

# DH-HAC-HFW1200C(-A)

2MP HDCVI IR Bullet Camera



- Max 30fps@1080P
- CVI/CVBS/AHD/TVI switchable
- 3.6mm fixed lens (2.8mm, optional)
- Built-in mic(-A)
- Max. IR length 30m, Smart IR
- IP67, DC12V



## System Overview

Experience 1080P full HD video and the simplicity of using existing cabling infrastructure with HDCVI. The Lite series 1080P HDCVI camera features a compact design and offers a high quality image at a friendly price. It offers various motorized/fixed lens models with a multi-language OSD and HD/SD switchable output. Its structural flexibility and high cost-performance makes the camera an ideal choice for SMB solutions.

## Functions

### 4 Signals over 1 Coaxial Cable

HDCVI technology supports 4 signals to be transmitted over 1 coaxial cable simultaneously, i.e. video, audio\*, data and power. Dual-way data transmission allows the HDCVI camera to interact with the XVR, such as sending control signal or triggering alarm. Moreover, HDCVI technology supports PoC for construction flexibility.

\* Audio input is available for some models of HDCVI cameras.

### Long Distance Transmission

HDCVI technology guarantees real-time transmission at long distance without any loss. It supports up to 800m(1080p)/1200m(720P) transmission via coaxial cable, and up to 300m(1080P)/450m(720P) via UTP cable.\*

\*Actual results verified by real-scene testing in Dahua's test laboratory.

### Simplicity

HDCVI technology inherits the born feature of simplicity from traditional analog surveillance system, making itself a best choice for investment protection. HDCVI system can seamlessly upgrade the traditional analog system without replacing existing coaxial cabling. The plug and play approach enables full HD video surveillance without the hassle of configuring a network.

### Smart IR

The camera is designed with IR LED illumination for best lowlight performance. Smart IR is a technology to ensure brightness uniformity in B/W image under low illumination. Dahua's unique Smart IR adjusts to the intensity of camera's infrared LEDs to compensate for the distance of an object, and prevents IR LEDs from overexposing images as the object come closer to the camera.

### Multi-formats

The camera supports multiple video formats including HDCVI, CVBS and other two common HD analog formats in the market. The four formats can be switched over through OSD menu or by PFM820(UTC controller). This feature makes the camera to be compatible with most end users' existing HD/SD DVRs.

### Multi-language OSD

OSD menu provides multiple image adjustments and function settings to meet the requirements of different monitoring scenes. The OSD menu includes configurations such as backlight mode, day/night, white balance, privacy mask and motion detect. The camera supports 11 languages for OSD menu, namely, Chinese, English, French, German, Spanish, Portuguese, Italian, Japanese, Korean, Russian and Polish.

### Protection

The camera's outstanding reliability is unsurpassed due to its rugged design. The camera is protected against water and dust with IP67 ranking, making it suitable for indoor or outdoor environments. With working temperature range of -40 °C to +60 °C (-40 °F to +140 °F), the camera is designed for extreme temperature environments. Supporting ±30% input voltage tolerance, this camera suits even the most unstable power supply conditions. Its 4KV lightning rating provides protection against the camera and its structure from the effects of lightning.

