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	WIDTH/HEIGHT	ROTATIONAL SPEED	CAPACITIES
SATA	3.5-inch/1-inch	IntelliPower™	320 GB to 3 TB

MODEL NUMBERS

WD30EZRX	WD10EZRX	WD5000AZRX
WD25EZRX	WD10EARX	WD5000AZDX
WD20EARX	WD10EARS	WD5000AADS
WD20EARS	WD7500AZRX	WD3200AZRX
WD15EARX	WD7500AARX	WD3200AZDX

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, DX, and RS 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®

Specifications[1]	3 TB	2.5 TB	2 TB	2 TB
Model number	WD30EZRX	WD25EZRX	WD20EARX	WD20EARS
Interface	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 3 Gb/s
Formatted capacity	3,000,592 MB	2,500,495 MB	2,000,398 MB	2,000,398 MB
User sectors per drive	5,860,533,168	4,883,781,168	3,907,029,168	3,907,029,168
Advanced Format (AF)	Yes	Yes	Yes	Yes
SATA latching connector	Yes	Yes	Yes	Yes
Form factor	3.5-inch	3.5-inch	3.5-inch	3.5-inch
RoHS compliant[2]	Yes	Yes	Yes	Yes
Performance				

Data transfer rate (max)
  Buffer to host
  Host to/from drive (sustained)
	6 Gb/s
	123 MB/s
		6 Gb/s
		123 MB/s
			6 Gb/s
			110 MB/s
				3 Gb/s
				110 MB/s

Cache (MB)	64	64	64	64
Rotational speed (RPM)	IntelliPower	IntelliPower	IntelliPower	IntelliPower
Reliability/Data Integrity				
Load/unload cycles[3]	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}
Limited warranty (years)[4]	2	2	2	2
Power Management				
12VDC (A, peak)	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
			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

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

Average acoustics (dBA)[6]
  Idle mode
  Performance seek mode
  Quiet seek mode
	24
	29
	25
		24
		29
		25
			24
			29
			25
				24
				29
				25

Physical Dimensions				
Height (in./mm, max)	1.028/26.1	1.028/26.1	1.028/26.1	1.028/26.1
Length (in./mm, max)	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
Weight (lb./kg, ± 10%)	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 RoHS Directive 2011/65/EU.

[3] Controlled unload at ambient condition

[4] The term of the limited warranty may vary by region. Visit http://support.wdc.com/warranty for details.

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

[6] Sound power level.

Specifications[1]	1.5 TB	1 TB	1 TB	1 TB
Model number	WD15EARX	WD10EZRX	WD10EARX	WD10EARS
Interface	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 3 Gb/s
Formatted capacity	1,500,301 MB	1,000,204 MB	1,000,204 MB	1,000,204 MB
User sectors per drive	2,930,277,168	1,953,525,168	1,953,525,168	1,953,525,168
Advanced Format (AF)	Yes	Yes	Yes	Yes
SATA latching connector	Yes	Yes	Yes	Yes
Form factor	3.5-inch	3.5-inch	3.5-inch	3.5-inch
RoHS compliant[2]	Yes	Yes	Yes	Yes
Performance				
Data transfer rate (max) Buffer to host Host to/from drive (sustained)	6 Gb/s 110 MB/s	6 Gb/s 150 MB/s	6 Gb/s 110 MB/s	3 Gb/s 110 MB/s
Cache (MB)	64	64	64	64
Rotational speed (RPM)	IntelliPower	IntelliPower	IntelliPower	IntelliPower
Reliability/Data Integrity				
Load/unload cycles[3]	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}
Limited warranty (years)[4]	2	2	2	2
Power Management				
12VDC (A, peak)	1.75	1.10	1.65	1.65
Average power requirements (W) Read/write Idle Standby Sleep	5.3 3.3 0.7 0.7	3.7 2.1 0.4 0.4	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
Shock (Gs) Operating (2 ms, read) Operating (2 ms, read/write) Non-operating (1 ms)	30 65 250	30 65 350	30 65 300	30 65 300
Average acoustics (dBA)[6] Idle mode Performance seek mode Quiet seek mode	24 29 25	21 22 22	23 27 24	23 27 24
Physical Dimensions				
Height (in./mm, max)	1.028/26.1	1.028/26.1	1.028/26.1	1.028/26.1
Length (in./mm, max)	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
Weight (lb./kg, ± 10%)	1.40/0.64	0.99/0.45	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 RoHS Directive 2011/65/EU.

