



WD Purple™ AI drives are built for 24/7, always-on, high-definition security systems. WD Purple™ AI surveillance storage feature Western Digital's exclusive AllFrame™ AI technology, so you can confidently create a security system tailored to the needs of your business. Using AllFrame™ AI technology, WD Purple™ AI drives improve video capturing and help to reduce errors, pixelation, and video interruptions that could happen in a video recorder system. WD Purple AI drives have an enhanced workload rating that supports systems designed for 24x7 video recording with up to 64 cameras.

Industry-leading storage. Surveillance you can trust.

Western Digital is a worldwide leader in the hard drive industry. With WD Purple surveillance storage, you have a drive engineered for high temperature, always-on surveillance systems so you can rely on quality video playback when you need it most. Whether you're protecting loved ones or monitoring your business, WD Purple offers performance you can trust.

Western Digital's Exclusive AllFrame AI Technology

All WD Purple AI drives are equipped with AllFrame AI technology, which improves ATA streaming to help reduce frame loss, improve overall video playback, and increase the number of hard drive bays supported within a NVR. Make your surveillance solution future-ready knowing that WD Purple AI drives are ready for ultra high definition cameras.

Enhanced Workload Ratings

WD Purple AI drives with AllFrame AI technology feature a workload rating of up to 360TB/year - up to three times that of desktop drives - to handle the unique demands of modern video surveillance

Highlights

- Perfect satisfy High-end AI-NVR
- Support for up to 64 cameras per drive
- AllFrame™ AI technology
- Up to 16 AI channels, highly improve user experience for AI-NVR video analytics and indexing
- MTBF of up to 1.5 million hours
- 5-year limited warranty

INTERFACE	PERFORMANCE CLASS
SATA 6 Gb/s	7200RPMClass
FORM FACTOR	CAPACITIES
3.5-inch	10TB

WD102PURX

Expand your view to 64

Each WD Purple AI drive is optimized to support up to 64 cameras. With so many options, you have the flexibility to upgrade or expand your security system in the future.

Designed for Today's and Tomorrow's Surveillance Solutions

With an MTBF of up to 1.5 million hours¹, WD Purple AI drives are engineered for mainstream surveillance AI DVRs and NVRs that operate 24/7. With support for more than sixteen bays² and tarnish resistant components², WD Purple AI drives deliver reliable operation in large scale surveillance systems in harsh environments.

Wide Compatibility. Seamless Integration.

WD Purple AI hard drives are built with compatibility in mind, so you can quickly and seamlessly add capacity to your surveillance system. With a wide range of industry-leading enclosures and chipsets supported, you're sure to find the AI DVR or NVR configuration that's right for you.

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 it. Our toll-free customer support lines are here to help, or you can access our Western Digital Support site for additional details.

Specifications⁵

10TB	
Model Number	WD102PURX
Formatted capacity ⁵	10TB
Form factor	3.5-inch
Advanced Format (AF)	Yes
RoHS compliant ⁶	Yes
Product Features	
Cameras supported	Up to 64
Drive Bays Supported	16+
AI Streams	32
Firmware Feature Name	AllFrame AI
Tarnish resistant components	Yes
Performance	
Interface transfer rate (max) ⁸ Buffer to host	6 Gb/s
Host to/from drive (sustained)	265 MB/s
Cache (MB) ⁵	256
Performance Class	7200 RPM
Reliability/Data Integrity	
Load/unload cycles ⁷	300,000
Annualized workload rating ⁸	360TB/yr
Non-recoverable read errors per bits read	<1 in 10 ¹⁵
MTBF	1,500,000
Limited warranty (years) ⁹	3
Power Management¹⁰	
Average power requirements (W)	
Read/Write	9.0
Idle	8.0
Standby and Sleep	0.5
Environmental Specifications¹¹	
Temperature (°C, on the base casting)	
Operating ¹²	0 to 65
Non-operating	-40 to 70
Shock (Gs)	
Operating (2 ms, read/write)	30
Operating (2 ms, read)	70
Non-operating (2 ms)	300
Acoustics (dBA) ¹³ Idle	29
Seek (average)	36
Physical Dimensions	
Height (in./mm, max)	1.028/26.1
Length (in./mm, max)	5.787/147
Width (in./mm, ± .01 in.)	4/101.6
Weight (lb/kg, ± 10%)	1.576/0.715

¹ Up to 1.5M MTBF for 8TB, 10TB, 12TB and 14TB capacities (up to 1.0M MTBF for lower capacities). MTBF specifications are based upon internal testing using a 40°C base casting temperature. MTBF is based on a sample population and is estimated by statistical measurements and acceleration algorithms. MTBF does not predict an individual drive's reliability and does not constitute a warranty.

² For capacities 4TB and higher. ³

As of April 2018

⁴ Not all products may be available in all regions of the world.

⁵ 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 for details.

⁶ 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.

⁷ Controlled unload at ambient condition.

⁸ 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.

⁹ See support.wdc.com/warranty for regional specific warranty details.

¹⁰ Power measurements at room-ambient temperature.

¹¹ Non-recoverable errors during operating tests or after non-operating tests.

¹² On the base casting.

¹³ Sound power level.

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GAN ICES-3 (B) / NMB-3 (B)