

# DH-KIT/NVR2104HC-W/2-HFW1539DTK1P-SW-PV-0360B/2-HDW1539DAP-SW-PV-0280B

## 5MP Smart Dual Light Wi-Fi Security System with 4CH Wi-Fi NVR and 2×Indoor & 2×Outdoor 5MP IP Cameras



### Series Overview

Driven by industry-leading technology, Dahua Smart Dual Light Wi-Fi Security System is highly precise and easy to install, producing high-quality images. Wi-Fi NVR can automatically detect and connect to Wi-Fi cameras to instantly generate live videos. Equipped with embedded Wi-Fi module that supports IEEE 802.11b/g/n/a/ac/ax, its signals are highly stable, covering an extensive area, enabling the system to deliver reliable wireless connectivity. They have strong wireless connection capabilities and do not require network cables, eliminating the need for a professional construction team. The system is ideal for small and medium-sized scenes such as retail stores, homes, and other small and medium-sized enterprises.

### Functions

#### Smart Dual Light

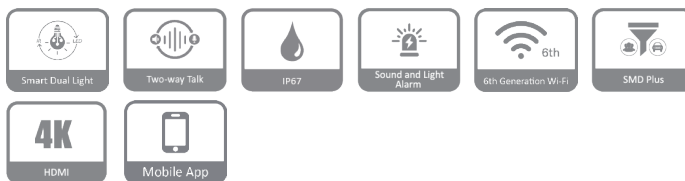
Dahua Smart Dual Light technology adopts smart algorithm to detect targets. Usually, the IR illuminator is on at night; when the target appears in the monitoring area, the white light is on, and the camera records the full-color video and information of key events. That is, the camera links snapshot and video with full-color image. When the target is out of the monitoring area, the white light is off and the IR illuminator is on, which reduces light pollution efficiently.

#### Sound and Light Alarm

Dahua camera with sound and light alarms can provide quick warning to effectively prevent potential illegal intrusion.

The camera is built in multiple voices for selection, and supports customized voice importing.

- Built-in IR LED and warm light, and the max. IR illumination distance is 30 m, the max. warm light distance is 30m.
- Built-in Mic; built-in speaker; support two-way talk.
- Sound and light alarm provide instant alarms to deter intruders.
- IP67 protection.
- Automatic pairing with wireless cameras.
- Supports Smart H.265+, H.265, Smart H.264+, H.264 and MJPEG decoding formats.
- Max. decoding capability: 10 × 1080p@30 fps or 4 × 5MP@30 fps.
- Max. 80/80/80 Mbps incoming/recording/outgoing bandwidth.
- Supports IP cameras with a resolution up to 16 MP.
- AI by Recorder supports 4-channel SMD Plus.
- Supports one-click arming and disarming.



#### 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.

#### Two-way Talk

Convenient for remote communication. You can talk through the built-in speaker and microphone and enjoy real-time video through the DMSS app anytime.

#### 6th Generation Wi-Fi

With its embedded Wi-Fi 6 module, the Wi-Fi NVR is not only highly stable, but also offers fast transmission rates, low-latency and extensive coverage, enabling efficient and reliable monitoring.

#### Protection (IP67)

With IP67 weather-resistance capability, it performs well against rain, dust and wind, ensuring stable surveillance 24/7.

**Technical Specification**

## System (DHI-NVR2104HC-W)

Main Processor	Industrial-grade processor
Operating System	Embedded Linux
Operating Interface	Web, Local GUI

## AI

AI by Recorder	SMD Plus
AI by Camera	Perimeter protection; SMD

## Perimeter Protection

Perimeter Performance of AI by Camera (Number of Channels)	All channels (8 targets/s)
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## SMD

SMD Plus by Recorder	4 channels: Secondary filtering for human and motor vehicle, reducing false alarms caused by leaves, rain and lighting condition change
SMD by Camera	All channels (16 targets/s)

## Audio and Video

Access Channel	4 channels
Network Bandwidth	AI disabled: 80 Mbps incoming, 80 Mbps recording and 80 Mbps outgoing AI enabled: 80 Mbps incoming, 80 Mbps recording and 60 Mbps outgoing
Resolution	16 MP; 12 MP; 8 MP; 6 MP; 5 MP; 4 MP; 3 MP; 1080p; 960p; 720p; D1; CIF; QCIF
Decoding Capability	AI disabled: 1-channel 16 MP@30 fps; 2-channel 8 MP@30 fps; 3-channel 6 MP@30 fps; 4-channel 5 MP@30 fps AI enabled: 1-channel 12 MP@30 fps; 2-channel 6 MP@30 fps; 3-channel 5 MP@30 fps; 4-channel 4 MP@30 fps
Video Output	1 HDMI, 1 VGA HDMI: 3840 × 2160, 1920 × 1080, 1280 × 1024, 1280 × 720 VGA: 1920 × 1080, 1280 × 1024, 1280 × 720
Multi-screen Display	1/4
Third-party Camera Access	ONVIF