| Technical Specification    |        |   |                     |                    |                    | Gain Control          |  | Auto; manual  |  |
|----------------------------|--------|---|---------------------|--------------------|--------------------|-----------------------|--|---|--|
| Camera                     |        |   |                     |                    |                    | Noise Reduction       |  | 2D NR   |  |
| Image Sensor               |        | 1/2.7 inch CMOS   |                     |                    |                    | Smart IR              |  | Yes   |  |
| Max. Resolution            |        | 1920(H)×1080(V)   |                     |                    |                    | Electronic Defog      |  | Yes   |  |
| Pixel                      |        | 2MP   |                     |                    |                    | Mirror                |  | Off/On  |  |
| Scanning System            |        | Progressive   |                     |                    |                    | Privacy Masking       |  | Off/On (8 area, rectangle)  |  |
| Electronic Shutter Speed   |        | PAL: 1/25s–1/100000s<br>NTSC: 1/30s–1/100000s   |                     |                    |                    | Certifications        |  |   |  |
| S/N Ratio                  |        | >65dB   |                     |                    |                    | Certifications        |  | CE (EN55032:2015, EN 61000-3-2:2014, EN 61000-3-3:2013, EN55024:2010+A1:2015, EN 55035:2017, EN50130-4:2011+A1:2014)<br>FCC (CFR 47 FCC Part 15 subpartB, ANSI C63.4-2014)<br>UL (UL60950-1+CAN/CSA C22.2 No.60950-1) |  |
| Min. Illumination          |        | 0.02Lux/F1.9, 30IRE, 0Lux IR on   |                     |                    |                    | Port                  |  |   |  |
| Illumination Distance      |        | 30 m (98.4 ft)  |                     |                    |                    | Audio Output          |  | One channel built-in mic (-A)   |  |
| Illuminator On/Off Control |        | Auto; manual  |                     |                    |                    | Video Output          |  | Video output choices of CVI/TVI/AHD/CVBS by one BNC port  |  |
| Illuminator Number         |        | 2   |                     |                    |                    | Power                 |  |   |  |
| Pan/Tilt/Rotation Range    |        | Pan: 0°–360°<br>Tilt: 0°–90°<br>Rotation: 0°–360°   |                     |                    |                    | Power Supply          |  | 12V ±30% DC   |  |
| Lens                       |        | Power Consumption   |                     |                    |                    | Power Consumption     |  | Max 2.7W (12V DC, IR on)  |  |
| Lens Type                  |        | Fixed-focal   |                     |                    |                    | Environment           |  |   |  |
| Mount Type                 |        | M12   |                     |                    |                    | Operating Temperature |  | -40°C to +60°C (-40°F to 140°F); <95% (non-condensation)  |  |
| Focal Length               |        | 2.8 mm; 3.6 mm  |                     |                    |                    | Storage Temperature   |  | -40°C to +60°C (-40°F to 140°F); <95% (non-condensation)  |  |
| Max. Aperture              |        | F1.9  |                     |                    |                    | Protection Grade      |  | IP67  |  |
| Field of View              |        | 2.8 mm: 119° x 101° x 54°<br>(diagonal x horizontal x vertical)<br>3.6 mm: 100° x 84° x 45°<br>(diagonal x horizontal x vertical)                                   |                     |                    |                    | Structure             |  |   |  |
| Iris Type                  |        | Fixed iris  |                     |                    |                    | Casing                |  | Plastic throughout the whole casing   |  |
| Close Focus Distance       |        | 2.8 mm: 0.5 m (1.7 ft)<br>3.6 mm: 0.8 m (2.6 ft)  |                     |                    |                    | Camera Dimensions     |  | 161.3mm×69.7mm×70.0mm (6.35"x2.75"x2.75")   |  |
| DORI Distance              | Lens   | Detect  | Observe             | Recognize          | Identify           | Net Weight            |  | 0.19 Kg (0.55 lb)   |  |
|                            | 2.8 mm | 38.6 m<br>(126.6 ft)  | 15.4 m<br>(50.5 ft) | 7.7 m<br>(25.3 ft) | 3.9 m<br>(12.8 ft) | Gross Weight          |  | 0.29 Kg (0.64 lb)   |  |
|                            | 3.6 mm | 49.7 m<br>(163.1 ft)  | 19.9 m<br>(65.3 ft) | 9.9 m<br>(32.5 ft) | 5 m<br>(16.4 ft)   |                       |  |   |  |
| Video                      |        |   |                     |                    |                    |                       |  |   |  |
| Frame Rate                 |        | CVI: 1080P@25/30fps; 720P@25/30fps;<br>720P@50/60fps;<br>AHD: 1080P@25/30fps; 720P@25/30fps;<br>TVI: 1080P@25/30fps; 720P@25/30fps;<br>720P@50/60fps;<br>CVBS: 960H |                     |                    |                    | Resolution            |  | 1080P (1920×1080); 720P (1280×720); 960H (960×576/960×480)  |  |
| Resolution                 |        | 1080P (1920×1080); 720P (1280×720); 960H (960×576/960×480)  |                     |                    |                    | Day/Night             |  | Auto switch by ICR  |  |
| Day/Night                  |        | Auto switch by ICR  |                     |                    |                    | BLC                   |  | BLC/HLC/DWDR  |  |
| BLC                        |        | BLC/HLC/DWDR  |                     |                    |                    | WDR                   |  | DWDR  |  |
| WDR                        |        | DWDR  |                     |                    |                    | White Balance         |  | Auto; manual  |  |
| White Balance              |        | Auto; manual  |                     |                    |                    |                       |  |   |  |

