WD Caviar® Green™

Desktop Hard Drives

As hard drive capacities increase, the power required to run those drives increases as well. WD Caviar Green drives make it possible for energy-conscious customers to build systems with higher capacities and the right balance of system performance, ensured reliability, and energy conservation.

INTERFACE
SATA

WIDTH/HEIGHT
3.5-inch/1-inch

ROTATIONAL SPEED
IntelliPower™

CAPACITIES
750 GB to 3 TB

MODEL NUMBERS

WD30EZRX	WD20EARS	WD7500AARX
WD30EZRSDTL	WD15EARX	WD7500AARS
WD25EZRX	WD15EARS	WD7500AADS
WD25EZRSDTL	WD10EARX	
WD20EARX	WD10EARS	

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

Product Features

Massive capacity
WD Caviar Green SATA drives now deliver up to 3 TB of storage on a single drive.

Reduced power consumption
WD has reduced power consumption making it possible for our energy-conscious customers to build systems with higher capacities and the right balance of system performance, ensured reliability, and energy conservation.

Cool and quiet
Drives with WD GreenPower Technology™ yield lower operating temperatures for increased reliability and low acoustics for ultra-quiet PCs and external drives.

Perfect for external drives
External drive manufacturers can eliminate the need for a fan in a high-capacity product with a WD Caviar Green drive, the coolest and quietest in its class.

IntelliPower
A fine-tuned balance of spin speed, transfer rate, and caching algorithms designed to deliver both significant power savings and solid performance. Additionally, WD Caviar Green drives consume less current during startup allowing lower peak loads on systems as they are booted.

IntelliSeek™
Calculates optimum seek speeds to lower power consumption, noise, and vibration.

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.

Advanced Format (AF)
Technology being adopted by WD and other drive manufacturers as one of multiple ways to continue growing hard drive capacities. AF is a more efficient media format that enables increased areal densities. (RX, RS, and RSDTL models only)

Applications

- Desktop PCs, high capacity external storage, and NAS.
- Desktop / Consumer RAID Environments - WD Caviar Green Hard Drives are tested and recommended for use in consumer-type RAID applications (RAID-0 / RAID-1).
  - Business Critical RAID Environments – WD Caviar Green Hard Drives are not recommended for and are not warranted for use in RAID environments utilizing Enterprise HBAs and/or expanders and in multi-bay chassis, as they are not designed for, nor tested in, these specific types of RAID applications. For all Business Critical RAID applications, please consider WD's Enterprise Hard Drives that are specifically designed with RAID-specific, time-limited error recovery (TLER), are tested extensively in 24x7 RAID applications, and include features like enhanced RAFF technology and thermal extended burn-in testing.

