WD Gold®
Enterprise Class SATA HDD

Highlights

- **No compromise storage for any application demanding the best in HDD storage.**

- **A wide range of capacities up to 26TB[1] to meet your enterprise-class storage needs.**

- **Among the highest workload and reliability ratings of any Western Digital® hard drive.**

- **Peace of mind with a 5-year limited warranty.[3]**

Ideal for:

- **Hybrid cloud and colocation storage for small and medium businesses.**

- **Data repatriation efforts requiring rapidly-scalable local or distributed storage.**

- **Demanding applications running high uptime workloads and more complex storage arrays such as RAID and JBODs.**

- **Adding an additional storage layer to strengthen business continuity implementations.**

- **Storing A.I. training data sets and hyperparameter tuning data.**

WD Gold® Enterprise Class SATA HDD

Your Data Is Gold

WD Gold® HDDs incorporate our latest innovations to handle heavy, continuous read-write workloads in the toughest of enterprise and commercial system environments. WD Gold® drives provide the utmost in HDD storage performance, reliability, durability, and capacity-point flexibility to small and medium businesses and design professionals whose mission-critical data and creative output are essential to their success.

Built For Demanding Use Cases

Customize your business's storage mix to fit your specific needs with hard drives in capacities of up to 26TB[1] engineered for demanding applications and read-write workloads of up to 550TB[2] per year.

Enhanced Reliability

With a five-year limited warranty[3] supporting up to 2.5M hours MTBF,[4] WD Gold® hard drives deliver enhanced levels of dependability and durability.

Protection *and* Performance Boost

ArmorCache™ technology (available in 22TB and above) is a Western Digital-only feature that provides enterprise power loss protection of your data in write-cache enabled (WCE) mode while increasing performance in write-cache disabled (WCD) mode.

Continuous Innovation

The WD Gold® 26TB[1] model is built on the world's first 11-disk HDD platform and delivers the 10th generation of HelioSeal® technology, which has proven to be a vital foundation for continuous capacity growth for over a decade.

Robustness For Tough Environments

Our exclusive Rotational Vibration Safeguard (RVS) uses dual sensors to anticipate and counteract disturbances, maintaining peak performance in high-vibration environments.

Flexibility and Peace of Mind

WD Gold® has undergone extensive testing and validation in a variety of host bus adapters, servers, and enterprise storage solutions employing RAID and other data resiliency configurations.

WD Gold® Enterprise Class SATA HDD

Specifications

Model Number	WD261KRYZ	WD242KRYZ	WD241KRYZ	WD221KRYZ	WD203KRYZ	WD202KRYZ
Formatted capacity[1]	26TB	24TB	24TB	22TB	20TB	20TB
Form factor	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
512n / 512e user sectors per drive[5]	512e	512e	512e	512e	512e	512e
OptiNAND™ technology	Yes	Yes	Yes	Yes	No	Yes
ArmorCache™	Yes	Yes	Yes	Yes	No	No
RoHS compliant[6]	Yes	Yes	Yes	Yes	Yes	Yes
Performance						
Data transfer rate[7] (max sustained)	285MB/s	279MB/s	298MB/s	291MB/s	285MB/s	285MB/s
RPM	7200	7200	7200	7200	7200	7200
Cache (MB)[1, 8]	512MB	512MB	512MB	512MB	512MB	512MB
Power Management						
Average power requirements (W)						
Operational[9]	6.7W	6.7W	6.8W	7.1W	6.4W	6.9W
Idle[10]	5.6W	5.6W	5.5W	5.7W	5.3W	5.8W
Power efficiency index (W/TB, idle)	0.22	0.23	0.23	0.26	0.27	0.3
Reliability						
MTBF (hours, projected)[4]	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
Annualized Failure Rate[4] (AFR, %)	0.35	0.35	0.35	0.35	0.35	0.35
Limited Warranty[3]	5 years	5 years	5 years	5 years	5 years	5 years
Environmental						
Operating temperature[11]	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
Shock (Read/Write) Operating (half-sine wave, 2ms)	40G/40G	40G/40G	40G/40G	40G/40G	50G/50G	50G/50G
Non-operating (half-sine wave, 2ms)	200G	200G	200G	200G	250G	250G
Acoustics (average) Idle Mode						
Acoustics (average) Idle Mode	20 dBA	20 dBA	20 dBA	20 dBA	20 dBA	20 dBA
Seek Mode	32 dBA	32 dBA	32 dBA	32 dBA	32 dBA	32 dBA
Physical Dimensions						
Height (max)	26.1mm	26.1mm	26.1mm	26.1mm	26.1mm	26.1mm
Length (max)	147.0mm	147.0mm	147.0mm	147.0mm	147.0mm	147.0mm
Width (± .01 in.)	101.6mm	101.6mm	101.6mm	101.6mm	101.6mm	101.6mm
Weight	1.47 lb (.67 kg) ±10%	1.47 lb (.67 kg) ±10%	1.47 lb (.67 kg) ±10%	1.47 lb (.67 kg) ±10%	1.52 lb (.69 kg) ±10%	1.52 lb (.69 kg) ±10%

