

WD RE SATA/EIDE 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

1.5 Gb/s WD1600SB

WD1600SD WD2500SB

WD2500SD WD3200SB

WD3200SD

3.0 Gb/s

WD1600YD

WD2500YD

WD3200YS

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 SATA drives include an 8 or 16 MB 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 warranty and tested to 1 million hours MTBF at 80% 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 (APS)[™] 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 warranty**

SATA-specific Features

- **FlexPower[™]** — connector technology that accepts power from either industry-standard or new SATA power supplies.
- **SecureConnect[™]** — provides a 500% 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.
- **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.

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	160,041 MB	250,059 MB	320,072 MB
User sectors per drive	312,581,808	488,397,168	625,142,448
Model number			
SATA 1.5 Gb/s	WD1600SD	WD2500SD	WD3200SD
SATA 3.0 Gb/s	WD1600YD	WD2500YD	WD3200YS
Actuator latch/auto park	Yes		
Bytes per sector (STD)	512		
Dedicated landing zone	Yes		
Form factor	3.5-inch		
Interface			
SD models	SATA 1.5 Gb/s		
YD and YS models	SATA 3.0 Gb/s		
RoHS compliant ²	Yes		

Performance Specifications

SATA Hard Drives

Average latency	4.2 ms
Buffer	
SD models	8 MB
YD and YS models	16 MB
Cache	
Read	Adaptive
Write	Yes
Data transfer rate	
Buffer to host	
SD models	1.5 Gb/s (maximum)
YD and YS models	3.0 Gb/s (maximum)
Buffer to disk	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 ³	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)
Warranty ⁵	5-year

EIDE Hard Drives

	160 GB	250 GB	320 GB
Formatted capacity ¹	160,041 MB	250,059 MB	320,072 MB
User sectors per drive	312,581,808	488,397,168	625,142,448
Model number	WD1600SB	WD2500SB	WD3200SB
Actuator latch/auto park	Yes		
Bytes per sector (STD)	512		
Dedicated landing zone	Yes		
Form factor	3.5-inch		
Interface	EIDE		
RoHS compliant ²	Yes		

EIDE Hard Drives

Average latency	4.2 ms
Buffer	8 MB
Cache	
Read	Adaptive
Write	Yes
Data transfer rate	
Buffer to host ³	100 MB/s
Buffer to disk	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 ⁴	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)
Warranty ⁵	5-year



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¹ 1 gigabyte (GB) = 1 billion 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 burst rate running the specified Ultra ATA transfer mode.

⁴ 80% duty cycle with 100% power on hours.

⁵ Five-year standard warranty unless otherwise required by law. For extended warranty information, visit our Web site at support.wdc.com.