## Compression Standard

Video Compression	Smart H.265+; H.265; Smart H.264+; H.264; MJPEG
Audio Compression	G.711a; G.711u; PCM; G726

## Network

Network Protocol	HTTP; HTTPS; TCP/IP; IPv4; IPv6; UDP; NTP; DHCP; DNS; SMTP; IP Filter; DDNS; IP Search (Supports IP camera, DVR, NVS, etc.); P2P; Auto Registration
Mobile Phone Access	iOS; Android
Interoperability	ONVIF 24.12(Profile T; Profile S; Profile G); CGI; SDK
Browser	Chrome; IE; Safari; Edge; Firefox

## Wi-Fi

Wi-Fi Standard	802.11b/g/n/a/ac/ax
Frequency Range	2400-2483.5MHz, 5150-5350MHz, 5470-5725MHz, 5725-5850MHz
Transmitter Power (EIRP)	CE EIRP: ≤20dBm@2400-2483.5MHz; ≤23dBm@5150-5250MHz; ≤20dBm@5250-5350MHz; ≤27dBm@5470-5725MHz; ≤14dBm@5725-5850MHz

## Recording Playback

Multi-channel Playback	Up to 4 channels
Record Mode	General, motion detection; intelligent; alarm
Backup Method	USB device and network
Playback Mode	Instant playback; general playback; event playback; tag playback; smart playback

## Alarm

General Alarm	Motion detection; camera external alarm; PIR alarm
Anomaly Alarm	Error (no disk, disk error, low space, low quota space; network disconnection; IP conflict; MAC conflict); video loss; video tampering; camera offline
Intelligent Alarm	Perimeter protection; SMD Plus
Alarm Linkage	Recording; snapshot; buzzer; log; preset; email; tour

## Port

Disk Interface	1 SATA port. Each disk can contain up to 20 TB. This limit varies depending on the environment temperature.
USB	2 (2 rear USB 2.0 ports)
HDMI	1
VGA	1
Network Port	1 (10/100 Mbps Ethernet port, RJ-45)
Antenna	2

## General

Power Supply	12 VDC, 1.5 A
Power Consumption	<6 W (without HDD)
Net Weight	0.57 kg (1.26 lb)
Gross Weight	0.98 kg (2.16 lb)
Product Dimensions	197.0 mm × 234.0 mm × 41.5 mm (7.76" × 9.21" × 1.63") (W × D × H)
Packaging Dimensions	332.0 mm × 240.0 mm × 64.0 mm (13.07" × 9.45" × 2.52") (W × D × H)
Operating Temperature	-10 °C to +45 °C (+14 °F to +113 °F)
Storage Temperature	-20 °C to +60 °C (-4 °F to +140 °F)
Operating Humidity	10%–93% (RH), non-condensing
Certifications	CE-LVD: IEC 62368-1:2014 CE-EMC: EN IEC 61000-3-2:2019, EN 61000-3-3:2013+A1:2019, EN 55032:2015+A11:2020, EN 55035:2017+A11:2020, EN 55024:2010+A1:2015, EN 50130-4:2011+A1:2014

Technical Specification	
Camera (DH-IPC-HDW1539DA-SW-PV)	
Image Sensor	1/2.8" CMOS
Max. Resolution	2880 (H) × 1620 (V)
Min. Illumination	0.007 lux@F1.6 (Color, 30 IRE) 0.0007 lux@F1.6 (B/W, 30 IRE) 0 lux (Illuminator on)
Illumination Distance	Up to 30 m (98.43 ft) (IR) Up to 30 m (98.43 ft) (Warm light)
Illuminator Number	1 (IR LED); 1 (Warm light)
Angle Adjustment	Pan: 0°–360° Tilt: 0°–78° Rotation: 0°–360°
Lens Type	Fixed-focal
Focal Length	2.8 mm; 3.6 mm
Max. Aperture	F1.6
Field of View	2.8 mm: H: 108°; V: 57°; D: 129° 3.6 mm: H: 89°; V: 48°; D: 104°

Intelligence	
Human Detection	Yes
Vehicle Detection	Yes

Audio and Video	
Video Compression	H.265; H.264; H.264H; H.264B; MJPEG (Only supported by sub stream)
Video Frame Rate	Main stream: 2880 × 1620@(1–25/30 fps) sub stream: 640 × 360@(1–25/30 fps) *The values above are the max. frame rates of each stream; for multiple streams, the values will be subjected to the total encoding capacity.
Video Bit Rate	H.264: 32 kbps–6144 kbps H.265: 32 kbps–6144 kbps
Day/Night	Auto(ICR)/Color/B/W
WDR	DWDR
Image Rotation	0°/180°
Built-in MIC	Yes, built-in Mic
Built-in Speaker	Yes, built-in speaker
Audio Compression	G.711a; G.711Mu; PCM

