



Conquer tough workloads with enterprise-class WD Gold™ HDDs. Available in 1TB to 14TB capacities, this highly reliable solution for demanding storage environments provides up to 2.5M hours MTBF, vibration protection technology and a low power draw thanks to HelioSeal™ technology [for 12TB and above]. Specifically designed for use in enterprise-class storage systems and data centers, the WD Gold Enterprise Class SATA HDD delivers the world-class performance you expect from Western Digital® hard drives.

## Beyond Expectations

WD Gold™ hard drives are performance-optimized for heavy application workloads, whether you need 1TB or 14TB. The WD Gold HDD's wide capacity range solves for the most demanding storage environments.

## Enhanced Reliability

With up to 2.5M hours MTBF, WD Gold™ hard drives deliver enhanced levels of dependability and durability. Built for yearly operation (24×7×365) within the most demanding storage environments.

## A World-Class Performer

Delivering excellent service to any storage environment, WD Gold™ hard drives are designed to handle workloads up to 550TB per year – among the highest of any 3.5-inch hard drive.

## Vibration Protection

WD Gold™ has sophisticated monitoring electronics that help correct linear and rotational vibrations in real time using enhanced vibration protection technology for improved performance in high-vibration environments.

## Play Well with Others

Broadly compatible with most PC and major enterprise operating systems. Specifically designed for use in enterprise-class storage systems and data centers.

## 5-Year Limited Warranty

Every WD Gold™ HDD comes with a 5-year limited warranty, so you can be confident in your storage.

## Highlights

- Take on tough workloads; up to 10 times the typical desktop rates
- Enhanced reliability with up to 2.5M hours MTBF
- Specifically designed for use in enterprise-class storage systems and data centers

# Western Digital WD Gold Enterprise Class SATA HDD Product Features and Specifications

Model Number	WD141KRYZ	WD121KRYZ	WD102KRYZ	WD8004FRYZ	WD6003FRYZ	WD4003FRYZ	WD2005FBYZ	WD1005FBYZ
Form Factor	3.5-inch	3.5-inch	3.5-inch	3.5-inch	3.5-inch	3.5-inch	3.5-inch	3.5-inch
Interface	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s
512n / 512e user sectors per drive	512e	512e	512e	512e	512e	512e	512e	512e
Formatted Capacity <sup>1</sup>	14TB	12TB	10TB	8TB	6TB	4TB	2TB	1TB
RoHS compliant <sup>2</sup>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Performance</b>								
Data Transfer Rate <sup>3</sup> (max sustained)	267MB/s	255MB/s	262MB/s	255MB/s	255MB/s	255MB/s	200MB/s	184MB/s
Performance Class	7200 RPM Class	7200 RPM Class	7200 RPM Class	7200 RPM Class	7200 RPM Class	7200 RPM Class	7200 RPM Class	7200 RPM Class
Cache	512MB	256MB	256MB	256MB	256MB	256MB	128MB	128MB
<b>Power Management</b>								
Average power requirements (W)								
Operational	6.0W	6.9W	9.2W	8.8W	7.0W	7.0W	8.1W	8.1W
Idle	5.5W	5.0W	8.0W	7.4W	5.9W	5.9W	5.9W	5.9W
Power efficiency index (W/TB, idle)	0.4	0.4	0.8	0.9	1.0	1.5	3.0	5.9
<b>Reliability</b>								
MTBF (hours)	2,500,000	2,500,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
Annualized Failure Rate (AFR, %)	0.35	0.35	0.44	0.44	0.44	0.44	0.44	0.44
Limited Warranty	5 years	5 years	5 years	5 years	5 years	5 years	5 years	5 years
<b>Environmental</b>								
Operating Temperature	5° C to 60° C	5° C to 60° C	5° C to 60° C	5° C to 60° C	5° C to 60° C	5° C to 60° C	5° C to 60° C	5° C to 60° C
Non-Operating Temperature	-40° C to 70° C	-40° C to 70° C	-40° C to 70° C	-40° C to 70° C	-40° C to 70° C	-40° C to 70° C	-40° C to 70° C	-40° C to 70° C
Shock (Read/Write) Operating (half-sine wave, 2ms)	70G/70G	70G/70G	70G/50G	70G/70G	70G/70G	70G/70G	65G/65G	65G/65G
Non-operating (half-sine wave, 2ms)	300G	300G	250G	300G	300G	300G	300G	300G
Acoustics (average)								
Idle Mode	20 dBA	20 dBA	34 dBA	29 dBA	29 dBA	29 dBA	25 dBA	25 dBA
Seek Mode	36 dBA	36 dBA	38 dBA	36 dBA	36 dBA	36 dBA	28 dBA	28 dBA
<b>Physical Dimensions</b>								
Height (max)	26.1 mm	26.1 mm	26.1 mm	26.1 mm	26.1 mm	26.1 mm	26.1 mm	26.1 mm
Length (max)	147.0 mm	147.0 mm	147.0 mm	147.0 mm	147.0 mm	147.0 mm	147.0 mm	147.0 mm
Width (± .01 in.)	101.6 mm	101.6 mm	101.6 mm	101.6 mm	101.6 mm	101.6 mm	101.6 mm	101.6 mm

<sup>1</sup> As used for storage capacity, one gigabyte (GB) = one billion bytes and one terabyte (TB) = one trillion bytes. Total accessible capacity varies depending on operating environment.

\*\*FORMAT: 512e: Advanced Format drive with 512-byte logical sectors and 4K (4096-byte) physical sectors

<sup>2</sup> Western Digital hard drive products manufactured and sold worldwide after June 8, 2011, meet or exceed Restriction of Hazardous Substances (RoHS) compliance requirements as mandated by the RoHS Directive 2011/65/EU.

<sup>3</sup> Data Transfer Rate: MB/s is 1,000,000 bytes

Cache Buffer: Portion of buffer capacity used for drive firmware.

Operational Power: 8K Queue Depth = 1 @ 40 IOPS

Idle Power: Based on use of Idle\_A

MTBF and AFR: Specifications are based on a sample population and are estimated by statistical measurements and acceleration algorithms under typical operating conditions for this drive model. MTBF and AFR ratings do not predict an individual drive's reliability and do not constitute a warranty.



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