

Western Digital SCSI Hard Drive

WD Enterprise™

WDE2170

WDE4360

Western Digital, the recognized leader in high-quality hard drive manufacturing, now introduces a new standard in high-performance SCSI hard drives. Our team of expert enterprise storage engineers developed these leading-edge drives using Western Digital's proven technology and world-class quality processes.

The WD Enterprise™ drives—the first in a family of 7200 RPM drives—deliver outstanding performance, capacity, and reliability. They are an excellent choice for workstation, server, multi-user, audio-video, and array applications.

These drives feature formatted capacities of 2.1 GB and 4.3 GB with host data transfer rates up to 40 MB/s. They are compliant with SCSI-3 SPI, support Ultra Fast and Ultra Fast Wide host data transfers, and offer a SCA-2 interface. Advanced caching, command queuing, S.M.A.R.T. (Self Monitoring, Analysis, and Reporting Technology), and S.C.A.M. (SCSI Configure AutoMagically) are standard features of the WD Enterprise drives.

The WD Enterprise drives incorporate the mechanical platform design and proven recording technologies of Western Digital's award-winning WD Caviar drives. This quality design means the WD Enterprise drives have fewer heads and disks in comparison to competitive drives, significantly reducing the drive components. Fewer components result in higher reliability—placing the WD Enterprise drives a step ahead of our competition.

Fewer disks and heads also mean fewer head switches, which combined with an 8 ms seek time, a 140 Mb/s maximum media data rate, and a low 4.17 ms rotational latency (7200 RPM) give the WD Enterprise drives unique performance advantages over our competition.

The WD Enterprise drives deliver the performance, capacity, and reliability demanded by all high-performance enterprise systems.

INTERFACE

Ultra SCSI

WIDTH/HEIGHT

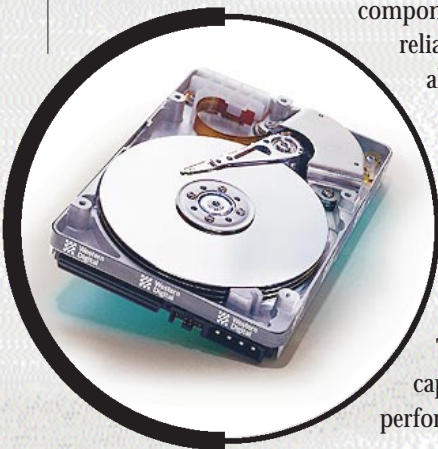
3.5-inch/1-inch

CAPACITY

2.1 and 4.3 GB

FEATURES

- **High Performance** - The WD Enterprise drives have a 7200 RPM speed, 8 ms average seek time, 512 KB or 1 MB cache option, and support up to 40 MB/s host transfers. The advanced caching, command queuing (with seek and latency optimization) for multi-threaded workloads, embedded servo (uninterrupted data stream), and 140 Mb/s maximum media data rate yield superior performance.
- **Highest Disk Capacity** - Capacities over 1 GB per disk are made possible by using the proven technology of advanced thin-film heads and a PRML read channel. These drives are available in 2-disk (2.1 GB) and 4-disk (4.3 GB) versions.
- **Superior Quality and Reliability** - Fewer disks and heads translate into many performance and reliability advantages over our competition. These high performance drives are based on a Western Digital design platform and process that has already achieved world-class quality. A 5-year warranty and 1 million hours MTBF means years of maintenance-free operation.
- **Low Power** - An efficient electrical design decreases power requirements to as low as 5 watts at idle.
- **Low Acoustics** - The WD Enterprise drives utilize innovative spindle technology that reduces acoustics to 4.0 bels at idle.



Western Digital SCSI Hard Drive

WD Enterprise™

Physical Specifications

	WDE2170	WDE4360
Formatted Capacity ¹	2170 MB	4360 MB
Interface	Ultra Fast (50-pin)	Ultra Fast Wide (68- and 80-pin SCA-2) ²
Actuator Type	Voice Coil	Voice Coil
Number of Disks	2	4
Number of Heads	4	8
Bytes per Sector (STD)	512	512
Servo Type	Embedded	Embedded
ECC	144-bit Reed Solomon	144-bit Reed Solomon
Dedicated Landing Zone	Yes	Yes
Actuator Latch/Auto Park	Yes	Yes

Physical Dimensions

Height	25.4 mm (1.0 in.)
Length	146.0 mm (5.75 in.)
Width	101.6 mm (4.0 in.)
Weight	0.45 kg (1.0 lb.)

Performance Specifications

Data Transfer Rate	
Media to Buffer	81-140 Mb/s max
Buffer to Host	40 MB/s max
Seek Times	
Average Seek ³	8 ms
Track to Track	1 ms
Full Stroke Seek	sub 18 ms
Average Latency	4.17 ms
Rotational Speed	7200 RPM
Read Cache	Adaptive, Segmented
Write Cache	Yes
Buffer	512 KB
	1 MB option
Error Rate	<1 in 10 ¹⁴ bits read (Non-recoverable)

Environmental Specifications⁴

Shock	
Operating	10G (2 per sec max)
Non-Operating	70G (3 drops/axis max)
<i>Half sine wave of 3 ms duration, measured without isolation.</i>	
Vibration	
Operating	5-20 Hz, .037 inches (peak to peak) 20-400 Hz, .75G (0 to peak)
Non-Operating	5-20 Hz, .098 inches (peak to peak) 20-400 Hz, 2G (0 to peak)
Operating Temperature & Humidity	
Temperature	5°C to 55°C
Humidity	10-95% 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	4.0 bels typical ⁵
Reliability/Warranty	
MTBF	1,000,000 POH
Warranty	5 years

Power Requirements (typical)⁶

Voltage:	5V ±5%, 12V ±5%	
	WDE2170	WDE4360
Idle	5.4W	7.1W
Seek	7.1W	8.7W

Model Numbers (512K)⁷

	2.1 GB	4.3 GB
Single-ended, 50-pin, Narrow	WDE2170-0003	WDE4360-0003
Single-ended, 68-pin, Wide	WDE2170-0007	WDE4360-0007
Single-ended, 80-pin, Wide	WDE2170-0008	WDE4360-0008
Differential, 68-pin, Wide	WDE2170-0023	WDE4360-0023

Designed for

Microsoft®
Windows® 95


MICROSOFT™
WINDOWS NT™
COMPATIBLE


Yes
NetWare®



S · M · A · R · T
S Y S T E M
C O M P L I A N T

For service and literature:

888.932.7274 USA
714.932.5000 Outside USA
714.932.4300 DocuFAX
www.wdc.com Internet

Western Digital is a registered trademark and WD Enterprise and FIT Lab are trademarks of Western Digital Corporation. Other marks that belong to other companies may be mentioned herein. Product specifications subject to change without notice. ©1997 Western Digital Corporation. All rights reserved.

Western Digital Corporation
8105 Irvine Center Drive
Irvine, California 92618

4079-001051 Rev. B
H0390 2/97

¹ Western Digital defines a megabyte (MB) as 1,000,000 bytes, and a gigabyte (GB) as 1,000,000,000 bytes.

² Differential interface options available on 68-pin models.

³ Average Read Seek Time is determined by dividing the total time required to seek between all possible ordered pairs of track addresses 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.

⁶ Single-ended values shown.

⁷ Contact your local Western Digital sales office for additional configurations.