

DH-IPC-HCBW8442

4MP WDR IR Corner Network Camera



- 1/1.8" 4Megapixel progressive scan CMOS
- H.265 & H.264 triple-stream encoding
- 25/30 fps@2688 × 1520
- WDR (140 dB), Day/Night (ICR), 3D DNR, 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



System Overview

With advanced H.265 encoding technology, Dahua corner 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 water-proof 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.

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.

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 passes strict vandal-proof test, and it can stand the punch of 50J impact energy.

Wide voltage: The camera allows $\pm 30\%$ 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
Effective Pixels	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, 1/3 s, 30 IRE)
IR Distance	10 m (32.8 ft) (monitoring distance)
IR On/Off Control	Auto
IR LEDs Number	2
Pan/Tilt/Rotation Range	Vertical: -10° to +10° Rotation: 0° to 355°

Lens

Lens Type	Fixed			
Mount Type	M12			
Focal Length	2.5 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; loitering detection; people gathering.
People Counting	Entry number and exit number counting: Support configuring 4 rules, and display and output daily/monthly/annual report People counting in area: Support configuring 4 rules Queue management: Support configuring 4 rules, and count the number of people and strand 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
Smart Codec	H.264: Yes H.265: Yes

Video Frame Rate	50 Hz: Main Stream: 2688 × 1520 @25 fps; sub stream: 704 × 576 @25 fps; third stream: 704 × 576 @25 fps Main Stream: 2688 × 1520 @25 fps; sub stream: 704 × 576 @25 fps; third stream: 1920 × 1080 @11 fps 60 Hz: Main Stream: 2688 × 1520 @30 fps; sub stream: 704 × 480 @30 fps; third stream: 704 × 480 @12 fps Main Stream: 2688 × 1520 @30 fps; sub stream: 704 × 480 @30 fps; third stream: 1920 × 1080 @1 fps
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	ICR switch
BLC	Yes
WDR	140 dB
White Balance	Auto/natural/street lamp/outdoor/manual/regional custom
Gain Control	Manual/Auto
Noise Reduction	3D DNR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest(Roi)	Yes (4 areas)
Electronic Image Stabilization(EIS)	Yes
Smart IR	Yes (Adjust by user)
Defog	Yes
Image Rotation	0°/90°/180°/270°
Mirror	Yes
Privacy Masking	4 areas

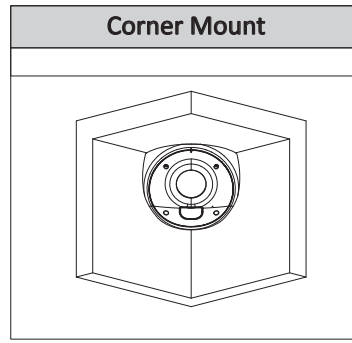
Audio

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

Network

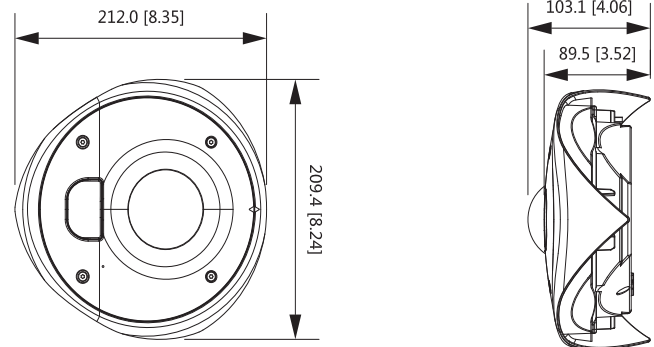
Network	RJ-45 (10/100 Base-T)
Protocol	HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPoE; IPv4/v6; SNMP; QoS; UPnP; NTP
Interoperability	ONVIF (Profile S/Profile G); CGI; Milestone; Genetec; P2P
Scene self-adaptation	Yes
User/Host	20 (Total bandwidth: 80 M.)
Edge Storage	FTP; NAS; 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; P2P
Mobile Phone	IOS, Android
Certification	
Certifications	CE-LVD: EN60950-1 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



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

Dimensions (mm[inch])



Power	
Power Supply	12V DC/PoE
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
2MP Camera	DH-IPC-HCBW8442P	4MP WDR IR Corner Network Camera,PAL
	DH-IPC-HCBW8442N	4MP WDR IR Corner Network Camera,NTSC
	IPC-HCBW8442P	4MP WDR IR Corner Network Camera,PAL
	IPC-HCBW8442N	4MP WDR IR Corner Network Camera,NTSC