4.9 0.7	5.4 4.9 0.7	5.4 4.9 0.7	5.4 4.9 0.7
Environmental Specifications					
Temperature (°C) Operating Non-operating	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, write) Operating (2 ms, read) Non-operating (2 ms)	30 65 350	30 65 350	30 65 350	30 65 350	30 65 350
Acoustics (dBA) <sup>7</sup> Idle Seek (average)	29 30	29 30	29 30	29 30	29 30
Physical Dimensions					
Height (in./mm, max)	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
Width (in./mm, ± .01 in.)	4/101.6	4/101.6	4/101.6	4/101.6	4/101.6
Weight (lb./kg, ± 10%)	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-10 organization as of the date of this specification sheet. Visit www.sata-io.org for details.

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



WD BLUE™ Everyday Storage



WD GREEN TO Cool & Quiet 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

North America Spanish

Asia Pacific Europe (toll free where available)















Learn more about WD Blue Desktop hard drives



+31.880062100 (toll free where available)
Europe/Middle East/Africa

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

Western Digital, WD, and the WD logo are registered trademarks in the U.S. and other countries; and WD Blue, WD Green, WD Black, NoTouch, and FIT Lab are trademarks of Western Digital Technologies, Inc. Other marks may be mentioned herein that belong to other companies. Product specifications subject to change without notice.

<sup>2</sup> 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.

<sup>&</sup>lt;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 support.wd.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