DH-IPC-WL46A

4MP Fixed-focal Floodlight Network Camera

Driven by industry-leading technology, Dahua Wireless Series network cameras are highly precise, producing high-quality images. They do not require network cables, making their installation easy to implement. It includes WiFi Series, 4G Camera, and 5G Camera to meet the needs of different wireless application scenarios.

Series Overview

With features of simple installation, easy operation, and high performance-cost ratio, Dahua Entry series network camera is applicable to small and medium-sized scenes, such as homes/ residences, small-sized retail stores, and other small and medium-sized enterprises.

Functions

Smart H.265+ & Smart H.264+

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

Motion Detection

When moving objects appear in the monitoring image, Dahua Motion Detection technology triggers alarm or records.

- 4-MP 1/3" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 4 MP (2560 × 1440)@25 fps/30 fps
- H.265 codec, high compression rate, ultra-low bit rate.
- SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments.
- Built-in microphone and speaker for real-time communication.
- Active alarm with built-in 110 dB Siren.
- The built-in dual floodlights can switch between warm and cool color temperature and have 4 floodlights modes.
- Detects humans, vehicles and animals to reduce the occurrence of false alarms.
- SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments.
- Dual-band 2.4 GHz and 5 GHz WiFi options, IEEE802.11a/b/g/n/ac.
- Supports max. 256 G Micro SD card and NVR storage.
- 100–240 VAC power supply, easy for installation.
- IP65 Protection.

Day/Night

Dahua Day/Night function provides color image when illumination is adequate; when illuminance is inadequate, it switches night mode and provides white and black image. It can guarantee that the network camera can work normally when illuminance changes.

Cyber Security

Dahua network cameras employ a series of security technologies, including security authentication and authorization, access control protocols, trusted protection, encrypted transmission and encrypted storage. These technologies improve the camera's defense against external cyber threats and prevent malicious programs from compromising the device.

Technical Specification

Camera

Image Sensor	1/3" CMOS
Max. Resolution	2560 (H) × 1440 (V)
ROM	128 MB
RAM	512 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.005 lux@F1.6 (Color,30 IRE) 0.0005 lux@F1.6 (B/W,30 IRE) 0 lux (Illuminator on)
S/N Ratio	>56 dB
Illumination Distance	10 m (32.81 ft) (IR); 30 m (98.43 ft) (Floodlight)
Illuminator On/Off Control	Auto; Manual
Illuminator Number	1 (IR LED); 2 (Floodlight, color can be switched between warm and cool)
Floodlight Brightness	1500-2400 lm
Floodlight Color Temperature	3000K±200K (warm); 6000K±300K (cool)
Floodlight Modes	Motion Activation Manual Schedule PIR Activation
Pan/Tilt/Rotation Range	Camera: Pan: −85° to +85° Tilt: −90° to +45° Rotation: 0° to +360° Floodlight: Tilt: −90° to +90° Rotation: −145° to +145°
PIR Sensor Distance	10 m (the height of the device is 3 m, placed at an angle of 30° from the horizontal)
PIR Detection Range	270°

Lens

Lens Type	Fixed-focal
Lens Mount	M12
Focal Length	2.8 mm
Max. Aperture	F1.6
Field of View	H: 98°; V: 55°; D: 115°
Iris Control	Fixed
Close Focus Distance	1.0 m (3.28 ft)

DORI Distance	Detect	Observe	Recognize	Identify
	61.2 m (200.79 ft)	24.5 m (80.38 ft)	12.2 m (40.03 ft)	6.1 m (20.01 ft)

Video

Video Compression	H.264B; H.264; H.264H; H.265; MJPEG
Smart Codec	Smart H.265+; Smart H.264+
Video Frame Rate	Main stream: 2560 × 1440@(1–20 fps) Sub stream: 704 × 576@(1–25 fps)/704 × 480@(1–30 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.
Stream Capability	3 streams
Resolution	4M (2560 × 1440); 3M (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 1M (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)
Bit Rate Control	CBR/VBR
Video Bit Rate	H264: 32 kbps–8192 kbps; H265: 32 kbps–8192 kbps
Day/Night	Auto(ICR)/Color/B/W
BLC	Yes
HLC	Yes
WDR	DWDR
White Balance	Auto; natural; street lamp; outdoor; manual; regional custom
Gain Control	Auto
Noise Reduction	3D NR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest (RoI)	Yes (4 areas)
Smart Illumination	Yes
Image Rotation	0°/180°
Mirror	Yes
Privacy Masking	Yes

Audio

Built-in MIC	Yes
Built-in Speaker	Yes
Audio Compression	G.711a; G.711Mu; G.726; PCM

Alarm

Alarm Event	No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; security exception; motion detection; video tampering; sence changing; SMD (human, animal and vehicle); audio detection; intensity change

Network

Wi-Fi	IEEE802.11a/b/g/n/ac 2.4–2.4835GHz & 5.18–5.85GHz
SDK and API	Yes
Cyber Security	Video encryption; configuration encryption; Digest; WSSE; account lockout; security logs; generation and importing of X.509 certification; HTTPS; trusted boot; trusted execution; trusted upgrade
Network Protocol	IPV4; IPV6; ARP&Ping; TCP; UDP; HTTP; RTSP; HTTPS; DDNS; Email; SNMP; Multicast; Auto Registration; Wireless Qos; Wi-Fi setting; hotspot scanning; 802.1x; UPnP status; Bonjour; UPnP; device discovery
Interoperability	ONVIF; CGI; P2P; RTMP

User/Host	6 (Total bandwidth: 36 M)
Storage	Micro SD card (support max. 256 GB); FTP; SFTP; NAS
Browser	IE; Chrome; Firefox
Management Software	DMSS
Mobile Client	iOS; Android

Certification

Certifications	CE-LVD: EN62368-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU; CE-RED: Radio Equipment Directive 2014/53/EU; FCC: 47 CFR FCC Part 15, Subpart B; FCC ID: FCC PART 15C

Power

Power Supply	100–240 VAC
Power Consumption	Basic: 5.2 W (100–240 VAC) Max. (Illuminator+IPC): 48.3 W (100–240 VAC)

Environment

Operating Temperature	−20 °C to +50 °C (−4 °F to +122 °F)
Operating Humidity	≤ 95%
Storage Temperature	−20 °C to +50 °C (−4 °F to +122 °F)
Protection	IP65

Structure

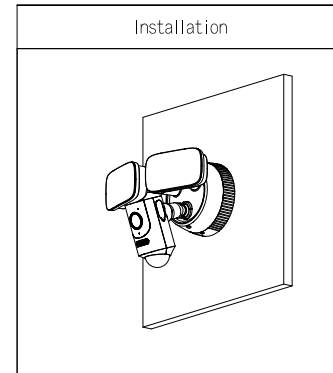|	
Casing	Metal + Plastic
Product Dimensions	270.7 mm × 217.2 mm × 195.6 mm (10.66" × 8.55" × 7.70") (L × W × H)
Net Weight	1.40 kg (3.08 lb)
Gross Weight	1.88 kg (4.14 lb)

Ordering Information

Type	Model	Description
4MP Camera	DH-IPC-WL46AP-0280B	4MP Fixed-focal Floodlight Network Camera
	DH-IPC-WL46AN-0280B	4MP Fixed-focal Floodlight Network Camera
Accessories (Optional)	TF-P100	MicroSD Memory Card

Accessories

Optional:

TF-P100
MicroSD Memory Card

Installation

Dimensions (mm[inch])