# WD Purple™

## Surveillance Hard Drives




WD Purple Surveillance Storage is built for 24/7 always-on surveillance in high-definition security systems that use up to eight hard drives and up to 32 cameras. Exclusive AllFrame™ technology works with ATA streaming to reduce error pixilation and video interruptions that occur when desktop hard drives are incorrectly used as storage in security systems.

| INTERFACE | FORM FACTOR | ROTATIONAL SPEED | CAPACITIES |
|---|---|---|---|
| SATA 6 Gb/s | 3.5-inch | IntelliPower™ | 1 TB to 4 TB |

MODEL NUMBERS

WD40PURX
WD30PURX
WD20PURX
WD10PURX

AB Electronics SRL - 0831/6556.29

## Product Features

**Desktop drives vs. surveillance-class storage**

WD Purple surveillance-class storage has been tested to be compatible in a wide-range of security systems. These drives are designed to replace standard desktop drives that were not designed for the harsh 24/7 always-on, high-definition surveillance environment. Desktop drives are built to run for only short intervals and are not engineered to withstand high-temperature fluctuations and equipment vibrations found in a typical surveillance application.

**Surveillance storage for peace-of-mind**

Whether you're protecting your personal assets and loved ones or monitoring the business you worked hard to build, you can rely on surveillance-class storage built by one of the largest hard drive manufacturers in the world.
WD Purple Surveillance Hard Drives are designed for high temperature, always-on, surveillance security systems to ensure reliability and quality video play back when you need it most. Experience the security of knowing you're using a surveillance–class drive designed by a leader in the hard drive industry.

**Improve performance with AllFrame**

WD Purple surveillance-class hard drives are equipped with AllFrame technology which works with ATA streaming to reduce frame loss, improve playback and increases the number of drive bays supported. AllFrame reduces video interruptions that commonly occur when desktop hard drives are incorrectly used as storage in security systems. Missed frames and lost footage is a serious problem when an event occurs and surveillance footage needs to be retrieved. WD Purple with AllFrame provides the confidence you should expect when it's time to play back and review critical surveillance footage.

**Engineered for compatibility**

WD Purple surveillance hard drives are built for compatibility with industry-leading chassis and chip set manufacturers for seamless integration into your new or existing video surveillance system.

**Optimized performance for up to 32 HD cameras**

WD Purple hard drives are optimized to support up to 32 high-definition surveillance cameras, giving you the flexibility to upgrade and expand your security system in the future.

**Lower power consumption**

Low power consumption is crucial in high-temperature always-on surveillance environments. With exclusive IntelliSeek™ technology, WD Purple drives calculate the optimum seek speeds which lowers power consumption, noise and vibration that can damage and cause drives to wear out more quickly. When you invest in a premium surveillance-class drive you worry less while enjoying the benefits over a longer period of time.

**3-year limited warranty (worldwide)**

Trust a company with the confidence to stand behind their surveillance storage products with a 3-year limited warranty worldwide.

**1 million hours MTBF**

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

* Based upon drive/user system operating in typical 30°C air ambient environment.

## 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.

absolutely

# WD Purple™

| Specifications | 4 TB | 3 TB | 2 TB | 1 TB |
|---|---|---|---|---|
| Model number[1] | WD40PURX | WD30PURX | WD20PURX | WD10PURX |
| Formatted capacity[2] | 4 TB | 3 TB | 2 TB | 1 TB |
| User sectors per drive | 7,814,037,168 | 5,860,533,168 | 3,907,029,168 | 1,953,525,168 |
| Form factor | 3.5-inch | 3.5-inch | 3.5-inch | 3.5-inch |
| Advanced Format (AF) | Yes | Yes | Yes | Yes |
| RoHS compliant[3] | Yes | Yes | Yes | Yes |
| **Performance** | | | | |
| Data transfer rate (max)<br>Buffer to host<br>Host to/from drive (sustained) | <br>6 Gb/s<br>150 MB/s | <br>6 Gb/s<br>145 MB/s | <br>6 Gb/s<br>145 MB/s | <br>6 Gb/s<br>110 MB/s |
| Cache (MB) | 64 | 64 | 64 | 64 |
| Rotational speed (RPM) | IntelliPower | IntelliPower | IntelliPower | IntelliPower |
| **Reliability/Data Integrity** | | | | |
| Load/unload cycles[4] | 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)[5] | 3 | 3 | 3 | 3 |
| **Power Management** | | | | |
| Average power requirements (W)<br>Read/Write<br>Idle<br>Standby and Sleep | <br>5.1<br>4.5<br>0.5 | <br>4.4<br>4.1<br>0.6 | <br>4.4<br>4.1<br>0.6 | <br>3.3<br>2.9<br>0.7 |
| **Environmental Specifications**[6] | | | | |
| Temperature (°C, on the base casting)<br>Operating<br>Non-operating | <br>0 to 65<br>-40 to 70 | <br>0 to 65<br>-40 to 70 | <br>0 to 65<br>-40 to 70 | <br>0 to 65<br>-40 to 70 |
| Shock (Gs)<br>Operating (2 ms, read/write)<br>Operating (2 ms, read)<br>Non-operating (2 ms) | <br>30<br>65<br>250 | <br>30<br>65<br>250 | <br>30<br>65<br>250 | <br>30<br>65<br>350 |
| Acoustics (dBA)[7]<br>Idle<br>Seek (average) | <br>25<br>26 | <br>23<br>24 | <br>23<br>24 | <br>21<br>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%) | 1.50/0.68 | 1.40/0.64 | 1.40/0.64 | 0.99/0.45 |

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 6 Gb/s transfer rate calculated according to the SerialATA 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 8, 2011, 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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**For service and literature:**

http://support.wd.com
www.wd.com

| | |
|---|---|
| 800.ASK.4WDC<br>(800.275.4932) | North America |
| 800.832.4778 | Spanish |
| +800.6008.6008 | Asia Pacific |
| 00800.27549338 | Europe<br>(toll free where available) |
| +31.880062100 | Europe/Middle East/Africa |

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**Canada ICES-003 Class B / NMB-003 Classe B**

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