WD Gold® Enterprise Class SATA HDD

Model Number	WD181KRYZ	WD161KRYZ	WD142KRYZ	WD122KRYZ	WD121KRYZ	WD103KRYZ
Formatted capacity[1]	18TB	16TB	14TB	12TB	12TB	10TB
Form factor	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
512n / 512e user sectors per drive[5]	512e	512e	512e	512e	512e	512e
OptiNAND™ technology	No	No	No	No	No	No
ArmorCache™	No	No	No	No	No	No
RoHS compliant[6]	Yes	Yes	Yes	Yes	Yes	Yes
Performance						
Data transfer rate[7] (max sustained)	269MB/s	262MB/s	262MB/s	267MB/s	255MB/s	267MB/s
RPM	7200	7200	7200	7200	7200	7200
Cache (MB)[1, 8]	512MB	512MB	512MB	512MB	256MB	512MB
Power Management						
Average power requirements (W)						
Operational[9]	6.5W	6.5W	6.5W	9.2W	6.9W	9.2W
Idle[10]	5.6W	5.6W	5.6W	8.4W	5.0W	8.3W
Power efficiency index (W/TB, idle)	0.31	0.35	0.4	0.7	0.4	0.84
Reliability						
MTBF (hours, projected)[4]	2,500,000	2,500,000	2,500,000	2,000,000	2,500,000	2,000,000
Annualized Failure Rate[4] (AFR, %)	0.35	0.35	0.35	0.44	0.44	0.44
Limited Warranty[3]	5 years	5 years	5 years	5 years	5 years	5 years
Environmental						
Operating temperature[11]	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
Shock (Read/Write) Operating (half-sine wave, 2ms)	50G/50G	50G/50G	50G/50G	70G/70G	70G/70G	70G/70G
Non-operating (half-sine wave, 2ms)	250G	250G	250G	250G	300G	250G
Acoustics (average) Idle Mode						
Acoustics (average) Idle Mode	20 dBA	20 dBA	20 dBA	34 dBA	20 dBA	34 dBA
Seek Mode	36 dBA	36 dBA	36 dBA	39 dBA	36 dBA	39 dBA
Physical Dimensions						
Height (max)	26.1mm	26.1mm	26.1mm	26.1mm	26.1mm	26.1mm
Length (max)	147.0mm	147.0mm	147.0mm	147.0mm	147.0mm	147.0mm
Width (± .01 in.)	101.6mm	101.6mm	101.6mm	101.6mm	101.6mm	101.6mm
Weight	1.52 lb (.69 kg) ±10%	1.52 lb (.69 kg) ±10%	1.52 lb (.69 kg) ±10%	1.65 lb (.75 kg) ±10%	1.46 lb (.66 kg) ±10%	1.65 lb (.75 kg) ±10%

