DH-IPC-HCBW8442

4MP WizMind Corner Network Camera

ePoE **WizMind**

Launched by Dahua Technology, Dahua WizMind is a full portfolio of solutions composed of project-oriented products including IPC, NVR, PTZ, XVR, Thermal and software platform which adopts industry-leading deep learning algorithms. Focusing on customer's requirements, WizMind provides precise, reliable and comprehensive AI solutions for verticals.

Series Overview

With advanced H.265 encoding technology, Dahua WizMind corner series network camera has efficient encoding capacity, which helps to save bandwidth and storage space. The camera adopts starlight technology, intelligent IR technology, and intelligent image analysis technology; and has waterproof function, dust-proof function and vandal-proof function, complying to the standards of IP67 and IK10+(50J).

Functions

Smart (H.265+ & 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.

Starlight

Dahua Starlight technology mainly applies to the environment of low illuminance, and it can provide clear colorful video. Even in the environment of ultra-low illuminance, the technology can guarantee the good image effect.

Perimeter Protection

With deep learning algorithm, Dahua Perimeter Protection technology can recognize human and vehicle accurately. In restricted area (such as pedestrian area and vehicle area), the false alarms of intelligent detection based on target type (such as tripwire, intrusion, fast moving, parking detection, loitering detection and gathering detection) are largely reduced.

- 1/1.8" 4Megapixel progressive scan CMOS
- ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments.
- 25/30 fps@2688 × 1520
- WDR (140 dB), Day/Night (ICR), 3D NR, AWB, AGC, BLC
- 2.5 mm fixed lens, distortion correction
- 1/1 Alarm in/out, 1/1 audio in/out
- Max. IR LEDs Length 10 m
- IP67 and IK10+ (50J) protection

4Mp	Perimeter Protection	People counting	Starlight	50J

Distortion Correction

With advanced distortion correction algorithm, Dahua Distortion Correction corrects the image distortion in both horizontal and vertical directions to be consistent with the actual situation.

Invisible IR LED Illuminator (940 nm)

With 940 nm IR LED, the IR LED Illuminator of the camera is invisible to naked eyes.

Cyber Security

Dahua network camera is equipped with a series of key security technologies, such as security authentication and authorization, access control, trusted protection, encrypted transmission, and encrypted storage, which improve its security defense and data protection, and prevent malicious programs from invading the device.

Protection (IP67, IK10+, wide voltage)

IP67: The camera passes a series of strict test on dust and soak. It has dust-proof function, and the enclosure can works normal after soaking in 1 m deep water for 30 minutes.
IK10+: The enclosure can stand the punch more than 3 times from a 5 kg hammer falling from a height of 100 cm (Impact energy is 50J).
Wide voltage: The camera allows ±30% input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

Technical Specification

Camera

Image Sensor	1/1.8"4Megapixel progressive CMOS
Max. Resolution	2688 (H) ×1520 (V)
ROM	128 MB
RAM	512 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100000 s
Min. Illumination	0.004 Lux@F2.0 (Color, 30IRE) 0.0004 Lux@F2.0 (B/W, 30IRE) 0 lux (Illuminator on)
Illumination Distance	10 m (32.8 ft) (monitoring distance)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	2
Pan/Tilt/Rotation Range	Vertical: -10° to +10° Rotation: 0° to 355°

Lens

Lens Type	Fixed
Mount Type	M12
Focal Length	2.1 mm
Max. Aperture	F2.0
Field of View	Horizontal: 135° Vertical: 90°
Iris Type	Fixed aperture
Close Focus Distance	0.4 m (1.3 ft)

DORI Distance	Detect	Observe	Recognize	Identify
	34.5 m (113.2 ft)	13.8 m (45.3 ft)	6.9 m (22.6 ft)	3.4 m (11.2 ft)

Smart event

General IVS Analytics	Abandoned object; moving object
Heat Map	Yes

Professional, intelligent

Perimeter Protection	Tripwire; intrusion; fast moving (the three functions support the classification and accurate detection of vehicle and human); loitering detection; people gathering; parking detection
People Counting	Support the counting of enter number, leave number and pass number, and displaying and outputting yearly/monthly/daily reports Support the counting of number in area, and 4 rules configuration. Count number of people or stay time and link alarm Support queue management, and 4 rules configuration. Count number of people or stay time and link alarm
Intelligent Search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos.

