



## WD AV™ Digital Video Drives

WD AV (formally WD AV-GP) SATA hard drives store more hi-def audio and video than ever before – up to 4 TB. They are optimized with SilkStream™ technology to capture data from up to 16 simultaneous HD video streams. With 24x7 operation, low temperature, and best-in-class reliability, WD AV hard drives are ideal for DVR/PVR and IPTV applications. 3-year limited warranty.



### INTERFACE

SATA 6 Gb/s  
SATA 3 Gb/s

### FORM FACTOR

3.5-inch

### ROTATIONAL SPEED

IntelliPower™

### CAPACITIES

160 GB to 4 TB

### MODEL NUMBERS

|          |            |            |
|----------|------------|------------|
| WD40EURX | WD20EURS   | WD5000AVCS |
| WD30EURX | WD10EURX   | WD3200AVCS |
| WD30EURS | WD5000AUDX | WD2500AVCS |
| WD20EURX | WD5000AVDS | WD1600AVCS |

## Product Features

### Highest capacity for audio/video storage

WD AV SATA drives now offer unrivaled storage capacity up to 4 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 and IPTV systems.

### Low Capacity Surveillance

WD AV drives offer 500 GB and lower capacities suitable for low profile entry level surveillance systems requiring reliability in always on environments.

### Reduced power consumption

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

### SilkStream

Optimized for smooth, continuous digital video playback of up to 16 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.

### Advanced Format (AF)

Technology 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/AUDX models only)

### 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, NVR and IPTV), media servers and media centers.

## 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 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                                  | 4 TB                    | 3 TB                           | 2 TB                           | 1 TB                    | 500 GB                  |
|-------------------------------------------------|-------------------------|--------------------------------|--------------------------------|-------------------------|-------------------------|
| Model number <sup>1</sup>                       | WD40EURX                | WD30EURX<br>WD30EURS           | WD20EURX<br>WD20EURS           | WD10EURX                | WD5000AUDX              |
| Formatted capacity <sup>2</sup>                 | 4 TB                    | 3 TB                           | 2 TB                           | 1 TB                    | 500,107 MB              |
| User sectors per drive                          | 7,814,037,168           | 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                | 3.5-inch                |
| Advanced Format (AF)                            | Yes                     | Yes                            | Yes                            | Yes                     | Yes                     |
| RoHS compliant <sup>3</sup>                     | Yes                     | Yes                            | Yes                            | Yes                     | Yes                     |
| <b>Performance</b>                              |                         |                                |                                |                         |                         |
| Data transfer rate (max)                        |                         |                                |                                |                         |                         |
| Buffer to host                                  | 6 Gb/s                  | 6 Gb/s (EURX)<br>3 Gb/s (EURS) | 6 Gb/s (EURX)<br>3 Gb/s (EURS) | 6 Gb/s                  | 6 Gb/s                  |
| Host to/from drive (sustained)                  | 150 MB/s                | 145 MB/s                       | 130 MB/s                       | 110 MB/s                | 130 MB/s                |
| Cache (MB)                                      | 64                      | 64                             | 64                             | 64                      | 32                      |
| Rotational speed (RPM)                          | IntelliPower            | IntelliPower                   | IntelliPower                   | IntelliPower            | IntelliPower            |
| <b>Reliability/Data Integrity</b>               |                         |                                |                                |                         |                         |
| Load/unload cycles <sup>4</sup>                 | 300,000                 | 300,000                        | 300,000                        | 300,000                 | 300,000                 |
| Non-recoverable read errors per bits read       | <10 in 10 <sup>14</sup> | <10 in 10 <sup>14</sup>        | <10 in 10 <sup>14</sup>        | <10 in 10 <sup>14</sup> | <10 in 10 <sup>14</sup> |
| Limited warranty (years) <sup>5</sup>           | 3                       | 3                              | 3                              | 3                       | 3                       |
| <b>Power Management</b>                         |                         |                                |                                |                         |                         |
| Average power requirements (W)                  |                         |                                |                                |                         |                         |
| Read/Write                                      | 5.1                     | 4.4                            | 4.4                            | 5.3                     | 3.7                     |
| Idle                                            | 4.5                     | 4.1                            | 4.1                            | 3.3                     | 2.6                     |
| Standby and Sleep                               | 0.5                     | 0.6                            | 0.6                            | 0.7                     | 0.4                     |
| <b>Environmental Specifications<sup>6</sup></b> |                         |                                |                                |                         |                         |
| Temperature (°C, on the base casting)           |                         |                                |                                |                         |                         |
| Operating                                       | 0 to 65                 | 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               | -40 to 70               |
| Shock (Gs)                                      |                         |                                |                                |                         |                         |
| Operating (2 ms, read/write)                    | 30                      | 30                             | 30                             | 30                      | 30                      |
| Operating (2 ms, read)                          | 65                      | 65                             | 65                             | 65                      | 65                      |
| Non-operating (2 ms)                            | 250                     | 250                            | 250                            | 300                     | 350                     |
| Acoustics (dBA) <sup>7</sup>                    |                         |                                |                                |                         |                         |
| Idle                                            | 26                      | 23                             | 23                             | 23                      | 21                      |
| Seek (average)                                  | 27                      | 24                             | 24                             | 24                      | 22                      |
| <b>Physical Dimensions</b>                      |                         |                                |                                |                         |                         |
| 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%)                          | 1.50/0.68               | 1.61/0.73                      | 1.40/0.64                      | 1.32/0.60               | 0.99/0.45               |

