



WD AV-GP

Power-saving Hard Drives

WD AV-GP SATA hard drives store more hi-def audio and video than ever before – up to 3 TB. They are optimized with SilkStream™ technology to capture data from up to 12 simultaneous HD video streams. And with 24x7 operation, low temperature, and best-in-class reliability, WD AV-GP hard drives are ideal for DVR/PVR and video surveillance applications. 3-year limited warranty.



INTERFACE

SATA 6 Gb/s
SATA 3 Gb/s

WIDTH/HEIGHT

3.5-inch/1-inch

ROTATIONAL SPEED

IntelliPower™

CAPACITIES

160 GB to 3 TB

MODEL NUMBERS

WD30EURS	WD5000AVDS
WD20EURS	WD5000AVCS
WD10EURX	WD3200AVCS
WD10EUCX	WD2500AVCS
WD5000AUDX	WD1600AVCS

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

Product Features

Highest capacity for audio/video storage

WD AV-GP SATA drives now offer unrivaled storage capacity up to 3 TB – perfect for today's storage intensive applications.

24x7 reliability

These drives are designed to last in high temperature always-on streaming digital audio/video environments such as PVR/DVR, IPTV, and video surveillance systems.

Compatible

Tested for compatibility in a broad range of AV products including set top boxes, DVR/PVR, and mainstream video surveillance systems. For drives with greater than 2.19 TB capacity, compatibility is selective to PVRs and surveillance systems that are compatible with hard drives exceeding 2.19 TB. For more information on large capacity drive compatibility, go to <http://avlargecapacitydrives.com>.

Reduced power consumption

WD AV-GP drives consume less power by up to 40 percent compared to 7200 RPM hard drives. Lower power means less heat and greater reliability.

Quiet

Noise levels have been minimized to less than one sone* - virtually below the threshold of human hearing.

SilkStream

Optimized for smooth, continuous digital video playback of up to twelve simultaneous HD streams. SilkStream is compatible with the ATA streaming command set so CE customers can use standard streaming management and error recovery options.

IntelliSeek™

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

IntelliPower™

A fine-tuned balance of spin speed, transfer rate, and caching algorithms designed to deliver both significant power savings and solid performance.

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.

Preemptive Wear Leveling (PWL)

The drive arm frequently sweeps across the disk to reduce uneven wear on the drive surface common to audio video streaming applications.

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. (EURS/EURX/EUCX/AURS/AUDX models only)

1 million hours MTBF

Best-in-class reliability for mainstream 3.5-inch form-factor AV storage.**

* A sone is a subjective unit of loudness as perceived by a person with normal hearing.

** Based upon dual tuner system operating in typical 30°C air ambient environment.





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Specifications	3 TB	2 TB	1 TB	500 GB
Model number	WD30EURS	WD20EURS	WD10EURX WD10EUCX	WD5000AUDX
Formatted capacity ¹	3,000,592 MB	2,000,398 MB	1,000,204 MB	500,107 MB
User sectors per drive	5,860,533,168	3,907,029,168	1,953,525,168	976,773,168
Form factor	3.5-inch	3.5-inch	3.5-inch	3.5-inch
Advanced Format (AF)	Yes	Yes	Yes	Yes
RoHS compliant ²	Yes	Yes	Yes	Yes
Performance				
Data transfer rate (max)				
Buffer to host	3 Gb/s	3 Gb/s	6 Gb/s	6 Gb/s
Host to/from drive (sustained)	145 MB/s	130 MB/s	110 MB/s	130 MB/s
Cache (MB)	64	64	64 (WD10EURX) 16 (WD10EUCX)	32
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	<10 in 10 ¹⁴	<10 in 10 ¹⁴	<10 in 10 ¹⁴	<10 in 10 ¹⁴
Limited warranty (years) ⁴	3	3	3	3
Power Management				
Average power requirements (W)				
Read/Write	4.4	4.4	5.3	3.7
Idle	4.1	4.1	3.3	2.6
Standby and Sleep	0.6	0.6	0.7	0.4
Environmental Specifications⁵				
Temperature (°C, on the base casting)				
Operating	0 to 70	0 to 70	0 to 70	0 to 70
Non-operating	-40 to 70	-40 to 70	-40 to 70	-40 to 70
Shock (Gs)				
Operating (2 ms, read/write)	30	30	30	30
Operating (2 ms, read)	65	65	65	65
Non-operating (2 ms)	250	250	300	350
Acoustics (dBA) ⁶				
Idle	23	23	23	21
Seek (average)	24	24	24	22
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	1.40/0.64	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 6 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.wd.com/warranty> for details.

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

⁶ Sound power level.



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Specifications	500 GB	320 GB	250 GB	160 GB
Model number	WD5000AVDS WD5000AVCS	WD3200AVCS	WD2500AVCS	WD1600AVCS
Formatted capacity ¹	500,107 MB	320,072 MB	251,059 MB	160,041 MB
User sectors per drive	976,773,168	625,142,448	490,350,672	312,581,808
Form factor	3.5-inch	3.5-inch	3.5-inch	3.5-inch
Advanced Format (AF)	No	No	No	No
RoHS compliant ²	Yes	Yes	Yes	Yes
Performance				
Data transfer rate (max) Buffer to host Host to/from drive (sustained)	3 Gb/s 110 MB/s	3 Gb/s 110 MB/s	3 Gb/s 110 MB/s	3 Gb/s 110 MB/s
Cache (MB)	32 (WD5000AVDS) 16 (WD5000AVCS)	16	16	16
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	<10 in 10 ¹⁴	<10 in 10 ¹⁴	<10 in 10 ¹⁴	<10 in 10 ¹⁴
Limited warranty (years) ⁴	3	3	3	3
Power Management				
Average power requirements (W) Read/Write Idle Standby and Sleep	4.1 3.7 0.8	4.1 3.7 0.8	4.1 3.7 0.8	4.1 3.7 0.8
Environmental Specifications⁵				
Temperature (°C, on the base casting) Operating Non-operating	0 to 70 -40 to 70	0 to 70 -40 to 70	0 to 70 -40 to 70	0 to 70 -40 to 70
Shock (Gs) Operating (2 ms, read/write) Operating (2 ms, read) Non-operating (2 ms)	30 65 350	30 65 350	30 65 350	30 65 350
Acoustics (dBA) ⁶ Idle Seek (average)	21 22	21 22	21 22	21 22
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%)	0.97/0.44	0.97/0.44	0.97/0.44	0.97/0.44

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 6 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.

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⁶ Sound power level.

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