



WD Caviar® Blue™ Desktop Hard Drives

Performance and
reliability for
everyday computing



Interface

SATA or EIDE

Width/Height

3.5-inch/1-inch

Rotational Speed

7200 RPM

Capacities

40 to 750 GB

Model Numbers

SATA Drives

WD7500AAKS
WD6400AAKS
WD5000AAKS
WD5000AAJS
WD4000AAKS
WD4000AAJS
WD3200AAKS
WD3200AAJS
WD2500AAKS
WD2500AAJS
WD1600AAJS
WD1600AABS
WD1200AAJS
WD800JD
WD800BD
WD400JD

EIDE Drives

WD5000AAKB
WD5000AAJB
WD4000AAKB
WD4000AAJB
WD3200AAKB
WD3200AAJB
WD2500AAJB
WD1600AAJB
WD1600AABB
WD800JB
WD800BB
WD400BB

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

To make drive selection simple, we've gathered all our popular WD Caviar SE16, WD Caviar SE, and WD Caviar drives under one umbrella we call WD Caviar Blue. Built to Western Digital's award winning quality standards, these drives are available in a full range of performance features.

Product Features

Cache — WD Caviar Blue is available in 2 MB, 8 MB, and 16 MB cache sizes. Bigger cache memory yields faster performance.

Capacity — We offer drives ranging from 40 GB to 750 GB. Pick the biggest capacity your budget will allow. You can never have too much storage space.

Reliability — We understand the importance of your data, and we are committed to protecting that data with exceptionally reliable products, advanced data protection technology and superior customer support.

Cool — Keeping the drive cool enhances reliability. WD continues to develop new and innovative ways to keep drives cool while they are operating.

Quiet — The technology that Tom's Hardware Guide called "very fast and nearly silent" is used throughout this family of drives. Our WhisperDrive™ technology minimizes noise to levels near the threshold of human hearing. To cut seek noise, SoftSeek™ technology streamlines read/write seeking algorithms, resulting in more efficient operation.

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

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



WD Caviar® Black™
Maximum performance
for power computing.



WD Caviar® Blue™
Performance and reliability
for everyday computing.



WD Caviar® Green™
Cool, quiet, eco-friendly.



PUT YOUR LIFE ON IT®

WD Caviar Blue

Desktop Hard Drives

Drive Specifications

SATA Hard Drives	250 GB	320 GB	400 GB	500 GB	640 GB	750 GB
Formatted capacity ¹	250,059 MB	320,072 MB	400,088 MB	500,107 MB	640,135 MB	750,156 MB
User sectors per drive	488,397,168	625,142,448	781,422,768	976,773,168	1,250,263,728	1,465,149,168
SATA latching connector	Yes	Yes	Yes	Yes	Yes	Yes
WD model number	WD2500AAKS	WD3200AAKS	WD4000AAKS	WD5000AAKS	WD6400AAKS	WD7500AAKS

EIDE Hard Drives	320 GB	400 GB	500 GB
Formatted capacity ¹	320,072 MB	400,088 MB	500,107 MB
User sectors per drive	625,142,448	781,422,768	976,773,168
WD model number	WD3200AAKB	WD4000AAKB	WD5000AAKB

SATA Hard Drives

Actuator latch/auto park	Yes
Bytes per sector (STD)	512
Form factor	3.5-inch
RoHS compliant ²	Yes

EIDE Hard Drives

Actuator type	Rotary voice coil
Bytes per sector (STD)	512
Form factor	3.5-inch
RoHS compliant ²	Yes

Performance Specifications

SATA Hard Drives

Average latency	4.2 ms
Buffer	16 MB
Cache	
Read	Adaptive
Write	Yes
Data transfer rate	
Buffer to disk	70 MB/s sustained ³
Buffer to host	3 Gb/s (maximum)
Drive ready time	13 sec ⁴
Error rate (non-recoverable)	< 1 in 10 ¹⁵ bits read
LBA support	Yes
Rotational speed	7200 RPM
Start/stop cycles ⁴	50,000

EIDE Hard Drives

Average latency	5.5 ms
Buffer	16 MB
Cache	
Read	Adaptive
Write	Yes
Data transfer rate (buffer to host)	
Mode 5 Ultra ATA ⁵	100 MB/s
Mode 4 Ultra ATA ⁵	66.6 MB/s
Mode 2 Ultra ATA ⁵	33.3 MB/s
Mode 2 Ultra DMA ⁵	16.6 MB/s
Mode 4 Ultra PIO ⁵	16.6 MB/s
Drive ready time	7.0 sec (average)
Error rate (non-recoverable)	< 1 in 10 ¹⁵ bits read
LBA support	Yes
Rotational speed	7200 RPM
Start/stop cycles ⁴	50,000



¹One gigabyte (GB) = one billion bytes. One terabyte (TB) = one trillion bytes. Total accessible capacity varies depending on operating environment.

²WD products manufactured and sold worldwide after August 1, 2005, meet or exceed Restriction of Hazardous Substances (RoHS) compliance requirements as mandated by the European Union for electrical and electronic products. The RoHS Directive 2002/95/EC of the European Parliament, which is effective in the EU beginning July 1, 2006, aims to protect human health and the environment by restricting the use of certain hazardous substances in new equipment, and consists of restrictions on lead, mercury, cadmium, and other substances.

³For 750 GB.

⁴Controlled unload at ambient condition.

⁵Maximum burst rate running the specified PIO, DMA, or Ultra ATA transfer mode.