WD GreenPower™ TECHNOLOGY

PUT YOUR LIFE ON IT®

WD Caviar Green

Specifications[1]	3 TB	3 TB	2.5 TB	2.5 TB	2 TB	2 TB
Model number	WD30EZRX	WD30EZRSDTL	WD25EZRX	WD25EZRSDTL	WD20EARX	WD20EARS
Interface	SATA 6 Gb/s	SATA 3 Gb/s	SATA 6 Gb/s	SATA 3 Gb/s	SATA 6Gb/s	SATA 3 Gb/s
Formatted capacity	3,000,592 MB	3,000,592 MB	2,500,495 MB	2,500,495 MB	2,000,398 MB	2,000,398 MB
User sectors per drive	5,860,533,168	5,860,533,168	4,883,781,168	4,883,781,168	3,907,029,168	3,907,029,168
Advanced Format (AF)	Yes	Yes	Yes	Yes	Yes	Yes
SATA latching connector	Yes	Yes	Yes	Yes	Yes	Yes
Form factor	3.5-inch	3.5-inch	3.5-inch	3.5-inch	3.5-inch	3.5-inch
RoHS compliant[2]	Yes	Yes	Yes	Yes	Yes	Yes
Performance						
Data transfer rate (max) Buffer to host Host to/from drive (sustained)	 6 Gb/s 123 MB/s	 3 Gb/s 123 MB/s	 6 Gb/s 123 MB/s	 3 Gb/s 123 MB/s	 6 Gb/s 110 MB/s	 3 Gb/s 110 MB/s
Cache (MB)	64	64	64	64	64	64
Rotational speed (RPM)	IntelliPower	IntelliPower	IntelliPower	IntelliPower	IntelliPower	IntelliPower
Reliability/Data Integrity						
Load/unload cycles[3]	300,000	300,000	300,000	300,000	300,000	300,000
Non-recoverable read errors per bits read	<1 in 10^{14}	<1 in 10^{14}	<1 in 10^{14}	<1 in 10^{14}	<1 in 10^{14}	<1 in 10^{14}
Limited warranty (years)[4]	3	3	3	3	3	3
Power Management						
12VDC (A, peak)	1.78	1.78	1.78	1.78	1.75	1.75
Average power requirements (W) Read/write Idle Standby Sleep	 6 5.5 0.8 0.8	 6 5.5 0.8 0.8	 6 5.5 0.8 0.8	 6 5.5 0.8 0.8	 5.3 3.3 0.7 0.7	 5.3 3.3 0.7 0.7
Environmental Specifications[5]						
Temperature (°C) Operating Non-operating	 0 to 60 -40 to 70	 0 to 60 -40 to 70	 0 to 60 -40 to 70	 0 to 60 -40 to 70	 0 to 60 -40 to 70	 0 to 60 -40 to 70
Shock (Gs) Operating (2 ms, read) Operating (2 ms, read/write) Non-operating (1 ms)	 30 65 250	 30 65 250	 30 65 250	 30 65 250	 30 65 250	 30 65 250
Average acoustics (dBA)[6] Idle mode Performance seek mode Quiet seek mode	 24 29 25	 24 29 25	 24 29 25	 24 29 25	 24 29 25	 24 29 25
Physical Dimensions						
Height (in./mm, max)	1.028/25.4	1.028/25.4	1.028/25.4	1.028/25.4	1.028/25.4	1.028/25.4
Length (in./mm, max)	5.787/147	5.787/147	5.787/147	5.787/147	5.787/147	5.787/147
Width (in./mm, ± .01 in.)	4/101.6	4/101.6	4/101.6	4/101.6	4/101.6	4/101.6
Weight (lb./kg, ± 10%)	1.61/0.73	1.61/0.73	1.61/0.73	1.61/0.73	1.40/0.64	1.40/0.64

[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 SATA 3 Gb/s transfer rate calculated according to the Serial ATA specification published by the SATA-IO organization as of the date of this specification sheet. Visit www.sata-io.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] The term of the limited warranty may vary by region. Visit support.wdc.com/warranty for details.

[5] No non-recoverable errors during operating tests or after non-operating tests.

[6] Sound power level.