Video

Video Compression	H.265; H.264; H.264H; H.264B; MJPEG (only supported by the sub stream)
Smart Codec	Smart H.265+/ Smart H.264+
Video Frame Rate	Main stream: 2688 × 1520 (1 fps–25/30 fps) Sub stream: D1 (1 fps–25/30 fps) Third stream: 1080p (1 fps–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.
Stream Capability	3 streams
Resolution	2688 × 1520; 2560 × 1440; 2304 × 1296; 2016 × 1512; 1080p (1920 × 1080); UXGA(1600 × 1200); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF(352 × 288/352 × 240)
Bit Rate Control	CBR; VBR
Video Bit Rate	H.264: 32 Kbps–8192 Kbps H.265: 19 Kbps–8192 Kbps
Day/Night	Auto (ICR)/Color/B/W
BLC	Yes
WDR	140 dB
White Balance	Auto/natural/street lamp/outdoor/manual/regional custom
Gain Control	Manual/Auto
Noise Reduction	3D NR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest (RoI)	Yes (4 areas)
Electronic Image Stabilization (EIS)	Yes
Smart Illumination	Yes (Adjust by user)
Defog	Yes
Image Rotation	0°/90°/180°/270°
Mirror	Yes
Privacy Masking	4 areas

Audio

Built-in MIC	Yes
Audio Compression	G.711; G.711a; G.711Mu; G726; AAC

Network

Network	RJ-45 (10/100 Base-T)
Cyber Security	Video encryption; firmware encryption; configuration encryption; Digest; WSSE; account lockout; security logs; IP/MAC filtering; generation and importing of X.509 certification; syslog; HTTPS; 802.1x; trusted boot; trusted execution; IP Filter; Password protection
Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS;UPnP; NTP; Multicast; ICMP; IGMP; NFS; SAMBA; PPPoE; SNMP; SSL
Interoperability	ONVIF (Profile S/Profile G); CGI; Milestone; Genetec

Scene self-adaptation (SSA)	Yes
User/Host	20 (Total bandwidth: 80 M.)
Edge Storage	FTP; NAS; Micro SD card (support max. 256 G)
Browser	IE: Versions later than IE 8 Google Firefox Apple: versions later than Safari 12
Management Software	Smart PSS; DSS; DMSS
Mobile Phone	IOS, Android

Certification

Certifications	CE-LVD: EN62368-1 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B

Port

RS-485	1 (Baud rate range: 1200 bps–115200 bps)
Audio Input	1 channel (Terminal)
Audio Output	1 channel (Terminal)
Alarm Input	1 channel in: 5mA 3V–5V DC
Alarm Output	1 channel out: 300mA 12V DC

Power

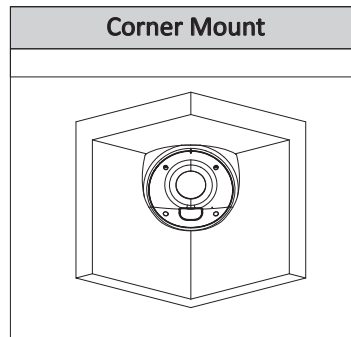| Power Supply	12V DC/PoE (802.3af) /ePOE
Power Consumption	Basic power consumption: 3W (12V DC); 3.6W (PoE) Max. power consumption (ICR + IR full intensity): 9.5W (12V DC); 11.5W (PoE)

Environment

Operating Temperature	−30°C to +60°C (−22°F to +140°F)
Operating Humidity	≤95%
Storage Temperature	−30°C to +60°C (−22°F to +140°F)
Ingress Protection	IP67; IK10+(50J)

Structure

Casing	Metal
Dimensions	209.4 mm × 212.0 mm × 103.1 mm (8.2" × 8.3" × 4.1") (L × W × H)
Net Weight	1365 g (3.0 lb)
Gross Weight	1465 g (3.2 lb)

Ordering Information

Type	Part Number	Description
4MP Camera	DH-IPC-HCBW8442P	4MP WizMind Corner Network Camera,PAL
	DH-IPC-HCBW8442N	4MP WizMind Corner Network Camera,NTSC
	IPC-HCBW8442P	4MP WizMind Corner Network Camera,PAL
	IPC-HCBW8442N	4MP WizMind Corner Network Camera,NTSC

Corner Mount

Dimensions (mm[inch])

212.0 [8.35]

209.4 [8.24]

103.1 [4.06]

89.5 [3.52]