

WD Caviar® SE16

Desktop Hard Drives

Lightning Fast
Cool
Quiet



Interface

SATA or EIDE

Width/Height

3.5-inch/1-inch

Rotational Speed

7200 RPM

Capacities

250 to 750 GB

Model Numbers

SATA
WD2500AAKS
WD3200AAKS
WD4000AAKS
WD5000AAKS
WD6400AAKS
WD7500AAKS

EIDE
WD3200AAKB
WD4000AAKB
WD5000AAKB

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

WD Caviar SE16 drives combine 16 MB cache with up to 3 Gb/s transfer rate for lightning-fast performance in demanding desktop and workstation applications. Technologically advanced acoustics minimize noise and cool drive operation, and enhanced reliability features help protect the drive and the data stored on it.

Product Features

Top performance for Windows® Vista™ — The WD Caviar SE16 500 and 750 GB SATA drives received a 5.9, the highest possible score on the Windows Experience Index.

16 MB Cache — Bigger cache means faster performance. A massive 16 MB cache combined with advanced acoustic and power-reducing technologies make these ultra-fast drives the perfect solution for the fully loaded PC.

Perpendicular Magnetic Recording (PMR) — The latest generation of WD Caviar SE16 drives employ PMR technology to achieve even greater areal density.

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

SecurePark™ — Parks the recording heads off the disk surface during spin up, spin down, and when the drive is off. This ensures the recording head never touches the disk surface, resulting in improved long-term reliability due to less head wear and improved non-operational shock tolerance.

StableTrac™ — The motor shaft is secured at both ends to reduce system-induced vibration and stabilize platters for accurate tracking during read and write operations. (750 GB only)

The WD Promise



WD understands the importance of the information you save to your hard drive and we are committed to protecting that data with exceptionally reliable products, advanced data protection technology, and superior customer support. No one does more to safeguard your data than WD.

WD Caviar SE16

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 ³
Error rate (non-recoverable)	<1 in 10 ¹⁵ bits read
LBA support	Yes
Rotational speed	7200 RPM
Load/unload cycles ⁴	600,000

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
Load/unload cycles ⁴	600,000



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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.

