

WD Caviar® SE

SATA/EIDE Hard Drives

Fast
Cool
Quiet



INTERFACE

SATA or EIDE

WIDTH/HEIGHT

3.5-inch/1-inch

ROTATIONAL SPEED

7200 RPM

CAPACITIES

40 to 320 GB

MODEL NUMBERS

| EIDE | SATA |
|----------|------------|
| WD400JB | WD400JD |
| WD800JB | WD800JD |
| WD1200JB | WD1200JS |
| WD1600JB | WD1600AAJS |
| WD2000JB | WD1600JS |
| WD2500JB | WD2000JS |
| WD3000JB | WD2500JS |
| WD3200JB | WD3000JS |
| | WD3200JS |

Cool-running, quiet operation, superior performance, and industry-leading reliability make these drives the perfect hard drives for desktop, business, and consumer electronics storage — ideal for high-performance family computing such as photo editing, multimedia functions, and business applications such as spreadsheets and databases.

Product Benefits

- **Fast** — WD, the first to introduce an 8 MB buffer, has advanced the caching algorithms of this new and improved WD Caviar family of hard drives, resulting in next-generation high performance — performance that beats all competing 8 MB cache drives.
- **Cool** — Heat is a major contributor to hard drive wear, and cool drive operating temperatures help increase long-term drive reliability. WD achieves the lowest operating temperature of any hard drive in its class by lowering the drive's power consumption through advanced design of electronics and firmware.
- **Quiet** — Today's PCs, digital video recorders, and gaming machines are increasingly operated in environments where noise is less tolerated. WD minimizes WD Caviar noise to levels virtually below the threshold of human hearing with its WhisperDrive™ technology which features a highly efficient power driver design. And to cut seek noise, SoftSeek™ technology streamlines read/write seeking algorithms, resulting in the drive operating more efficiently when accessing and writing data.
- **Data Lifeguard Tools™** — This software utility works with embedded Data Lifeguard™ features (including shock protection, an environmental protection system, and error detection and repair) to make hard drive installation, management, and diagnostics simple and worry-free.

SATA-specific Features

- **SecureConnect™** — provides a 500 percent stronger cable-to-drive connection than first-generation SATA hard drives and cables. Also ensures backward compatibility with legacy SATA cables and backplanes.
Note: SecureConnect supports only legacy power and does not allow connection to a SATA power supply.
- **FlexPower™** — connector technology that accepts power from both industry-standard and new SATA power supplies.

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.

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

WD Caviar® SE

SATA/EIDE Hard Drives



Drive Specifications

| SATA Hard Drives | 40 GB | 80 GB | 120 GB | 160 GB | 200 GB | 250 GB | 300 GB | 320 GB |
|---------------------------------|------------|-------------|-------------|------------------------|-------------|-------------|-------------|-------------|
| Formatted capacity ¹ | 40,020 MB | 80,026 MB | 120,034 MB | 160,041 MB | 200,049 MB | 250,059 MB | 300,069 MB | 320,072 MB |
| User sectors per drive | 78,165,360 | 156,301,488 | 234,441,648 | 312,581,808 | 390,721,968 | 488,397,168 | 586,072,368 | 625,142,448 |
| WD model number | WD400JD | WD800JD | WD1200JS | WD1600JS WD1600AAJS | WD2000JS | WD2500JS | WD3000JS | WD3200JS |

| EIDE Hard Drives | 40 GB | 80 GB | 120 GB | 160 GB | 200 GB | 250 GB | 300 GB | 320 GB |
|---------------------------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
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| WD model number | WD400JB | WD800JB | WD1200JB | WD1600JB | WD2000JB | WD2500JB | WD3000JB | WD3200JB |

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 (multi-platter) | 748 Mbits/s (maximum) |
| Buffer to disk (single platter) ³ | 475 Mbits/s (maximum) |
| Buffer to host ⁴ | 300 MB/s (maximum) |
| Drive ready time | 9.0 sec (average) |
| Error rate (non-recoverable) | <1 in 10 ¹⁴ bits read |
| LBA support | Yes |
| Rotational speed | 7200 RPM |
| Seek time | |
| Full stroke read | 21 ms (average) |
| Read | 8.9 ms (average) |
| Track-to-track | 2.0 ms (average) |
| Start/stop cycles | 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 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 ¹⁴ bits read |
| LBA support | Yes |
| Rotational speed | 7200 RPM |
| Seek time | |
| Full stroke read | 21 ms (average) |
| Read | 8.9 ms (average) |
| Track-to-track | 2.0 ms (average) |
| Start/stop cycles | 50,000 minimum |

¹One gigabyte (GB) = 1,000,000,000 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.

³The WD1600AAJS model has a buffer to disk data transfer rate of 592 Mbits/s (maximum).

⁴Models WD400JD and WD800JD manufactured before December 1, 2005 have a buffer-to-host data transfer rate of 150 MB/s.

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



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