



Protect it with Purple

Make the right choice

Why WD Purple®?

Our WD Purple® products are tailored specifically to the needs of the Smart Video and Surveillance market where continuous operation and durability are key.

Our consumer grade products are not typically designed for constant usage in demanding conditions and usage in these surveillance applications may invalidate your warranty terms.

With optimised firmware and features like AllFrame™ technology, Western Digital® Device Analytics and Card Health Monitoring, you can rest-assured that your products are fit for purpose.



WD Purple® HDD

WD AllFrame™ Technology

All WD Purple® drives are equipped with Western Digital's Exclusive AllFrame™ technology. Stream detection, caching, management and intelligent data placement drives deep-learning analytics while reducing frame-drops and improving video recording and playback.



WD Purple® - Mainstream Surveillance

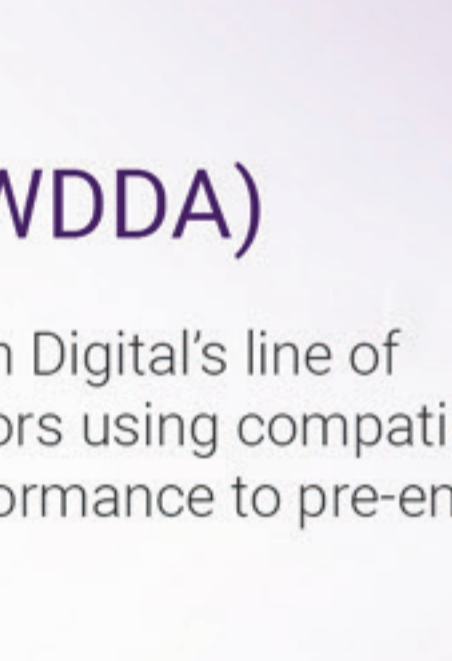
The cornerstone of the WD Purple® family and powering countless systems around the world, our WD Purple® drives are available in up to 8TB* capacity and offer a viable mainstream solution that's built for purpose to accommodate the requirement for up to 64 Cameras in Digital Video Recorders (DVRs) or Networked Video Recorders (NVRs).



WD Purple® Pro – Enterprise Grade for AI and Deep Learning

With the growth in cameras, the requirement for high capacity, high performance and workload drives is key for the decision making and deep learning requirements of modern AI systems.

These drives allow recording from multiple sources while simultaneously supplying valuable data for processing.



Western Digital® Device Analytics (WDDA)

WDDA is a new device analytics capability supported by Western Digital's line of surveillance-optimized storage products. WDDA enables administrators using compatible systems to proactively manage storage and to maintain optimal performance with pre-emptive unexpected failures.

