WD AV-25

AV Hard Drives

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.

INTERFACE

SATA

WIDTH/HEIGHT

2.75 in./0.37 in.
(69.85 mm/9.5 mm)

ROTATIONAL SPEED

5400 RPM

CAPACITIES

160 GB to 1 TB

MODEL NUMBERS

WD10JUCT
WD5000BUDT
WD5000BUCT
WD3200BUDT
WD3200BUCT
WD2500BUDT
WD2500BUCT
WD1600BUCT

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

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 Technology

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

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.

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Specifications	1 TB	500 GB	500 GB	320 GB	250 GB	160 GB
Model number	WD10JUCT	WD5000BUDT	WD5000BUCT	WD3200BUDT WD3200BUCT	WD2500BUDT WD2500BUCT	WD1600BUCT
Interface	SATA 3 Gb/s	SATA 3 Gb/s	SATA 3 Gb/s	SATA 3 Gb/s	SATA 3 Gb/s	SATA 3 Gb/s
Formatted capacity[1]	1,000,204 MB	500,107 MB	500,107 MB	320,072 MB	250,059 MB	160,041 MB
User sectors per drive	1,953,525,168	976,773,168	976,773,168	625,142,448	488,397,168	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[2]	Yes	Yes	Yes	Yes	Yes	Yes
Performance						
Data transfer rate (max)[3] Buffer to host Host to/from drive (sustained)	 3 Gb/s 144 MB/s	 3 Gb/s 121 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	32	16	32 (WD3200BUDT) 16 (WD3200BUCT)	32 (WD2500BUDT) 16 (WD2500BUCT)	16
Rotational speed (RPM)	5400	5400	5400	5400	5400	5400
Average drive ready time (sec)	3.5	4	4	4	4	4
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	<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)[5]	3	3	3	3	3	3
Power Management						
5VDC ±10% (A, peak)	0.900	0.950	0.975	1.00	1.00	1.00
Average power requirements (W) Read/Write Idle Standby/Sleep	 1.4 0.59 0.18	 1.6 0.65 0.20	 1.7 0.65 0.20	 2.5 0.85 0.20	 2.5 0.85 0.20	 2.5 0.85 0.20
Environmental Specifications[6]						
Temperature (°C) Operating Non-operating	 0 to 60 -40 to 65	 0 to 60 -40 to 65	 0 to 60 -40 to 65	 0 to 60 -40 to 65	 0 to 60 -40 to 65	 0 to 60 -40 to 65
Shock (Gs) Operating (2 ms, read) Non-operating (2 ms)	 400 1000	 350 1000	 350 1000	 350 1000	 350 1000	 350 1000
Average acoustics (dBA)[7] Idle mode Average seek mode	 24 25	 22 25	 22 25	 22 25	 22 25	 22 25
Physical Dimensions						
Height (in./mm, max)	0.374/9.50	0.374/9.50	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	0.22/0.10	0.22/0.10	0.22/0.10	0.22/0.10	0.22/0.10

[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] Maximum burst rate running the Mode 5 Ultra ATA transfer mode.

[4] Controlled unload at ambient condition.

[5] The term of the limited warranty may vary by region. Visit support.wdc.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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