

WD AV-25 AV Hard Drives

Engineered to thrive in 24x7 streaming environments

24x7 reliability Low power, compact storage Supports up to five HD streams

WD AV-25 2.5-inch SATA hard drives are specially engineered to offer cool quiet operation while providing maximum reliability in 24x7 always-on environments. With support for up to five simultaneous HD video streams, these drives are perfect for DVRs, set-top boxes and digital video surveillance.





WD AV-25 AV Hard Drives



Product Features

24x7 reliability

These drives are designed to last in always-on streaming digital audio/ video environments such as DVR/ PVR, digital video surveillance and other demanding multimedia 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.

SilkStream[™] technology

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

Ultra-cool operation

A cool drive is a more reliable drive. WD continues to develop new and innovative ways to keep drives cool while they are operating.

Quiet

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

Low power consumption The drive draws less than 2 watts while operating and a mere 4.75 watts during spin up.

1 million hours MTBF Best-in-class reliability for small form-factor AV storage.**

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.

* 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.

Product Specifications

INTERFACE SATA 3 Gb/s

MODELS WD1600BUCT WD2500BUCT WD3200BUCT WD5000BUCT WD5000LUCT WD10JUCT FORM FACTOR 2.5-inch

CAPACITIES 160 GB 250 GB 320 GB 500 GB 1 TB

SPIN SPEED

LIMITED WARRANTY 3 years **CACHE** 8 MB 16 MB

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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 transfer rate or interface, megabyte per second (MB/s) = one million bytes per second, and gigabit per second (Gb/s) = one billion bytes.



WD AV[™] Digital Video Drives

WD AV 2.5-inch (formerly WD AV-25) hard drives are optimized with SilkStream[™] technology to capture data from up to 12 simultaneous HD video streams. With 24x7 operation, low temperature, and best-in-class reliability, WD AV 2.5-inch hard drives are ideal for DVR/PVR, IPTV and digital video surveillance applications requiring smaller form factor hard drives. 3-year limited warranty.



INTERFACE SATA 3 Gb/s FORM FACTOR

HEIGHT 7.0 mm to 9.5 mm ROTATIONAL SPEED 5400 RPM

CAPACITIES 160 GB to 1 TB

MODEL NUMBERS

WD10JUCT WD5000LUCT WD5000BUCT WD3200BUCT WD2500BUCT WD1600BUCT

Product Features

24x7 reliability

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

Advanced Format technology

Leading edge technology delivers improved video quality and AV performance through enhanced error correction capability.

SilkStream

Optimized for smooth, continuous digital video playback of up to 12 simultaneous HD streams. SilkStream is compatible with the ATA streaming command set so CE customers can use standard streaming management and error recovery options.

Ultra-cool operation

A cool drive is a more reliable drive. WD continues to develop new and innovative ways to keep drives cool while they are operating.

Low power consumption

The drive draws less than 2 Watts while operating and a mere 4.75 Watts during spin up.

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.

Quiet

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

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

Applications

Set-top boxes (PVR, DVR and IPTV), and digital video surveillance.

The WD Advantage

WD puts our products through extensive Functional Integrity Testing (FI.T.) prior to any product launch. This testing ensures our products consistently meet the highest quality and reliability standards of the WD brand. WD also has a detailed Knowledge Base with more than 1,000 helpful articles as well as helpful software and utilities. Our customer support lines have longer operational hours to ensure you get the help you need when you need it. Our toll-free customer support lines are here to help or you can access our WD Support site for additional details.



Specifications	1 TB	500 GB	500 GB	320 GB	250 GB	160 GB
Model number	WD10JUCT	WD5000LUCT	WD5000BUCT	WD3200BUCT	WD2500BUCT	WD1600BUCT
Formatted capacity ²	1,000,204 MB	500,107 MB	500,107 MB	320,072 MB	251,059 MB	160,041 MB
User sectors per drive	1,953,525,168	976,773,168	976,773,168	625,142,448	490,350,672	312,581,808
Form factor	2.5-inch	2.5-inch	2.5-inch	2.5-inch	2.5-inch	2.5-inch
Advanced Format (AF)	Yes	Yes	Yes	Yes	Yes	Yes
RoHS compliant ³	Yes	Yes	Yes	Yes	Yes	Yes
Performance						
Data transfer rate (max) Buffer to host Host to/from drive (sustained)	3 Gb/s 144 MB/s	3 Gb/s 147 MB/s	3 Gb/s 136 MB/s	3 Gb/s 116 MB/s	3 Gb/s 116 MB/s	3 Gb/s 116 MB/s
Cache (MB)	16	16	16	16	16	16
Rotational speed (RPM)	5400	5400	5400	5400	5400	5400
Reliability/Data Integrity						
Load/unload cycles ⁴	600,000	600,000	600,000	600,000	600,000	600,000
Non-recoverable read errors per bits read	<10 in 10 ¹⁴	<10 in 1014				
Limited warranty (years) ⁵	3	3	3	3	3	3
Power Management						
Average power requirements (W) Read/Write Idle Standby and Sleep	1.4 0.6 0.2	1.4 0.8 0.1	1.7 0.7 0.2	1.7 0.6 0.2	1.7 0.6 0.2	1.7 0.6 0.2
Environmental Specifications						
Temperature (°C) Operating Non-operating	0 to 60 -40 to 65	0 to 60 -40 to 70	0 to 60 -40 to 65			
Shock (Gs) Operating (2 ms, read) Non-operating (2 ms)	400 1000	400 1000	350 1000	350 1000	350 1000	350 1000
Acoustics (dBA) ⁶ Idle Seek (average)	24 25	17 22	24 25	22 25	22 25	22 25
Physical Dimensions						
Height (in./mm, max)	0.374/9.50	0.28/7.0	0.374/9.50	0.374/9.50	0.374/9.50	0.374/9.50
Length (in./mm, max)	3.94/100.20	3.94/100.20	3.94/100.20	3.94/100.20	3.94/100.20	3.94/100.20
Width (in./mm, ± .01 in.)	2.75/69.85	2.75/69.85	2.75/69.85	2.75/69.85	2.75/69.85	2.75/69.85
Weight (lb./kg, ± 10%)	0.25/0.12	0.20/0.92	0.22/0.10	0.22/0.10	0.22/0.10	0.22/0.10

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

¹ As used for storage capacity, one megatyte (MB) = one million bytes, one gigatyte (GB) = one billion bytes, and one teratopte (TB) = one trillion bytes. Total accessible capacity varies depending on operating environment. As used for buffer or cache, one megatyte (MB) = 1,048,576 bytes. As used for transfer rate or interface, megatyte 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-10 organization as of the date of this specification sheet. Visit www.sata-to.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.

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

For service and literature: http://support.wd.com

www.wd.com

 800.ASK.4WDC
 North America

 (800.275.4932)
 Spanish

 +86.21.2603.7560
 Asia Pacific

 00800.27549338
 Europe (toll free where available)

 +31.880062100
 Europe/Middle East/Africa



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