## Ordering Information

| Type        | Part Number              | Description   |
|-------------|--------------------------|---|
| 2MP Camera  | DH-HAC-HFW1200CP 2.8mm   | 2MP HDCVI IR Bullet Camera                                    |
|             | DH-HAC-HFW1200CN 2.8mm   |   |
|             | DH-HAC-HFW1200CP 3.6mm   |   |
|             | DH-HAC-HFW1200CN 3.6mm   |   |
|             | DH-HAC-HFW1200CP-A 2.8mm |   |
|             | DH-HAC-HFW1200CN-A 2.8mm |   |
|             | DH-HAC-HFW1200CP-A 3.6mm |   |
| Accessories | DH-HAC-HFW1200CN-A 3.6mm |   |
|             | PFA134                   | Junction Box  |
|             | PFA130-E                 | IP66 Junction Box (For use alone or with PFA152-E pole mount) |
|             | PFA152-E                 | Pole Mount Bracket (For use with PFA130-E junction box)       |
|             | PFM800-E                 | Passive HDCVI Balun   |
|             | PFM321D                  | 12V 1A Power Adapter  |
|             | PFM820                   | UTC Controller  |
|             | PFM904                   | Integrated Mount Tester                                       |

## Accessories

### Optional:



PFA134  
Junction box



PFA130-E  
IP66 Junction Box (For use  
alone or with PFA152-E  
pole mount)



PFA152-E  
Pole Mount Bracket  
(For use with PFA130-E  
junction box)



PFM800-E  
Passive HDCVI Balun



PFM321D  
12V 1A Power Adapter



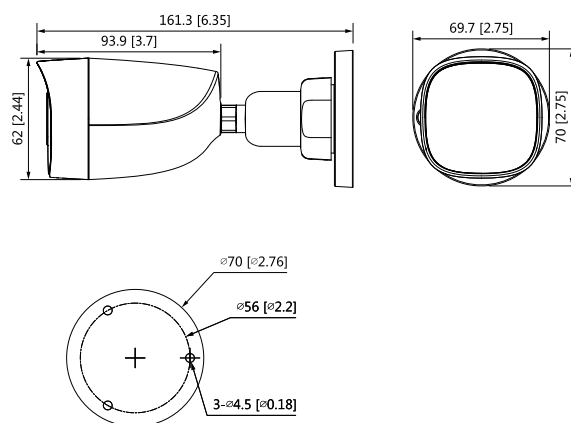
PFM820  
UTC Controller



PFM904  
Integrated Mount Tester

| Ceiling Mount | Junction Mount | Pole Mount (Vertical) |
|---------------|----------------|-----------------------|
|               |                |                       |

## Dimensions (mm[inch])



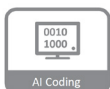
# DH-XVR1B04-I

4 Channel Penta-brid 1080N/720p Cooper 1U 1HDD WizSense Digital Video Recorder



WizSense

- H.265+/H.265 dual-stream video compression
- Supports Full channel AI-Coding
- Supports HDCVI/AHD/TVI/CVBS/IP video inputs
- Max 5 channels IP camera inputs, each channel up to 2MP; Max 20 Mbps incoming bandwidth
- Up to 4 channels video stream ( analog channel ) SMD Plus



Launched by Dahua Technology, WizSense is a series of AI products and solutions that adopt independent AI chip and deep learning algorithm. It focuses on human and vehicle with high accuracy, enabling users to fast act on defined targets. Based on Dahua's advanced technologies, WizSense provides intelligent, simple and inclusive products and solutions.

