



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

SATA 6 Gb/s

FORM FACTOR

3.5-inch

ROTATIONAL SPEED

5400 RPM Class

CAPACITIES

1 TB to 4 TB

MODEL NUMBERS

D 5514 1 TB
D 5516 2 TB
D 5518 3 GB
D 5520 4 TB

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.

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.

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.

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.

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.

3-year limited warranty

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

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.

1 million hours MTBF

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

* Based on a surveillance usage of <60 TB/year transferred at 25°C ambient environment with up to 16 cameras.

The WD Advantage

At WD, we put 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.



WD Purple™

Specifications	4 TB	3 TB	2 TB	1 TB
Model number ¹	D 5520	D 5518	D 5516	D 5514
Formatted capacity ²	4 TB	3 TB	2 TB	1 TB
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)				
Buffer to host	6 Gb/s	6 Gb/s	6 Gb/s	6 Gb/s
Host to/from drive (sustained)	150 MB/s	145 MB/s	145 MB/s	110 MB/s
Cache (MB)	64	64	64	64
Rotational speed (RPM)	5400 RPM Class	5400 RPM Class	5400 RPM Class	5400 RPM Class
Reliability/Data Integrity				
Load/unload cycles ⁴	300,000	300,000	300,000	300,000
Non-recoverable read errors per bits read	<1 in 10 ¹⁴			
Limited warranty (years) ⁵	3	3	3	3
Power Management				
Average power requirements (W)				
Read/Write	5.1	4.4	4.4	3.3
Idle	4.5	4.1	4.1	2.9
Standby and Sleep	0.4	0.4	0.4	0.4
Environmental Specifications⁶				
Temperature (°C, on the base casting)				
Operating	0 to 65	0 to 65	0 to 65	0 to 65
Non-operating	-40 to 70	-40 to 70	-40 to 70	-40 to 70
Shock (Gs)				
Operating (2 ms, read/write)	30	30	30	30
Operating (2 ms, read)	65	65	65	65
Non-operating (2 ms)	250	250	250	350
Acoustics (dBA)				
Idle	25	23	23	21
Seek (average)	26	24	24	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 Serial ATA 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 See <http://support.wd.com/warranty> for regional specific warranty details.

⁶ No non-recoverable errors during operating tests or after non-operating tests.

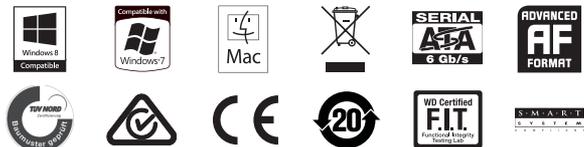
⁷ Sound power level.

Western Digital Technologies, Inc.
3355 Michelson Drive, Suite 100
Irvine, California 92612
U.S.A.

For service and literature:

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

800.ASK.4WDC (800.275.4932) North America
800.832.4778 Spanish
+86.21.2603.7560 Asia Pacific
00800.27549338 Europe
(toll free where available)
+31.880062100 Europe/Middle East/Africa



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

Western Digital, WD, the WD logo, and WD Purple are registered trademarks in the U.S. and other countries; AllFrame, IntelliSeek, and FIT Lab are trademarks of Western Digital Technologies, Inc. in the U.S. and other countries. Other marks may be mentioned herein that belong to other companies. Product specifications subject to change without notice.

© 2015 Western Digital Technologies, Inc. All rights reserved.

2879-800012-A04 Oct 2015