



The next-generation WD Purple™ hard drives with high-density recording technology (SMR) are purpose-built for the 24/7, always-on, high-definition, security DVR and NVR systems. The new high-density recording technology delivers among the highest density storage available in a hard drive solution for security video. Using AllFrame™ technology, WD Purple™ hard drives improve video capturing and helps reduce errors, pixelation, and video interruptions that could happen in a video recorder system.

### Industry-leading storage. Reliability you can trust.

Western Digital is a global leader in the data storage industry. We engineered the WD Purple hard drive specifically to meet the myriad of requirements for security video systems that operate 24/7, including temperature, humidity, vibration, and read/write performance requirements. Whether you're protecting loved ones or monitoring your business, WD Purple hard drives offer the reliability and performance you can trust.

### More Data, Better Efficiency

The new higher density WD Purple hard drive provides higher density while maintaining high performance and reducing the number of platters, which leads to lower power and improved cost-efficiency over previous generations. The result will help deliver more optimal \$/GB and W/GB. With this new generation of WD Purple hard drives, leading security video DVR and NVR OEMs, system integrators, and VARs will be able to deliver improved cost and power efficiency in their solutions.

### Designed for Today's and Tomorrow's Surveillance Solutions

Our advanced high-density recording technology architecture allows us to deliver improved density together with sustained high performance for mainstream security video DVRs and NVRs that operate 24/7. It is now possible to provide more value in the mainstream security video solutions. Besides, with support for more than eight bays<sup>1</sup> and tarnish-resistant components<sup>1</sup>, WD Purple hard drives deliver reliable operations in large scale security video systems in harsh environments.

### Western Digital's Exclusive AllFrame Technology

All WD Purple hard drives are equipped with AllFrame™ technology, which improves ATA streaming to help reduce frame loss, improves overall video playback, and increases the number of hard drive bays supported within an NVR. Help make your security video solution future-ready knowing that WD Purple drives are ready for ultra-high definition cameras.

### Enhanced Workload Ratings

WD Purple hard drives with AllFrame™ 4K technology feature a workload rating of up to 180TB/year - up to three times that of desktop drives - to handle the unique demands of modern video.

### Three Year Limited Warranty

As an industry-leading data storage manufacturer in flash and hard drives, Western Digital stands behind our storage solutions with a 3-year limited warranty included with every WD Purple drive.

## Highlights

- 2 TB/platter high density
- Enhanced performance capability for mainstream DVR/NVR market
- Improved storage power and cost efficiency over previous generation
- AllFrame™ technology
- 3-year limited warranty

INTERFACE SATA 6 Gb/s	PERFORMANCE CLASS 5400 RPM Class
FORM FACTOR 3.5-inch and 6TB	CAPACITIES 2TB, 4TB
MODEL NUMBERS WD21PURX    WD41PURX    WD61PURX	

### THE WESTERN DIGITAL ADVANTAGE

Western Digital 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 Western Digital brand.

Western Digital also has a detailed Knowledge Base with more than 1,000 helpful articles as well as software and utilities. Our customer support lines have long operational hours to ensure you get the help you need when you need

Specifications

		6TB	4TB	2TB	
<b>PRODUCT</b>	Model number <sup>2</sup>	WD61PURX	WD41PURX	WD21PURX	
	Interface	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	
	Formatted capacity <sup>3</sup>	6TB	4TB	2TB	
	Form factor	3.5-inch	3.5-inch	3.5-inch	
	Advanced Format (AF)	Yes	Yes	Yes	
	Drive Management SMR	Yes	Yes	Yes	
	Host Password Locked	Locked	Locked	Locked	
	RoHS compliant <sup>4</sup>	Yes	Yes	Yes	
<b>FEATURES</b>	Cameras Supported	32	32	32	
	Maximum drive bays supported	8+	8+	8	
	AI Streams	-	-	-	
	Firmware Feature Name	AllFrame 4K	AllFrame 4K	AllFrame 4K	
<b>PERFORMANCE</b>	Tarnish-resistant components <sup>1</sup>	Yes	Yes	No	
	Interface transfer rate (max) <sup>3</sup>	Buffer to host	6 Gb/s	6 Gb/s	6 Gb/s
		Host to / from drive	180 MB/s	180 MB/s	180 MB/s
	Cache (MB) <sup>3</sup>	256 MB	256 MB	256 MB	
<b>RELIABILITY / DATA INTEGRITY</b>	Performance Class	5400-RPM Class	5400-RPM Class	5400-RPM Class	
	Load/unload cycles <sup>5</sup>	300,000	300,000	300,000	
	Annualized Workload rating <sup>6</sup> (TB/year)	180 TB/year	180 TB/year	180 TB/year	
	Non-recoverable read errors per bits read	<1 in 10 <sup>14</sup>	<1 in 10 <sup>14</sup>	<1 in 10 <sup>14</sup>	
	MTBF	1,000,000	1,000,000	1,000,000	
	Limited warranty (years) <sup>7</sup>	3 years	3 years	3 years	
<b>POWER MANAGEMENT<sup>8</sup></b>	Average Power (W)	Read/Write	5.0 W	5.0 W	5 W
		Idle	4.5 W	4.5 W	4.5 W
		Standby/Sleep	0.4 W	0.4 W	0.4 W
<b>ENVIRONMENTAL SPECIFICATIONS<sup>9</sup></b>	Temperature	Operating <sup>10</sup>	0°C to 65°C	0°C to 65°C	0°C to 65°C
		Non-operating	-40°C to 70°C	-40°C to 70°C	-40°C to 70°C
	Shock	Operating (2 ms, read/write)	70Gs	70Gs	70Gs
		Operating (2 ms, read)	70Gs	70Gs	70Gs
		Non-operating (2 ms)	250Gs	250Gs	350Gs
<b>ACOUSTICS (DBA)<sup>11</sup></b>	Idle	dBA	23	23	21
	Seek (average)	dBA	27	27	22
<b>PHYSICAL DIMENSIONS</b>	Height (max)	(in / mm)	1.028 / 26.1	1.028 / 26.1	1.028 / 26.1
	Length (max)	(in / mm)	5.787 / 147	5.787 / 147	5.787 / 147
	Width (± .01 in.)	(in / mm)	4 / 101.6	4 / 101.6	4 / 101.6
	Weight (± 3%)	(lb / kg)	1.40 / 0.64	1.26 / 0.57	0.99 / 0.45

- Supported on 4TB and 6TB only.
- Not all products may be available in all regions of the world.
- As used for storage capacity, 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.
- 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.
- Controlled unload at ambient condition.

6. Workload Rate is defined as the amount of user data transferred to or from the hard drive. Workload Rate is annualized (TB transferred X (8760 / recorded power-on hours)). Workload Rate will vary depending on your hardware and software components and configurations.
7. See <http://support.wdc.com/warranty> for regional specific warranty details.
8. Power measurements at room-ambient temperature.
9. No non-recoverable errors during operating tests or after non- operating tests.
10. On the base casting.
11. Sound power level.
12. [www.uniview.com](http://www.uniview.com)