WD Caviar Blue

Desktop Hard Drives

Drive Specifications

SATA Hard Drives	40 GB	80 GB	120 GB	160 GB	250 GB	320 GB	400 GB	500 GB
Formatted capacity ¹	40,020 MB	80,026 MB	120,034 MB	160,041 MB	250,059 MB	320,072 MB	400,088	500,107
User sectors per drive	78,165,360	156,301,488	234,441,648	312,581,808	488,397,168	625,142,448	781,422,768	976,773,168
WD model number	WD400JD	WD800JD	WD1200AAJS	WD1600AAJS	WD2500AAJS	WD3200AAJS	WD4000AAJS	WD5000AAJS

EIDE Hard Drives	80 GB	160 GB	250 GB	320 GB	400 GB	500 GB
Formatted capacity ¹	80,026 MB	160,041 MB	250,059 MB	320,072 MB	400,088	500,107
User sectors per drive	156,301,488	312,581,808	488,397,168	625,142,448	781,422,768	976,773,168
WD model number	WD800JB	WD1600AAJB	WD2500AAJB	WD3200AAJB	WD4000AAJB	WD5000AAJB



SATA Hard Drives

Actuator latch/auto park	Yes
Bytes per sector (STD)	512
Form factor	3.5-inch
RoHS compliant ²	Yes

EIDE Hard Drives

Actuator type	Rotary voice coil
Bytes per sector (STD)	512
Form factor	3.5-inch
RoHS compliant ²	Yes



Performance Specifications

SATA Hard Drives

Average latency	4.2 ms
Buffer	8 MB
Cache	
Read	Adaptive
Write	Yes
Data transfer rate	
Buffer to disk	972 Mbits/s (maximum)
Buffer to host	3 Gb/s (maximum)
Drive ready time	12.5 sec (maximum)
Error rate (non-recoverable)	<1 in 10 ¹⁵ bits read
LBA support	Yes
Rotational speed	7200 RPM
Start/stop cycles ³	50,000 minimum

EIDE Hard Drives

Average latency	5.5 ms
Buffer	8 MB
Cache	
Read	Adaptive
Write	Yes
Data transfer rate (buffer to host)	
Mode 5 Ultra ATA ⁴	100 MB/s
Mode 4 Ultra ATA ⁴	66.6 MB/s
Mode 2 Ultra ATA ⁴	33.3 MB/s
Mode 2 Ultra DMA ⁴	16.6 MB/s
Mode 4 Ultra PIO ⁴	16.6 MB/s
Drive ready time	7.0 sec (average)
Error rate (non-recoverable)	<1 in 10 ¹⁵ bits read
LBA support	Yes
Rotational speed	7200 RPM
Start/stop cycles ⁴	50,000 minimum



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³Controlled unload at ambient condition.

⁴Maximum burst rate running the specified PIO, DMA, or Ultra ATA transfer mode.

WD Caviar Blue

Desktop Hard Drives

Drive Specifications

SATA Hard Drives

	80 GB	160 GB
Formatted capacity ¹	80,026 MB	160,041 MB
User sectors per drive	156,301,488	312,581,808
WD model number	WD800BD	WD1600AABS

EIDE Hard Drives

	40 GB	80 GB	160 GB
Formatted capacity ¹	40,020 MB	80,026 MB	160,041 MB
User sectors per drive	78,165,360	156,301,488	312,581,808
WD model number	WD400BB	WD800BB	WD1600AABB

SATA/EIDE Hard Drives

Actuator latch/auto park	Yes
Bytes per sector (STD)	512
Dedicated landing site	Yes
Form factor	3.5-inch
RoHS compliant ²	Yes

Performance Specifications

SATA Hard Drives

Average latency	4.2 ms
Buffer	2 MB
Cache	
Read	Adaptive
Write	Yes
Data transfer rate	
Buffer to disk	972 Mbits/s (maximum)
Buffer to host ³	3 Gb/s (maximum)
Drive ready time	6.0 sec (maximum)
Error rate (non-recoverable)	<1 in 10 ¹⁴ bits read
LBA support	Yes
Rotational speed	7200 RPM
Start/stop cycles	50,000 minimum

EIDE Hard Drives

Average latency	4.2 ms
Buffer	2 MB
Cache	
Read	Adaptive
Write	Yes
Data transfer rate (buffer to host)	
Mode 5 Ultra ATA ⁴	100 MB/s
Mode 4 Ultra ATA ⁴	66.6 MB/s
Mode 2 Ultra ATA ⁴	33.3 MB/s
Mode 2 DMA ⁴	16.6 MB/s
Mode 4 PIO ⁴	16.6 MB/s
Drive ready time	7.0 sec (average)
Error rate (non-recoverable)	<1 in 10 ¹⁴ bits read
LBA support	Yes
Rotational speed	7200 RPM
Start/stop cycles	50,000 minimum



¹One gigabyte (GB) = one billion bytes. One terabyte (TB) = one trillion bytes. Total accessible capacity varies depending on operating environment.

²WD products manufactured and sold worldwide after August 1, 2005, meet or exceed Restriction of Hazardous Substances (RoHS) compliance requirements as mandated by the European Union for electrical and electronic products. The RoHS Directive 2002/95/EC of the European Parliament, which is effective in the EU beginning July 1, 2006, aims to protect human health and the environment by restricting the use of certain hazardous substances in new equipment, and consists of restrictions on lead, mercury, cadmium, and other substances.

³WD800BD models manufactured before December 1, 2005 have a buffer-to-host data transfer rate of 1.5 Gb/s.

⁴Maximum burst rate running the specified PIO, DMA, or Ultra ATA transfer mode.

For service and literature:

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