<https://www.westerndigital.com/solutions/device-analytics>

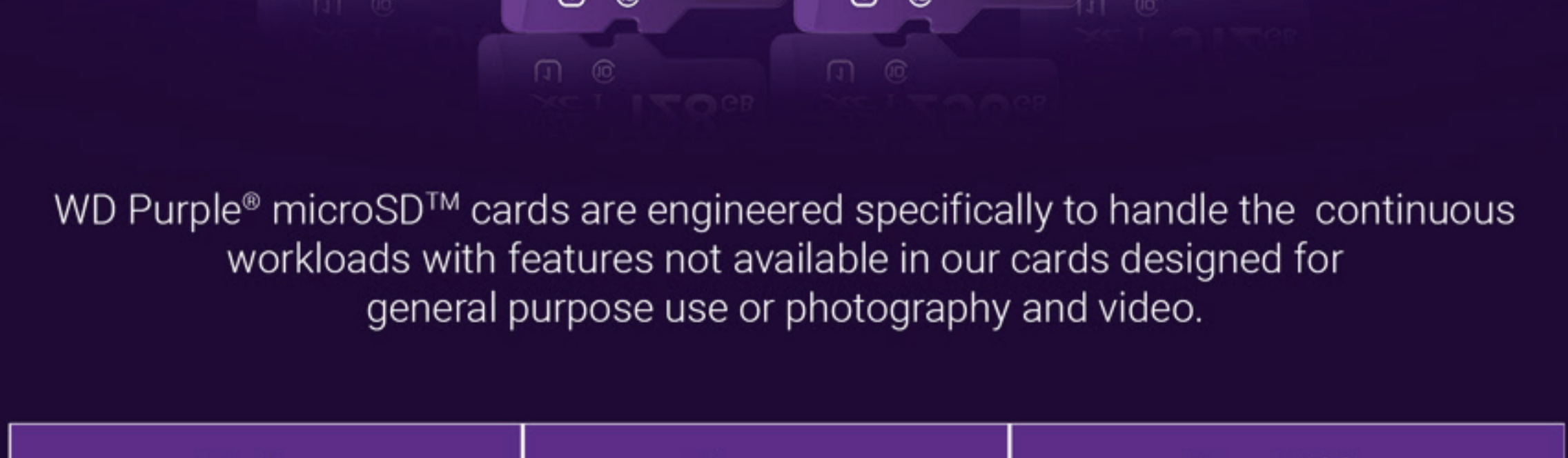
WD Purple® HDD Comparison Table

Comparison	WD Purple®	WD Purple® Pro
Capacities*	1TB – 8TB	8/10TB (Air), 12-22TB (Helium)
Target Application	Mainstream DVRs/NVRs	AI-enabled NVRs, Video Analytics Appliances, and Analytics Servers
RPM	5400 RPM	7200 RPM
Cameras Supported	Up to 64	Up to 64 HD**
Firmware Feature	AllFrame™	AllFrame™
AI workload support	-	Yes - Up to 32 Streams
Maximum Bays	1-3TB (Up to 8), 4-8TB (Up to 16)	No Limit
Workload Rate***	Up to 180TB/year	Up to 550TB/year
Limited Warranty	3 years	5 years
MTBF (hours)****	Up to 1M	Up to 2.5M (Helium)/2.0M (Air)
UBER (Unrecoverable Bit Error Rate)	<1 in 10 ¹⁴	<1 in 10 ¹⁵
WDDA Support	Yes	Yes

WD Purple® microSD™ cards

Designed for Surveillance Cameras

microSD cards can be used either as primary storage or backup in the case of network failure. Unlike our consumer cards, WD Purple® microSDs are designed specifically for use in Surveillance environments.



WD Purple® microSD™ cards are engineered specifically to handle the continuous workloads with features not available in our cards designed for general purpose use or photography and video.

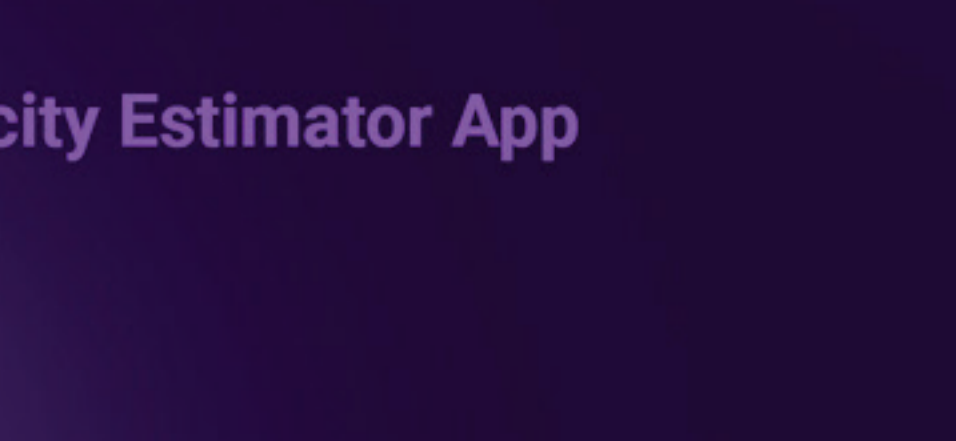
Feature	Consumer	Smart Video
Designed For	General Purpose Use Cases, Digital Photography/Video	Continuous smart video recording and/or backup in case of network failure or connectivity issues
Endurance	Endurance not specified	Designed for Ultra Endurance up to 512 TBW**** (1TB* model)
Monitoring	No card health monitoring features	Card Health Monitoring for pre-emptive maintenance in compatible systems
Limited Warranty	Invalid for surveillance device use	Valid for use in surveillance devices

Card Health Monitoring

Remote monitoring of your card's health status in compatible systems helps you take pre-emptive action which prevents downtime and saves you time and money.

