



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	FORM FACTOR	HEIGHT	ROTATIONAL SPEED	CAPACITIES
SATA 3 Gb/s	2.5-inch	7.0 mm to 9.5 mm	5400 RPM	160 GB to 1 TB
MODEL NUMBERS				
WD10JUCT	WD3200LUCT	WD2500BUCT		
WD5000LUCT	WD3200BUCT	WD1600BUCT		
WD5000BUCT				

Product Features

24x7 reliability

These drives are designed to last in high temperature always-on 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 allowing CE customers to 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 operate.

Low power consumption

These drives draw less than 2 Watts while operating, and draw 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, an occurrence 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 hearing.

Applications

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

The WD Advantage

WD puts our products through extensive Functional Integrity Testing (F.I.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 that you get the help that 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	320 GB	250 GB	160 GB
Model number	WD10JUCT	WD5000LUCT	WD5000BUCT	WD3200LUCT	WD3200BUCT	WD2500BUCT	WD1600BUCT
Formatted capacity ¹	1,000,204 MB	500,107 MB	500,107 MB	320,072 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	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	2.5-inch
Advanced Format (AF)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
RoHS compliant ²	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Performance							
Data transfer rate (max)							
Buffer to host	3 Gb/s	3 Gb/s	3 Gb/s	3 Gb/s	3 Gb/s	3 Gb/s	3 Gb/s
Host to/from drive (sustained)	144 MB/s	147 MB/s	136 MB/s	147 MB/s	116 MB/s	116 MB/s	116 MB/s
Cache (MB)	16	16	16	16	16	16	16
Rotational speed (RPM)	5400	5400	5400	5400	5400	5400	5400
Reliability/Data Integrity							
Load/unload cycles ³	600,000	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 10 ¹⁴	<10 in 10 ¹⁴	<10 in 10 ¹⁴	<10 in 10 ¹⁴	<10 in 10 ¹⁴	<10 in 10 ¹⁴
Limited warranty (years) ⁴	3	3	3	3	3	3	3
Power Management							
Average power requirements (W)							
Read/Write	1.4	1.4	1.7	1.4	1.7	1.7	1.7
Idle	0.6	0.8	0.7	0.8	0.6	0.6	0.6
Standby and Sleep	0.2	0.1	0.2	0.1	0.2	0.2	0.2
Environmental Specifications⁵							
Temperature (°C)							
Operating	0 to 60	0 to 60	0 to 60	0 to 60	0 to 60	0 to 60	0 to 60
Non-operating	-40 to 65	-40 to 70	-40 to 65	-40 to 70	-40 to 65	-40 to 65	-40 to 65
Shock (Gs)							
Operating (2 ms, read)	400	400	350	400	350	350	350
Non-operating (2 ms)	1000	1000	1000	1000	1000	1000	1000
Acoustics (dBA) ⁶							
Idle	24	17	24	17	22	22	22
Seek (average)	25	22	25	22	25	25	25
Physical Dimensions							
Height (in./mm, max)	0.374/9.50	0.27/6.8	0.374/9.50	0.27/6.8	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	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	2.75/69.85
Weight (lb/kg, ± 10%)	0.25/0.12	0.20/0.09	0.22/0.10	0.20/0.09	0.22/0.10	0.22/0.10	0.22/0.10

¹ Not all products may be available in all regions of the world.

² 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.

³ 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.

⁴ Controlled unload at ambient condition.

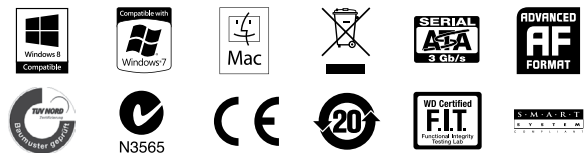
⁵ The term of the limited warranty may vary by region. Visit <http://support.wd.com/warranty> for details.

⁶ No non-recoverable errors during operating tests or after non-operating tests.

⁷ Sound power level.

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