## Series Overview

Dahua Technology, a world-leading video-centric smart IoT solution and service provider, debuted its new XVR series, Cooper Series featuring SMD Plus to benefit customers from AI upgrade. The series are designated to reduce false-alarm rates and human surveillance costs, thus bringing great value to customers in search of products with accurate human/vehicle alarm to raise the security level of various indoor and outdoor facilities.

## Functions

### SMD Plus

With intelligent algorithm, Dahua Smart Motion Detection technology can categorize the targets that trigger motion detection and filter the motion detection alarm triggered by non-concerned targets to realize effective and accurate alarm.

### AI Coding

Compared with H.265/H.264, AI coding can reduce more than 50% bit rate and storage requirements while have no loss of decoding compatibility, providing clear human and vehicle details.

### Smart Codec

With advanced scene-adaptive rate control algorithm, Dahua smart codec technology realizes the higher encoding efficiency than H.265 and H.264, provides high-quality video, and reduces the cost of storage and transmission.

### HDCVI/AHD/TVI/CVBS Auto-detect

The XVR can auto recognize the signal of front-camera without any setting. It makes operation more friendly and convenient.

### High Definition Camera Input

The XVR supports up to 2MP HDCVI camera and 2MP IP camera input.

### Coaxial Audio/Upgrade/Alarm

The integrated design can reduce wiring troubles which makes it much more cost-effective and convenient for installation.

### Long Distance Transmission

The HDCVI system supports long distance transmission over coaxial cable and UTP, max. 800 m for 1080p and 1200 m for 720p.

## Technical Specification

### System

|                  |  |
|------------------|--|
| Main Processor   | Embedded processor                               |
| Operating System | Embedded linux                                   |
| SMD Plus         |  |
| Performance      | 4 channels                                       |
| AI Search        | Search by target classification (Human, Vehicle) |

### Video and Audio

|                     |  |
|---------------------|--|
| Analog Camera Input | 4 channels, BNC                        |
| HDCVI Camera Input  | 1080p@ 25/30 fps, 720p@25/30/50/60 fps |
| AHD Camera Input    | 1080p@ 25/30 fps, 720p@ 25/30 fps      |
| TVI Camera Input    | 1080p@25/30 fps, 720p@25/30 fps        |
| CVBS Camera Input   | PAL/NTSC                               |
| IP Camera Input     | 4+1 channels, each channel up to 2MP   |
| Audio In/Out        | 1/1, RCA                               |
| Two-way Talk        | Reuse audio in/out, RCA                |

### Recording

|                   |  |
|-------------------|--|
| Compression       | AI Coding/H.265+/H.265/H.264+/H.264  |
| Resolution        | 1080N; 720p; 960H; D1; CIF   |
| Record Rate       | Main Stream:<br>All channels 1080N/720P/960H/D1/CIF/(1~25/30fps)<br>Sub stream:<br>CIF (1~15 fps)                  |
| Bit Rate          | 32 kbps–4096 kbps per channel  |
| Record Mode       | Manual; Schedule (General, Continuous); MD (Video detection: Motion Detection, Video Loss, Tampering); Alarm; Stop |
| Record Interval   | 1 min– 60 min (default: 60 min), Pre-record: 1 s–30 s, Post-record: 10 s–300 s                                     |
| Audio Compression | G.711A; G.711U; PCM  |
| Audio Sample Rate | 8 KHz, 16 bit per channel  |
| Audio Bit Rate    | 64 kbps per channel  |

### Display

|                      |  |
|----------------------|--|
| Interface            | 1 HDMI; 1 VGA  |
| Resolution           | 1920 × 1080, 1280 × 1024, 1280 × 720   |
| Multi-screen Display | When IP extension mode not enabled: 1/4<br>When IP extension mode enabled: 1/4/6 |
| OSD                  | Camera title; Time; Video loss; Camera lock; Motion detection; Recording         |