Network	
Network Port	RJ-45 (10/100 Base-T)
Wi-Fi	IEEE 802.11b/g/n/ax 2.4000–2.4835 GHz, 2.4 G, EIRP≤20 dBm
Wi-Fi Pairing	Bluetooth pairing
Interoperability	ONVIF (Profile S & Profile G & Profile T); CGI
Storage	Micro SD card (support max. 256 GB)
Management Software	Smart PSS Lite; DSS; DMSS
Mobile Client	iOS;Android

General	
Certifications	CE-LVD: EN62368-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU; CE-RED: Radio Equipment Directive 2014/53/EU
Power Supply	12 VDC
Power Consumption	Basic: 2.1 W (12 VDC); Max.: 7.1 W (12 VDC) (H.265 + warm light on+ sound and light alarm)
Operating Temperature	–40 °C to +60 °C (–40 °F to +140 °F)
Operating Humidity	≤95% (RH), non-condensing
Protection	IP67
Camera Button	Reset button
Casing Material	Metal + plastic
Product Dimensions	102.2 mm × Φ109.9 mm (4.02" × Φ4.33")
Net Weight	0.32 kg (0.71 lb)

Technical Specification	
Camera (DH-IPC-HFW1539DTK1-SW-PV)	
Image Sensor	1/2.7" CMOS
Max. Resolution	2880 (H) × 1620 (V)
Min. Illumination	0.007 lux@F1.6 (Color, 30 IRE) 0.0007 lux@F1.6 (B/W, 30 IRE) 0 lux (Illuminator on)
Illumination Distance	Up to 30 m (98.43 ft) (IR) Up to 30 m (98.43 ft) (Warm light)
Illuminator Number	1 (Multi-core (IR + warm) light)
Angle Adjustment	Tilt: 0°–90° Rotation: 0°–360°
Lens Type	Fixed-focal
Focal Length	2.8 mm; 3.6 mm
Max. Aperture	F1.6
Field of View	2.8 mm: H: 104°; V: 56°; D: 124° 3.6 mm: H: 89°; V: 48°; D: 104°
Intelligence	
Human Detection	Yes
Vehicle Detection	Yes
Audio and Video	
Video Compression	H.264B; H.264; H.264H; H.265
Video Frame Rate	Main stream: 2880 × 1620@(1–25/30 fps) sub stream: 640 × 360@(1–25/30 fps) *The values above are the max. frame rates of each stream; for multiple streams, the values will be subjected to the total encoding capacity.
Video Bit Rate	H.264: 32 kbps–6144 kbps H.265: 32 kbps–6144 kbps
Day/Night	Auto(ICR)/Color/B/W
WDR	DWDR
Motion Detection	OFF/ON (4 areas, rectangular)
Image Rotation	0°/180°
Built-in MIC	Yes, built-in Mic
Built-in Speaker	Yes, built-in speaker
Audio Compression	G.711a; G.711Mu; PCM
Network	
Network Port	RJ-45 (10/100 Base-T)
Wi-Fi	IEEE 802.11b/g/n/ax 2.4000–2.4835 GHz, 2.4 G, EIRP≤20 dBm
Wi-Fi Pairing	Bluetooth pairing
Interoperability	ONVIF (Profile S & Profile G & Profile T); CGI
Storage	Micro SD card (support max. 256 GB)
Management Software	Smart PSS Lite; DSS; DMSS

Mobile Client	Android;iOS
General	
Certifications	CE
Power Supply	12 VDC
Power Consumption	Basic: 2.4 W (12 VDC); Max.: 6.9 W (12 VDC)
Operating Temperature	–30 °C to +50 °C (–22 °F to +122 °F)
Operating Humidity	≤95% (RH), non-condensing
Protection	IP67
Camera Button	Reset button
Casing Material	Metal + plastic
Product Dimensions	172.4 mm × 83.3 mm × 75.0 mm (6.79" × 3.28" × 2.95") (L × W × H)
Net Weight	0.3 kg (0.66 lb)

Ordering Information		
Type	Model	Description
Smart Dual Light Series	DH-KIT/ NVR2104HC-W/2- HFW1539DTK1P- SW-PV-0360B/2- HDW1539DAP-SW- PV-0280B	5MP Smart Dual Light Wi-Fi Security System with 4CH Wi-Fi NVR and 2×Indoor & 2×Outdoor 5MP IP Cameras