



WD RE SAS

Enterprise Hard Drives

WD RE SAS hard drives are engineered to offer data-hungry SAS storage systems the massive capacity they need without compromising top-of-the-line performance. Advanced reliability and data integrity features allow for 24x7 operation in tightly packed vibration prone multi-drive systems. This uncompromising combination of high-capacity, peak performance and best-in-class reliability make WD RE SAS drives ideal for business critical applications.



INTERFACE

SAS 6 Gb/s

WIDTH/HEIGHT

3.5-inch/1-inch

ROTATIONAL SPEED

7200 RPM

CAPACITIES

1 TB and 2 TB

MODEL NUMBERS

WD2000FYYG
WD1000FYYG

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

Product Benefits

High-capacity

WD RE SAS hard drives are available with up to 2 TB for capacity-intensive storage applications.

Peak performance

Ultra-fast 6 Gb/s SAS interface maximizes transfer rates while dual-stage actuator technology enables fine-tuned read/write accuracy.

Enterprise-class reliability

Engineered for 24x7 operation with 1.2 million hours MTBF, these drives have the highest available reliability ratings on a high-capacity drive.

Compatibility

An ultra-fast 6 Gb/s SAS interface enables easy integration into SAS storage subsystems while delivering twice the interface speed of traditional 3 Gb/s SAS nearline hard drives.

Vibration protection

Enhanced Rotary Acceleration Feed Forward (RAFF™) technology includes sophisticated electronics to monitor the drive and correct both linear and rotational vibration in real time resulting in improved performance and efficiency in densely packed multi-drive systems.

NoTouch™ ramp load technology

The recording head never touches the disk media ensuring significantly less wear to the recording head and media as well as better drive protection in transit.

Enhanced error correction

Full internal IOEDC/IOECC* data integrity protection means the drive finds and corrects potential errors before they ever surface.

Environmentally conscious

In addition to being ROHS compliant, these drives also incorporate a halogen free design.

5-year limited warranty

*Input output error detection code/Input output error correction code

Applications

High-capacity data center storage, storage area networks (SAN), network attached storage (NAS), direct attach storage (DAS), networked surveillance systems, and cloud storage.

PUT YOUR LIFE ON IT®



WD RE SAS

Specifications ¹	2 TB	1 TB
Model number	WD2000FYYG	WD1000FYYG
Interface	SAS 6 Gb/s	SAS 6 Gb/s
Formatted capacity	2 TB	1 TB
User sectors per drive	3,907,029,168	1,953,525,168
SCSI command queuing	Yes	Yes
Form factor	3.5-inch	3.5-inch
RoHS compliant ²	Yes	Yes
Performance		
Data transfer rate (max)		
Buffer to host	6 Gb/s	6 Gb/s
Host to/from drive (sustained)	139 MB/s	139 MB/s
Cache (MB)	32	32
Rotational speed (RPM)	7200	7200
Average drive ready time (sec)	21	21
Reliability/Data Integrity		
Load/unload cycles ³	600,000	600,000
Non-recoverable read errors per bits read	<10 in 10 ¹⁶	<10 in 10 ¹⁶
MTBF (hours) ⁴	1,200,000	1,200,000
Limited warranty (years) ⁵	5	5
Power Management		
Average power requirements (W)		
Sequential read/write	12.8	12.8
Random read/write	12.7	12.7
Idle	9.9	9.9
Environmental Specifications⁶		
Temperature (°C)		
Operating	5 to 55	5 to 55
Non-operating	-40 to 70	-40 to 70
Shock (Gs)		
Operating (2 ms, read/write)	30	30
Operating (2 ms, read)	65	65
Non-operating (2 ms)	300	300
Average acoustics (dBA) ⁷		
Idle mode	29	29
Performance seek mode	34	34
Physical Dimensions		
Height (in./mm, max)	1.028/26.1	1.028/26.1
Length (in./mm, max)	5.787/147	5.787/147
Width (in./mm, ± .01 in.)	4/101.6	4/101.6
Weight (lb./kg, ± 10%)	1.66/0.75	1.66/0.75

¹ As used for storage capacity, one megabyte (MB) = one million bytes, one gigabyte (GB) = one billion bytes, and one terabyte (TB) = one trillion bytes. Total accessible capacity varies depending on operating environment. As used for buffer or cache, one megabyte (MB) = 1,048,576 bytes. As used for transfer rate or interface, megabyte per second (MB/s) = one million bytes per second, and gigabit per second (Gb/s) = one billion bits per second. Effective maximum SAS 6 Gb/s transfer rate calculated according to the SAS specification published by the NCITS T10 organization as of the date of this specification sheet. Visit www.t10.org for details.

² WD hard drive products manufactured and sold worldwide after June 1, 2006, 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 Controlled unload at ambient condition

⁴ 100% workload at 50°C on base casing.

⁵ The term of the limited warranty may vary by region. Visit <http://support.wdc.com/warranty> for details.

⁶ No non-recoverable errors during operating tests or after non-operating tests.

⁷ Sound power level.

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