

WD RE

Enterprise Hard Drives

High Capacity
24 x 7 Reliability
1 Million Hours MTBF



Interface

SATA or EIDE

Width/Height

3.5-inch/1-inch

Rotational Speed

7200 RPM

Capacities

160 to 320 GB

Model Numbers

SATA	EIDE
WD1600YS	WD1600SB
WD2500YS	WD2500SB
WD3200YS	WD3200SB

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

WD RE 7200 RPM hard drives are engineered to thrive in a high duty cycle RAID system while still offering traditional low cost-per-capacity desktop value. Designed and manufactured to server-class standards, WD RE drives provide RAID-specific, time-limited error recovery (TLER) to significantly reduce drive fallout caused by extended drive error-recovery processes and are tested to 1 million hours MTBF. These drives include an 8 MB (SB) or 16 MB (YS) cache for faster time to data and fluid dynamic bearings (FDB) to reduce heat, vibration, and noise.

Product Benefits

Superior reliability — backed by a 5-year limited warranty and tested to 1 million hours MTBF at high duty cycle, these enterprise drives are designed and manufactured to provide server-class reliability.

Fast — with up to 3.0 Gb/s data transfer rate, and up to 16 MB cache, these drives deliver optimum performance in nearline server environments.

Low power — Active Power Save™ delivers best-in-class seek mode power consumption through advanced WD firmware that conserves power in active seek modes without degrading performance.

RAID-specific, time-limited error recovery (TLER) — a feature pioneered by WD that significantly reduces drive fallout caused by extended drive error-recovery processes common to desktop drives.

5-year limited warranty

SATA-specific Features

Native command queuing (NCQ)* — server feature for increased performance in random I/O transaction environments. NCQ aggregates many small random data transfers and allows the disk to reorder the commands in a sequential order for faster access (available with most models).

Hot plug support — allows swapping of hard drives without having to power down the system or reboot; promotes system design flexibility, data availability, and serviceability.

Backplane compatibility — uses the SATA industry standard connector which includes alignment ears and 3-stage electrical mating sequence designed specifically for backplanes and hot pluggability.

SATA latching connector — provides a secure connection between the hard drive and the cable connector via a locking latch mechanism.

**Not available with all models.*

Applications

Servers, network attached storage, scientific computing, life sciences, video surveillance, enterprise backup, software build systems, document and image management, audio/video media applications, other demanding write-intensive applications.

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Drive Specifications

SATA Hard Drives

	160 GB	250 GB	320 GB
Formatted capacity ¹	164,696 MB	251,000 MB	320,072 MB
User sectors per drive	321,672,960	490,234,752	625,142,448
Model number	WD1600YS	WD2500YS	WD3200YS
Actuator latch/auto park	Yes	Yes	Yes
Bytes per sector (STD)	512	512	512
Dedicated landing zone	Yes	Yes	Yes
Form factor	3.5-inch	3.5-inch	3.5-inch
Interface	SATA 3.0 Gb/s	SATA 3.0 Gb/s	SATA 3.0 Gb/s
Native command queuing	Yes	Yes	Yes
RoHS compliant ²	Yes	Yes	Yes

EIDE Hard Drives

	160 GB	250 GB	320 GB
Formatted capacity ¹	164,696 MB	251,000 MB	320,072 MB
User sectors per drive	321,672,960	490,234,752	625,142,448
Model number	WD1600SB	WD2500SB	WD3200SB
Actuator latch/auto park	Yes	Yes	Yes
Bytes per sector (STD)	512	512	512
Dedicated landing zone	Yes	Yes	Yes
Form factor	3.5-inch	3.5-inch	3.5-inch
Interface	EIDE	EIDE	EIDE
RoHS compliant ²	Yes	Yes	Yes

Performance Specifications

SATA Hard Drives

Average latency	4.2 ms
Buffer	16 MB
Cache	
Read	Adaptive
Write	Yes
Data transfer rate	
Buffer to host	3.0 Gb/s (maximum)
Buffer to disk ³	61 MB/s (sustained)
Drive ready time	9.0 sec (average)
Error rate (non-recoverable)	< 1 in 10 ¹⁴ bits read
LBA support	Yes
MTBF	1,000,000 hours
Rotational speed	7200 RPM
Seek times	
Full stroke read	21 ms (average)
Read	8.9 ms (average)
Track-to-track	2.0 ms (average)
Limited warranty ⁵	5-year

EIDE Hard Drives

Average latency	4.2 ms
Buffer	8 MB
Cache	
Read	Adaptive
Write	Yes
Data transfer rate	
Buffer to host ⁴	100 MB/s
Buffer to disk ³	61 MB/s (sustained)
Drive ready time	7.0 sec (average)
Error rate (non-recoverable)	< 1 in 10 ¹⁴ bits read
IORDY support	Yes
LBA support	Yes
Master/slave support	Yes
MTBF	1,000,000 hours
Rotational speed	7200 RPM
Seek times	
Full stroke read	21 ms (average)
Read	8.9 ms (average)
Track-to-track	2.0 ms (average)
Limited warranty ⁵	5-year



For service and literature:

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2879-001119-A14 Aug 2007

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

² WD 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.

³ Maximum drive capacity model

⁴ Maximum burst rate running the specified Ultra ATA transfer mode.

⁵ Limited five-year limited warranty unless otherwise required by law.