The Importance of High Endurance

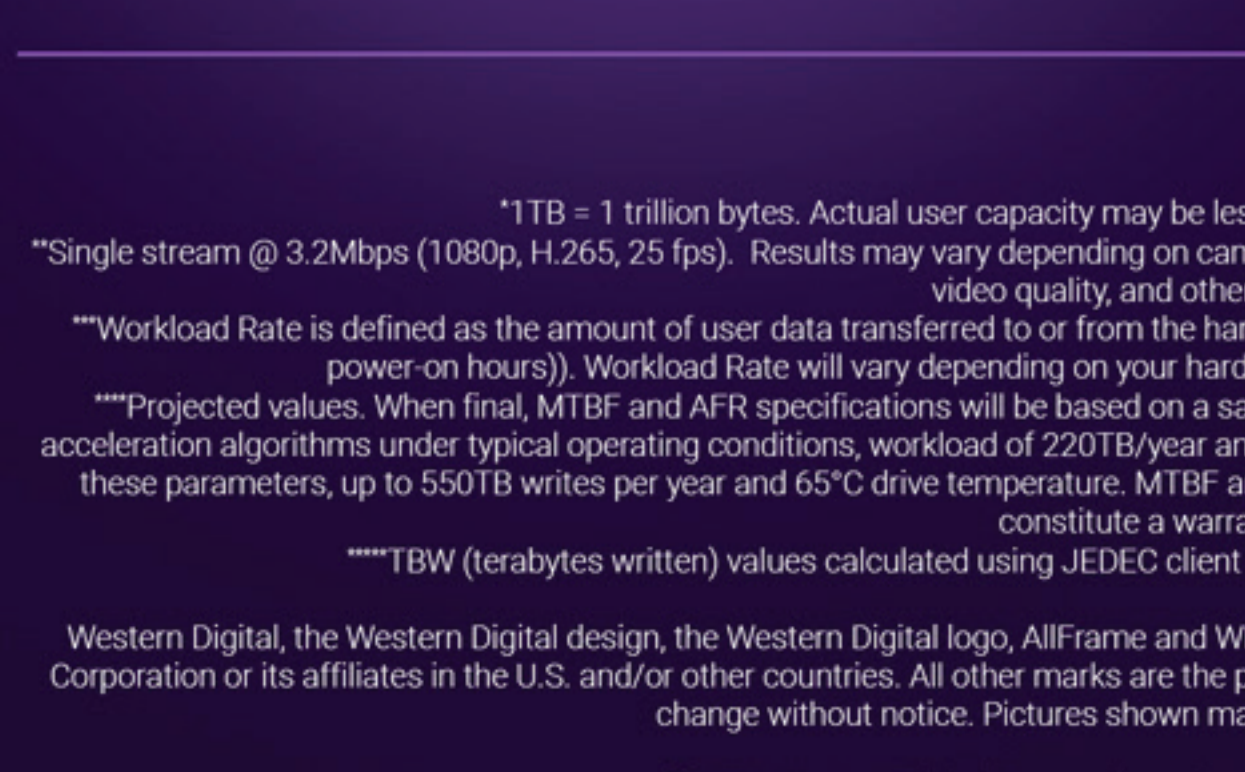
Check out this short video on the importance of choosing a card designed for Smart Video



<https://www.youtube.com/watch?v=kSG4S3PIfWM>

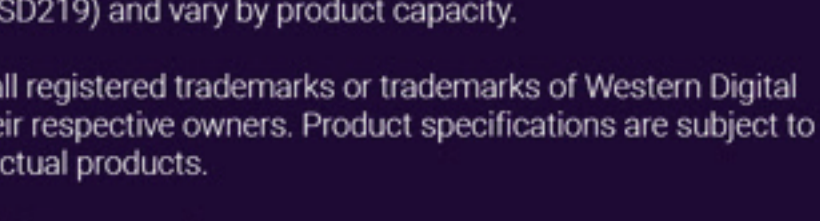
<https://www.youtube.com/watch?v=zz-ppiCczJe8>

WD Purple® Storage Capacity Estimator App



A FREE mobile app to help you get an estimate of storage capacity for your CCTV solution requirements.

Available on:



<https://shop.westerndigital.com/tools/microsd-capacity-calculator>

*1TB = 1 trillion bytes. Actual user capacity may be less depending on operating environment.
 **Single stream @ 3.2Mbps (1080p, H.265, 25 fps). Results may vary depending on camera resolution, file format, frames per second, software, system settings, video quality, and other factors.
 ***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 the hour)). Workload Rate may vary depending on your hardware and software components and configurations.
 ****Projected values. When final, MTBF and AFR specifications will be based on a sample population and are estimated by statistical measurements and acceleration algorithms under typical operating conditions, workload of 220TB/year and drive temperature of 40°C. Derating of MTBF and AFR will occur above these parameters, up to 550TB writes per year and 65°C drive temperature. MTBF and AFR ratings do not predict an individual drive's reliability and do not constitute a warranty.
 *****TBW (terabytes written) values calculated using JEDEC client workload (JESD219) and vary by product capacity.
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