<sup>1</sup> Not all products may be available in all regions of the world.

<sup>2</sup> 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](http://www.sata-io.org) for details.

<sup>3</sup> WD hard drive products manufactured and sold worldwide after June 8, 2011, meet or exceed Restriction of Hazardous Substances (RoHS) compliance requirements as mandated by the RoHS Directive 2011/65/EU.

<sup>4</sup> Controlled unload at ambient condition.

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

<sup>6</sup> No non-recoverable errors during operating tests or after non-operating tests.

<sup>7</sup> Sound power level.



# WD AV™

| Specifications                                                                               | 500 GB                             | 320 GB                  | 250 GB                  | 160 GB                  |
|----------------------------------------------------------------------------------------------|------------------------------------|-------------------------|-------------------------|-------------------------|
| Model number <sup>1</sup>                                                                    | WD5000AVDS<br>WD5000AVCS           | WD3200AVCS              | WD2500AVCS              | WD1600AVCS              |
| Formatted capacity <sup>2</sup>                                                              | 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 <sup>3</sup>                                                                  | Yes                                | Yes                     | Yes                     | Yes                     |
| <b>Performance</b>                                                                           |                                    |                         |                         |                         |
| Data transfer rate (max)<br>Buffer to host<br>Host to/from drive (sustained)                 | 3 Gb/s<br>110 MB/s                 | 3 Gb/s<br>110 MB/s      | 3 Gb/s<br>110 MB/s      | 3 Gb/s<br>110 MB/s      |
| Cache (MB)                                                                                   | 32 (WD5000AVDS)<br>16 (WD5000AVCS) | 16                      | 16                      | 16                      |
| Rotational speed (RPM)                                                                       | IntelliPower                       | IntelliPower            | IntelliPower            | IntelliPower            |
| <b>Reliability/Data Integrity</b>                                                            |                                    |                         |                         |                         |
| Load/unload cycles <sup>4</sup>                                                              | 300,000                            | 300,000                 | 300,000                 | 300,000                 |
| Non-recoverable read errors per bits read                                                    | <10 in 10 <sup>14</sup>            | <10 in 10 <sup>14</sup> | <10 in 10 <sup>14</sup> | <10 in 10 <sup>14</sup> |
| Limited warranty (years) <sup>5</sup>                                                        | 3                                  | 3                       | 3                       | 3                       |
| <b>Power Management</b>                                                                      |                                    |                         |                         |                         |
| Average power requirements (W)<br>Read/Write<br>Idle<br>Standby and Sleep                    | 4.1<br>3.7<br>0.8                  | 4.1<br>3.7<br>0.8       | 4.1<br>3.7<br>0.8       | 4.1<br>3.7<br>0.8       |
| <b>Environmental Specifications<sup>6</sup></b>                                              |                                    |                         |                         |                         |
| Temperature (°C, on the base casting)<br>Operating<br>Non-operating                          | 0 to 70<br>-40 to 70               | 0 to 70<br>-40 to 70    | 0 to 70<br>-40 to 70    | 0 to 70<br>-40 to 70    |
| Shock (Gs)<br>Operating (2 ms, read/write)<br>Operating (2 ms, read)<br>Non-operating (2 ms) | 30<br>65<br>350                    | 30<br>65<br>350         | 30<br>65<br>350         | 30<br>65<br>350         |
| Acoustics (dBA)<br>Idle<br>Seek (average)                                                    | 21<br>22                           | 21<br>22                | 21<br>22                | 21<br>22                |
| <b>Physical Dimensions</b>                                                                   |                                    |                         |                         |                         |
| 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               |

<sup>1</sup> Not all products may be available in all regions of the world.

<sup>2</sup> 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](http://www.sata-io.org) for details.

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<sup>6</sup> No non-recoverable errors during operating tests or after non-operating tests.

<sup>7</sup> Sound power level.

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