### Network

|                  |  |
|------------------|--|
| Interface        | 1 RJ-45 Port (100 Mbps)  |
| Network Protocol | HTTP; HTTPS; TCP/IP; IPv4/IPv6; 3G/4G; UPnP; RTSP; UDP; SMTP; NTP; DHCP; DNS; IP Filter; PPPoE; DDNS; FTP; Alarm Server; P2P; IP Search (Supports Dahua IP camera, DVR, NVS, etc.) |
| Max. User Access | 128 users  |

|                  |                             |
|------------------|-----------------------------|
| Smart Phone      | iPhone; iPad; Android       |
| Interoperability | ONVIF 16.12, CGI Conformant |

### Video Detection and Alarm

|                 |  |
|-----------------|--|
| Trigger Events  | Recording, PTZ, Tour, Video Push, Email, FTP, Snapshot, Buzzer and Screen Tips |
| Video Detection | Motion Detection, MD Zones: 396 (22 × 18), Video Loss, Tampering and Diagnosis |
| Alarm input     | N/A  |
| Relay Output    | N/A  |

### Playback and Backup

|                   |   |
|-------------------|---|
| Playback          | 1/4   |
| Search Mode       | Time/Date; Alarm; MD and Exact Search (accurate to second)  |
| Playback Function | Play; Pause; Stop; Rewind; Fast play; Slow Play; Next File; Previous File; Next Camera; Previous Camera; Full Screen; Repeat; Shuffle; Backup Selection; Digital Zoom |
| Backup Mode       | USB Device/Network  |

### Storage

|              |                                  |
|--------------|----------------------------------|
| Internal HDD | 1 SATA port, up to 6 TB capacity |
| eSATA        | N/A                              |

### Auxiliary Interface

|       |                       |
|-------|-----------------------|
| USB   | 2 USB ports (USB 2.0) |
| RS485 | N/A                   |
| RS232 | N/A                   |

### Electrical

|                                 |               |
|---------------------------------|---------------|
| Power Supply                    | DC 12 V/1.5 A |
| Power Consumption (Without HDD) | < 7 W         |

### Construction

|                          |  |
|--------------------------|--|
| Dimensions               | Cooper 1U, 198 mm × 202.9 mm × 41.5 mm (7.81" × 7.99" × 1.63") |
| Net Weight (without HDD) | 0.57 kg (1.25 lb)  |
| Gross Weight             | 1.08 kg (2.38 lb)  |
| Installation             | Desktop installation   |

### Environmental

|                      |   |
|----------------------|---|
| Operating Conditions | –10 °C to +45 °C (+14 °F to +113 °F), 0%–90% (RH) |
| Storage Conditions   | –20 °C to +70 °C (–4 °F to +158 °F), 0%–90% (RH)  |

### Third-party Support

|                     |   |
|---------------------|---|
| Third-party Support | Dahua, Arecont Vision, AXIS, Bosch, Brickcom, Canon, CP Plus, Dynacolor, Honeywell, Panasonic, Pelco, Samsung, Sanyo, Sony, Videotec, Vivotek, and more |
|---------------------|---|

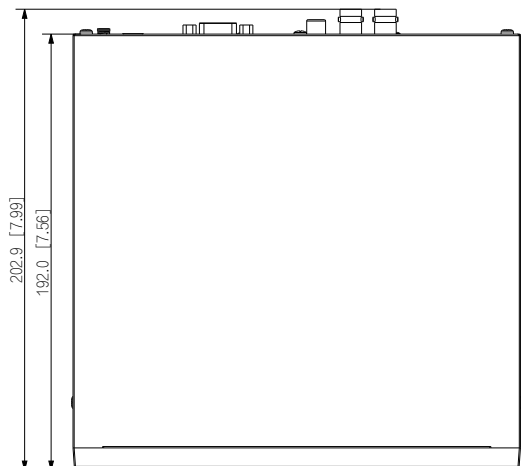
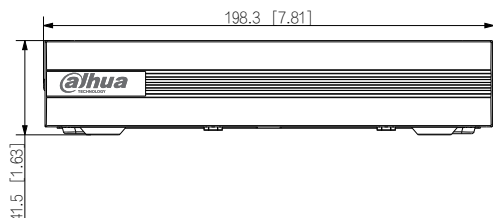
### Certifications

|                |  |
|----------------|--|
|                | FCC: Part 15 Subpart B   |
| Certifications | CE: CE-LVD: EN 60950-1/IEC 60950-1<br>CE-EMC: EN 61000-3-2; EN 61000-3-3; EN 55032; EN 50130; EN 55024 |