WD Caviar Green

Specifications[1]	1.5 TB	1.5 TB	1 TB	1 TB	750 GB	750 GB	750 GB
Model number	WD15EARX	WD15EARS	WD10EARX	WD10EARS	WD7500AARX	WD7500AARS	WD7500AADS
Interface	SATA 6 Gb/s	SATA 3 Gb/s	SATA 6 Gb/s	SATA 3 Gb/s	SATA 6 Gb/s	SATA 3 Gb/s	SATA 3 Gb/s
Formatted capacity	1,500,301 MB	1,500,301 MB	1,000,204 MB	1,000,204 MB	750,156 MB	750,156 MB	750,156 MB
User sectors per drive	2,930,277,168	2,930,277,168	1,953,525,168	1,953,525,168	1,465,149,168	1,465,149,168	1,465,149,168
Advanced Format (AF)	Yes	Yes	Yes	Yes	Yes	Yes	No
SATA latching connector	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Form factor	3.5-inch	3.5-inch	3.5-inch	3.5-inch	3.5-inch	3.5-inch	3.5-inch
RoHS compliant[2]	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Performance							
Data transfer rate (max) Buffer to host Host to/from drive (sustained)	 6 Gb/s 110 MB/s	 3 Gb/s 110 MB/s	 6 Gb/s 110 MB/s	 3 Gb/s 110 MB/s	 6 Gb/s 110 MB/s	 3 Gb/s 110 MB/s	 3 Gb/s 110 MB/s
Cache (MB)	64	64	64	64	64	64	32
Rotational speed (RPM)	IntelliPower	IntelliPower	IntelliPower	IntelliPower	IntelliPower	IntelliPower	IntelliPower
Reliability/Data Integrity							
Load/unload cycles[3]	300,000	300,000	300,000	300,000	300,000	300,000	300,000
Non-recoverable read errors per bits read	<1 in 10^{14}	<1 in 10^{14}	<1 in 10^{14}	<1 in 10^{14}	<1 in 10^{14}	<1 in 10^{14}	<1 in 10^{14}
Limited warranty (years)[4]	3	3	3	3	3	3	3
Power Management							
12VDC (A, peak)	1.75	1.75	1.65	1.65	1.65	1.65	1.65
Average power requirements (W) Read/write Idle Standby Sleep	 5.3 3.3 0.7 0.7	 5.3 3.3 0.7 0.7	 5.3 3.3 0.7 0.7	 5.3 3.3 0.7 0.7	 5.3 3.3 0.7 0.7	 5.3 3.3 0.7 0.7	 5.3 3.3 0.7 0.7
Environmental Specifications[5]							
Temperature (°C) Operating Non-operating	 0 to 60 -40 to 70	 0 to 60 -40 to 70	 0 to 60 -40 to 70	 0 to 60 -40 to 70	 0 to 60 -40 to 70	 0 to 60 -40 to 70	 0 to 60 -40 to 70
Shock (Gs) Operating (2 ms, read) Operating (2 ms, read/write) Non-operating (1 ms)	 30 65 250	 30 65 250	 30 65 300	 30 65 300	 30 65 300	 30 65 300	 30 65 300
Average acoustics (dBA)[6] Idle mode Performance seek mode Quiet seek mode	 24 29 25	 24 29 25	 23 27 24	 23 27 24	 23 27 24	 23 27 24	 23 27 24
Physical Dimensions							
Height (in./mm, max)	1.028/25.4	1.028/25.4	1.028/25.4	1.028/25.4	1.028/25.4	1.028/25.4	1.028/25.4
Length (in./mm, max)	5.787/147	5.787/147	5.787/147	5.787/147	5.787/147	5.787/147	5.787/147
Width (in./mm, ± .01 in.)	4/101.6	4/101.6	4/101.6	4/101.6	4/101.6	4/101.6	4/101.6
Weight (lb./kg, ± 10%)	1.40/0.64	1.40/0.64	1.32/0.60	1.32/0.60	1.32/0.60	1.32/0.60	1.32/0.60

[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 SATA 3 Gb/s transfer rate calculated according to the Serial ATA specification published by the SATA-IO organization as of the date of this specification sheet. Visit www.sata-io.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] The term of the limited warranty may vary by region. Visit support.wdc.com/warranty for details.

[5] No non-recoverable errors during operating tests or after non-operating tests.

[6] Sound power level.

WD Caviar Green is part of WD's complete lineup of desktop hard drives.

WD Caviar® Blue™
Desktop Hard Drives
Performance and reliability for everyday computing.

WD Caviar® Green™
Desktop Hard Drives
Cool, quiet, eco-friendly.

WD Caviar® Black™
Desktop Hard Drives
Maximum performance for power computing.

Western Digital
3355 Michelson Drive, Suite 100
Irvine, California 92612
U.S.A.

For service and literature:
http://support.wdc.com
www.westerndigital.com

800.ASK.4WDC	North America
800.832.4778	Spanish
+800.6008.6008	Asia Pacific
00800.27549338	Europe (toll free where available)
+31.880062100	Europe/Middle East/Africa





Canada ICES-003 Class B / NMB-003 Classe B

2879-701229-A21 May 2011