WD Gold® Enterprise Class SATA HDD

Model Number	WD102KRYZ	WD8005FRYZ	WD6004FRYZ	WD4004FRYZ	WD2005FBYZ	WD1005FBYZ
Formatted capacity[1]	10TB	8TB	6TB	4TB	2TB	1TB
Form factor	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
512n / 512e user sectors per drive[5]	512e	512e	512e	512e	512e	512e
OptiNAND™ technology	No	No	No	No	No	No
ArmorCache™	No	No	No	No	No	No
RoHS compliant[6]	Yes	Yes	Yes	Yes	Yes	Yes
Performance						
Data transfer rate[7] (max sustained)	267MB/s	267MB/s	267MB/s	267MB/s	200MB/s	184MB/s
RPM	7200	7200	7200	7200	7200	7200
Cache (MB)[1, 8]	256MB	256MB	256MB	256MB	128MB	128MB
Power Management						
Average power requirements (W)						
Operational[9]	9.2W	8.0W	8.0W	7.0W	8.1W	8.1W
Idle[10]	8.0W	6.7W	6.7W	5.8W	5.9W	5.9W
Power efficiency index (W/TB, idle)	0.8	0.84	1.12	1.45	2.95	3.0
Reliability						
MTBF (hours, projected)[4]	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
Annualized Failure Rate[4] (AFR, %)	0.44	0.44	0.44	0.44	0.44	0.44
Limited Warranty[3]	5 years	5 years	5 years	5 years	5 years	5 years
Environmental						
Operating temperature[11]	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
Shock (Read/Write) Operating (half-sine wave, 2ms)	70G/50G	70G/70G	70G/70G	70G/70G	65G/65G	65G/65G
Non-operating (half-sine wave, 2ms)	300G	300G	300G	300G	300G	300G
Acoustics (average) Idle Mode						
Acoustics (average) Idle Mode	34 dBA	29 dBA	29 dBA	29 dBA	25 dBA	25 dBA
Seek Mode	38 dBA	36 dBA	36 dBA	36 dBA	28 dBA	28 dBA
Physical Dimensions						
Height (max)	26.1mm	26.1mm	26.1mm	26.1mm	26.1mm	26.1mm
Length (max)	147.0mm	147.0mm	147.0mm	147.0mm	147.0mm	147.0mm
Width (± .01 in.)	101.6mm	101.6mm	101.6mm	101.6mm	101.6mm	101.6mm
Weight	1.65 lb (.75 kg) ±10%	1.58 lb (.715 kg) ±10%	1.58 lb (.715 kg) ±10%	1.58 lb (.715 kg) ±10%	1.41 lb (.64 kg) ±10%	1.41 lb (.64 kg) ±10%

[1] 1MB = 1 million bytes, 1GB = 1 billion bytes, and 1TB = 1 trillion bytes. Actual user capacity may be less depending on operating environment.

[2] Workload Rate is defined as the amount of user data transferred to or from the hard drive. Workload Rate is annualized (TB transferred X (8760 / recorded power-on hours)). Workload Rate will vary depending on your hardware and software components and configurations.

[3] See support.wdc.com for region-specific warranty details.

[4] Projected values for model numbers WD261KRYZ, WD242KRYZ, WD203KRYZ, WD122KRYZ, WD103KRYZ. Final MTBF and AFR specifications are based on a sample population and are estimated by statistical measurements and acceleration algorithms under typical operating conditions, workloads of 220TB/year, and 40°C device-reported temperature. Derating of MTBF and AFR will occur above these parameters, up to 550TB/ year and 60°C (device reported temperature). MTBF and AFR ratings do not predict an individual drive's reliability and do not constitute a warranty.

[5] 512e: Advanced Format drive with 512-byte logical sectors and 4K (4096-byte) physical sectors; 512n: Native 512-byte logical and physical sectors.

[6] This drive is in compliance with the European Union Directive 2011/65/EU and Directive (EU) 2015/863 on the restriction of the use of certain hazardous substances (RoHS) in electrical and electronic equipment.

[7] 1 MB/s = 1 million bytes per second. Based on internal testing; performance may vary depending upon host device, usage conditions, drive capacity, logical block address (LBA), and other factors.

[8] Portion of buffer capacity used for drive firmware.

[9] Random RW 50/50 8KB QD=1 @40 IOPS.

[10] Based on use of Idle_A.

[11] 5°C ambient temperature, 60°C device reported temperature.

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