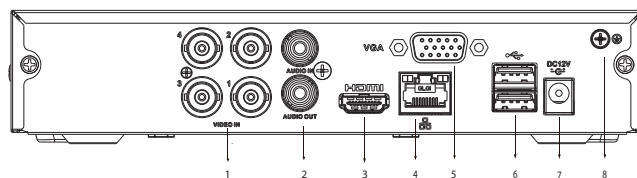
## Ordering Information

| Type                   | Model        | Description                               |
|------------------------|--------------|---|
| 4 Channel WizSense XVR | DH-XVR1B04-I | Cooper 1U WizSense Digital Video Recorder |

## Dimensions (mm[inch])



## Panels



- |               |                               |
|---------------|-------------------------------|
| 1 VIDEO IN    | 2 AUDIO IN/OUT, RCA Connector |
| 3 HDMI Port   | 4 Network Port                |
| 5 VGA Port    | 6 USB Ports                   |
| 7 Power Input | 8 Ground                      |



# WD Purple™

## Surveillance Hard Drives

WD Purple™ drives are built for 24/7, always-on, high-definition security systems. With a supported workload rate\* of up to 180 TB/yr and support for up to 64 cameras, WD Purple™ drives are optimized for surveillance systems. WD Purple™ surveillance storage also comes with WD's exclusive AllFrame 4K™ technology, so you can confidently create a security system tailored to the needs of your business. Using AllFrame 4K™ technology, WD Purple™ drives improve ATA streaming to help reduce errors, pixelation, and video interruptions that could happen in a video recorder system.



### INTERFACE

SATA 6 Gb/s

### FORM FACTOR

3.5-inch

### PERFORMANCE CLASS

5400 RPM Class

### CAPACITIES

500GB to 10TB

### MODEL NUMBERS

|           |          |
|-----------|----------|
| WD100PURZ | WD30PURX |
| WD800PURZ | WD20PURX |
| WD60PURX  | WD10PURX |
| WD50PURX  | WD05PURX |
| WD40PURX  |          |

## Product Features

### The right drive for the right job

WD Purple™ drives have been engineered specifically for surveillance, so they're able to withstand the extreme heat fluctuations and equipment vibrations within a NVR environment. An average desktop drive is built to run for only short intervals, not the harsh 24/7 always-on environment of a high-definition surveillance system. A disruption to a drive could result in a failure that impacts multiple users, your security archive, or even the entire system. With WD Purple™, you get reliable, surveillance-class storage that's tested for compatibility in a wide-range of security systems.

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

WD 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.

### Wide compatibility. Seamless integration.

WD Purple™ 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 DVR configuration that's right for you.\*\*

\*\*Not sure what drive is best for your system? Use our compatibility tool to find the perfect storage for your DVR or NVR.

### Expand your view to 64

Each WD Purple™ 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.

### Trust your view with AllFrame 4K™

Missed frames and lost footage could be a serious problem when video surveillance needs to be retrieved. All WD Purple™ drives are equipped with AllFrame 4K™ 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.

#### Features:

- Engineered specifically for surveillance security systems.
- Three times the workload rating of our desktop hard drives\*.
- Tuned for write-intensive, low bit-rate, high stream-count applications typical to most surveillance applications.
- Prioritized write-operations for maximized surveillance performance.
- TLER & ATA streaming support.
- Support for more than eight bays.\*\*\*

\*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.

\*\*\*For capacities 4TB and higher.

### Less power. More efficient.

Low power consumption is a necessity in a high-temperature, always-on surveillance environment. With our exclusive IntelliSeek™ technology, WD Purple™ drives are able to calculate optimum seek speeds. This keeps power consumption low so ambient noise and vibrations are at a minimum.

### Three year limited-warranty

As an industry-leading hard drive manufacturer, WD stands behind their surveillance storage solutions. With a 3-year limited warranty included with every WD Purple™ drive, you can rely on your surveillance system's data storage capabilities.

