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Jameco Part Number 151044

Western Digital EIDE Hard Drives

WD Caviar®

AC11600

AC23200

AC34300

AC35100

INTERFACE

EIDE

WIDTH/HEIGHT

3.5-inch/1-inch

CAPACITY

1.6, 3.2,
4.3 and 5.1 GB

FEATURES

- **CacheFlow5™ -** Increases performance by adapting read and write operations on-the-fly and works in conjunction with the advanced disk caching capabilities of today's major operating systems.
- **Ultra DMA/33 High-Speed Host Transfers** - Doubles the current transfer rate under local bus environments.
- **S.M.A.R.T.™ -** Assists the user in preventing possible system down time by warning users of the impending risk of data loss.
- **Low Power Consumption -** Saves energy, money, and the environment.
- **Exceptional Quality** - Guaranteed compatibility and automatic defect management allows easy installation. A three-year warranty and 350,000 MTBF means years of trouble-free operation.

Western Digital's latest generation of high-performance WD Caviar® drives, the AC11600, AC23200, AC34300, and AC35100 Enhanced IDE (EIDE) hard drives, set new standards for storage, performance, and reliability. With storage capacities up to 5.1 gigabytes, these workhorse WD Caviar drives are engineered to handle today's most storage-intensive desktop, workstation, multi-media, and internet applications.

Built on the proven track record of the 3.5-inch, low-profile WD Caviar design, the AC11600, AC23200, AC34300, and AC35100 drives combine enhanced electronics with leading-edge head and read-channel technology. The result is the highest WD Caviar performance ever.

These drives support Mode 4 PIO, Mode 2 DMA and Mode 2 Ultra DMA/33. Ultra DMA/33 is a high-speed host data transfer feature that transfers data at 33.3 MB/s—double the current burst transfer rate. This results in maximum disk performance under PCI local bus environments. These drives also offer advanced caching, increased rotational speeds, and low mechanical latency.

Western Digital's award-winning WD Caviar hard drives are your best choice for today's powerful, information-hungry systems running Windows 95, Windows 3.x, Windows NT, OS/2 Warp, Novell NetWare, or Unix operating systems on 486, Pentium, Pentium Pro, Pentium II, PowerPC, or RISC-based processors.



WD Caviar drives feature state-of-the-art Self-Monitoring, Analysis and Reporting Technology (S.M.A.R.T.). When used with S.M.A.R.T. applications, the drives will alert the host system of any negative reliability status conditions. The host system can then alert and advise users on taking appropriate actions.

Western Digital's rugged and reliable WD Caviar hard drives are designed and manufactured to the highest standards of quality and reliability. This commitment to quality is demonstrated by Western Digital's companywide ISO 9001 certification. Before shipping, every WD Caviar drive undergoes over 200 rigorous tests to ensure its functionality and compatibility. So it's not surprising that they have also set new standards for reliability, are rated at 350,000 hours Mean Time Between Failure—and are backed by Western Digital's comprehensive three-year warranty.

Western Digital

Western Digital EIDE Hard Drive

WD Caviar®

Physical Specifications

	1.6 GB	3.2 GB	4.3 GB	5.1 GB
Interface	40-pin EIDE	40-pin EIDE	40-pin EIDE	40-pin EIDE
Formatted Capacity [1]	1624.6 MB	3249.3 MB	4304.2 MB	5163.5 MB
Actuator Type	Voice Coil	Voice Coil	Voice Coil	Voice Coil
Number of Disks	1	2	3	3
Number of Heads	2	4	5 or 6	6
Bytes per Sector (STD)	512	512	512	512
User Sectors per Drive	3,173,184	6,346,368	8,406,720	10,085,040
Servo Type	Embedded	Embedded	Embedded	Embedded
ECC	Reed Solomon	Reed Solomon	Reed Solomon	Reed Solomon
Dedicated Landing Zone	Yes	Yes	Yes	Yes
Actuator Latch/Auto Park	Yes	Yes	Yes	Yes
Model Number	WDAC11600	WDAC23200	WDAC34300	WDAC35100

Physical Dimensions

Height	*1.0 in. (25.4 mm) ± .02*
Length	*5.75 in. (146.0 mm) ± .02*
Width	*4.0 in. (101.6 mm) ± .02*
Weight	*1.1 lb. (0.5 kg) ± 10%*

Performance Specifications

Recommended Setup

AC11600	*3148x16x63*
AC23200	*6296x16x63*
AC34300	*8896x15x63*
AC35100	*10672x15x63*

Data Transfer Rate

Buffer to Host	*16.6 MB/s (Mode 4 PIO)* [2]
	16.6 MB/s (Mode 2 DMA)
	33.3 MB/s (Mode 2 Ultra DMA)
Buffer to Disk	*135.5 Mbits/s max*

Average Read Seek [3]	*11 ms*
Track to Track Seek	*3.0 ms*
Full Stroke Seek	*21 ms*
Average Latency	*5.5 ms*
Rotational Speed	*5400 RPM*
Read Cache	*Adaptive*
Write Cache	*Yes*
Buffer	*256 KB*
Spindle Start Time	*11 sec typical*
Start/Stop Cycles	*40,000 minimum*
Master/Slave Support	*Yes*
LBA Support	*Yes*
IORDY Support	*Yes*
Error Rate (Non-recoverable)	*<1 in 10^{13} bits read*

Environmental Specifications [4]

Shock

Operating	*10G (2 per sec max)*
Non-Operating	*150G (3 drops/axis max)*

Half sine wave of 3 ms duration, measured without isolation.

Vibration

Operating	*5-20 Hz, .037 inches (dbl amp)* *20-300 Hz, .75G (0 to peak)*
Non-Operating	*5-20 Hz, .195 inches (dbl amp)* *20-500 Hz, 4G (0 to peak)*

Operating Temperature & Humidity

Temperature	*5°C to 55°C*
Humidity	*8-80% RH non-condensing*
Thermal Gradient	*10°C/hour max*

Non-Operating Temperature & Humidity

Temperature	*-40°C to 60°C*
Humidity	*5-95% RH non-condensing*
Thermal Gradient	*20°C/hour max*

Acoustics

Idle Mode [5]	*37 dBA average*

Reliability/Warranty

MTBF	*350,000 POH*
Warranty	*3 years*

Power Requirements (typical)

Voltage: 5V ±5%, 12V ±8%

Read/Write	*5.6W*
Standby	*1.6W*
Sleep	*1.3W*
Idle	*5.3W*

[1] *Western Digital defines a megabyte (MB) as 1,000,000 bytes, and a gigabyte (GB) as 1,000,000,000 bytes.*
[2] *Maximum PIO burst rate is specified at 16.6 MB/s using the IORDY signal.*
[3] *Average Read Seek Time is the total time required to seek between all possible ordered pairs of track addresses divided by the total number of these ordered pairs at nominal environmental conditions.*
[4] *No non-recoverable errors during operating tests or after non-operating tests.*
[5] *Sound power level.*

Ready for OS/2 WARP

Yes NetWare®

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79-880110-001 S0661 9/97

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