[3]Controlled unload at ambient condition

[4]The term of the limited warranty may vary by region. Visit http://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]	750 GB	750 GB	500 GB	500 GB	320 GB
Model number	WD7500AZRX	WD7500AARX	WD5000AZRX WD5000AZDX	WD5000AADS	WD3200AZRX WD3200AZDX
Interface	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 3 Gb/s	SATA 6 Gb/s
Formatted capacity	750,156 MB	750,156 MB	500,107 MB	500,107 MB	320,072 MB
User sectors per drive	1,465,149,168	1,465,149,168	976,773,168	976,773,168	625,142,448
Advanced Format (AF)	Yes	Yes	Yes	No	Yes
SATA latching connector	Yes	Yes	Yes	Yes	Yes
Form factor	3.5-inch	3.5-inch	3.5-inch	3.5-inch	3.5-inch
RoHS compliant[2]	Yes	Yes	Yes	Yes	Yes
Performance					

Data transfer rate (max)
  Buffer to host
  Host to/from drive (sustained)
	
	6 Gb/s
	150 MB/s
		
		6 Gb/s
		110 MB/s
			
			6 Gb/s
			150 MB/s
				
				3 Gb/s
				110 MB/s
					
					6 Gb/s
					150 MB/s

Cache (MB)	64	64	64 (WD5000AZRX) 32 (WD5000AZDX)	32	64 (WD3200AZRX) 32 (WD3200AZDX)
Rotational speed (RPM)	IntelliPower	IntelliPower	IntelliPower	IntelliPower	IntelliPower
Reliability/Data Integrity					
Load/unload cycles[3]	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}
Limited warranty (years)[4]	2	2	2	2	2
Power Management					
12VDC (A, peak)	1.10	1.65	1.10	1.65	1.10

Average power requirements (W)
  Read/write
  Idle
  Standby
  Sleep
	
	3.7
	2.1
	0.4
	0.4
		
		5.3
		3.3
		0.7
		0.7
			
			3.7
			2.1
			0.4
			0.4
				
				5.3
				3.3
				0.7
				0.7
					
					3.7
					2.1
					0.4
					0.4

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

Shock (Gs)
  Operating (2 ms, read)
  Operating (2 ms, read/write)
  Non-operating (1 ms)
	
	30
	65
	350
		
		30
		65
		300
			
			30
			65
			350
				
				30
				65
				300
					
					30
					65
					350

Average acoustics (dBA)[6]
  Idle mode
  Performance seek mode
  Quiet seek mode
	
	21
	22
	22
		
		23
		27
		24
			
			21
			22
			22
				
				23
				27
				24
					
					21
					22
					22

Physical Dimensions					
Height (in./mm, max)	1.028/26.1	1.028/26.1	1.028/26.1	1.028/26.1	1.028/26.1
Length (in./mm, max)	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
Weight (lb./kg, ± 10%)	0.99/0.45	1.32/0.60	0.99/0.45	1.32/0.60	0.99/0.45

[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 RoHS Directive 2011/65/EU.

[3] Controlled unload at ambient condition

[4] The term of the limited warranty may vary by region. Visit http://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
Value 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.

N3565

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

2879-701229-A25   Jan 2012

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Solid State Drives - SSD *category:*

Click to view products by Western Design Center (WDC) *manufacturer:*

Other Similar products are found below :

MTFDDAK256MAZ-1AE12ABYY SSDSC2CT120A3K5 MTFDDAC512MAM-1K1 SSDPEKKF010T7X1 ATCA7360-MMOD-SATA2
SQF-S25S2-8G-S9C SQF-SLMM4-128G-S9C 96FD25-S128-TR7 SQF-SMSS4-32G-S8E 96FD25-S512-TR7 SQF-SLMM4-16G-S9E SQF-SDMS4-16G-J6C SQF-S25S4-16G-S9C 96FD80-N128-LIS ASD25-MLC064G-CT-160-1 SQF-SMSU4-32G-S9E SQF-SMSU4-256G-SBE SQF-SMSM4-32G-S9E SQF-SMSM2-8G-S9E SQF-SHMS2-16G-S9C 96ND1T-ST-SG7E SQF-SMSM4-128G-SBE SQF-SMSM2-32G-SBE SQF-S25U4-128G-SBC 96FD-M032-TR71 SQF-SHMM1-32G-SBC SSDSC2BX800G401940785 SSDSCKJB150G701 SDUFD33-016G SD7SN6S-128G-1122 AF512UDI-FLU003 SDLF1DM-800G-1HA1 SM619GED-CDZ SPA31L SD9SN8W-128G-1122 SD9SN8W-128G MTFDDAA120MBB-2AE1ZABYY SSDSC2KR120H6XN SDSDQAD-128G SM668GXB-ACS O1118 SDSDAA-016G SDLF1CRM-016T-1HA1 0T00327 MTFDDAA240MBB-2AE1ZABYY SSDSC2BX200G401940779 SQF-S25V4-240G-SCC SQF-SDMM2-256G-S9E SQF-SHMM2-64G-SBE APSDM001G12AN-PT SQF-SM8V4-240G-SCC 96FD25-ST512G-M13