## 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 high 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 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 WD Support site for additional details.



| Specifications   | 10TB                   | 8TB                    | 6TB                    | 5TB                    | 4TB                    | 3TB                    | 2TB                    |
|--|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Model number <sup>1</sup>  | WD100PURZ              | WD80PUZX               | WD60PURX               | WD50PURX               | WD40PURX               | WD30PURX               | WD20PURX               |
| Formatted capacity <sup>2</sup>  | 10TB                   | 8TB                    | 6TB                    | 5TB                    | 4TB                    | 3TB                    | 2TB                    |
| Form factor  | 3.5-inch               | 3.5-inch               | 3.5-inch               | 3.5-inch               | 3.5-inch               | 3.5-inch               | 3.5-inch               |
| Advanced Format (AF)   | Yes                    | Yes                    | Yes                    | Yes                    | Yes                    | Yes                    | Yes                    |
| RoHS compliant <sup>3</sup>  | Yes                    | Yes                    | Yes                    | Yes                    | Yes                    | Yes                    | Yes                    |
| <b>Performance</b>   |                        |                        |                        |                        |                        |                        |                        |
| Interface transfer rate (max) <sup>2</sup><br>Buffer to host<br>Host to/from drive (sustained) | 6 Gb/s<br>210 MB/s     | 6 Gb/s<br>178 MB/s     | 6 Gb/s<br>175 MB/s     | 6 Gb/s<br>170 MB/s     | 6 Gb/s<br>150 MB/s     | 6 Gb/s<br>145 MB/s     | 6 Gb/s<br>145 MB/s     |
| Cache (MB) <sup>2</sup>  | 256                    | 128                    | 64                     | 64                     | 64                     | 64                     | 64                     |
| Performance Class  | 5400 RPM Class         | 5400 RPM Class         | 5400 RPM Class         | 5400 RPM Class         | 5400 RPM Class         | 5400 RPM Class         | 5400 RPM Class         |
| <b>Reliability/Data Integrity</b>  |                        |                        |                        |                        |                        |                        |                        |
| Load/unload cycles <sup>4</sup>  | 300,000                | 300,000                | 300,000                | 300,000                | 300,000                | 300,000                | 300,000                |
| 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> | <1 in 10 <sup>14</sup> | <1 in 10 <sup>14</sup> | <1 in 10 <sup>14</sup> | <1 in 10 <sup>14</sup> |
| Limited warranty (years) <sup>5</sup>  | 3                      | 3                      | 3                      | 3                      | 3                      | 3                      | 3                      |
| <b>Power Management</b>  |                        |                        |                        |                        |                        |                        |                        |
| Average power requirements (W)<br>Read/Write<br>Idle<br>Standby and Sleep                      | 6.2<br>5.0<br>0.5      | 6.4<br>5.7<br>0.7      | 5.3<br>4.9<br>0.4      | 5.3<br>4.9<br>0.4      | 5.1<br>4.5<br>0.4      | 4.4<br>4.1<br>0.4      | 4.4<br>4.1<br>0.4      |
| <b>Environmental Specifications<sup>6</sup></b>  |                        |                        |                        |                        |                        |                        |                        |
| Temperature (°C, on the base casting)<br>Operating<br>Non-operating                            | 0 to 65<br>-40 to 70   | 0 to 65<br>-40 to 70   | 0 to 65<br>-40 to 70   | 0 to 65<br>-40 to 70   | 0 to 65<br>-40 to 70   | 0 to 65<br>-40 to 70   | 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)   | 30<br>65<br>250        | 30<br>65<br>250        | 30<br>65<br>250        | 30<br>65<br>250        | 30<br>65<br>250        | 30<br>65<br>250        | 30<br>65<br>250        |
| Acoustics (dBA) <sup>7</sup><br>Idle<br>Seek (average)   | 20<br>29               | 20<br>29               | 25<br>26               | 25<br>26               | 25<br>26               | 23<br>24               | 23<br>24               |
| <b>Physical Dimensions</b>   |                        |                        |                        |                        |                        |                        |                        |
| Height (in./mm, max)   | 1.028/26.1             | 1.028/26.1             | 1.028/26.1             | 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              | 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                | 4/101.6                | 4/101.6                | 4/101.6                |
| Weight (lb/kg, ± 10%)  | 1.43/0.65              | 1.43/0.65              | 1.65/0.75              | 1.65/0.75              | 1.50/0.68              | 1.40/0.64              | 1.40/0.64              |

<sup>1</sup> Not all products may be available in all regions of the world.

<sup>2</sup> 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](http://www.sata-io.org) for details.

<sup>3</sup> 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.

<sup>4</sup> Controlled unload at ambient condition.

<sup>5</sup> See <http://support.wd.com/warranty> for regional specific warranty details.

<sup>6</sup> No non-recoverable errors during operating tests or after non-operating tests.

<sup>7</sup> Sound power level.





# WD Purple™

| Specifications                                  | 1TB                    | 500GB                  |
|---|------------------------|------------------------|
| Model number <sup>1</sup>                       | WD10PURX               | WD05PURX               |
| Formatted capacity <sup>2</sup>                 | 1TB                    | 500GB                  |
| Form factor                                     | 3.5-inch               | 3.5-inch               |
| Advanced Format (AF)                            | Yes                    | Yes                    |
| RoHS compliant <sup>3</sup>                     | Yes                    | Yes                    |
| <b>Performance</b>                              |                        |                        |
| Interface transfer rate (max) <sup>2</sup>      |                        |                        |
| Buffer to host                                  | 6 Gb/s                 | 6 Gb/s                 |
| Host to/from drive (sustained)                  | 110 MB/s               | 110 MB/s               |
| Cache (MB) <sup>2</sup>                         | 64                     | 64                     |
| Performance Class                               | 5400 RPM Class         | 5400 RPM Class         |
| <b>Reliability/Data Integrity</b>               |                        |                        |
| Load/unload cycles <sup>4</sup>                 | 300,000                | 300,000                |
| Non-recoverable read errors per bits read       | <1 in 10 <sup>14</sup> | <1 in 10 <sup>14</sup> |
| Limited warranty (years) <sup>5</sup>           | 3                      | 3                      |
| <b>Power Management</b>                         |                        |                        |
| Average power requirements (W)                  |                        |                        |
| Read/Write                                      | 3.3                    | 3.3                    |
| Idle  | 2.9                    | 2.9                    |
| Standby and Sleep                               | 0.4                    | 0.4                    |
| <b>Environmental Specifications<sup>6</sup></b> |                        |                        |
| Temperature (°C, on the base casting)           |                        |                        |
| Operating                                       | 0 to 65                | 0 to 65                |
| Non-operating                                   | -40 to 70              | -40 to 70              |
| Shock (Gs)                                      |                        |                        |
| Operating (2 ms, read/write)                    | 30                     | 30                     |
| Operating (2 ms, read)                          | 65                     | 65                     |
| Non-operating (2 ms)                            | 350                    | 350                    |
| Acoustics (dBA) <sup>7</sup>                    |                        |                        |
| Idle  | 21                     | 21                     |
| Seek (average)                                  | 22                     | 22                     |
| <b>Physical Dimensions</b>                      |                        |                        |
| Height (in./mm, max)                            | 1.028/26.1             | 1.028/26.1             |
| Length (in./mm, max)                            | 5.787/147              | 5.787/147              |
| Width (in./mm, ± .01 in.)                       | 4/101.6                | 4/101.6                |
| Weight (lb/kg, ± 10%)                           | 0.99/0.45              | 0.99/0.45              |

<sup>1</sup> Not all products may be available in all regions of the world.

<sup>2</sup> 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](http://www.sata-io.org) for details.

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<sup>4</sup> Controlled unload at ambient condition.

<sup>5</sup> See <http://support.wd.com/warranty> for regional specific warranty details.

<sup>6</sup> No non-recoverable errors during operating tests or after non-operating tests.

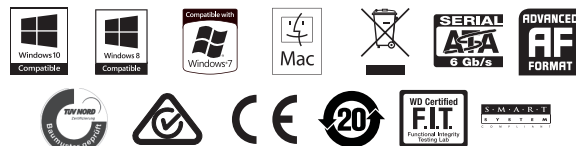
<sup>7</sup> Sound power level.

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

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