DH-IPC-HFS7842-Z-5G-LED

8MP 5G Bullet WizMind Network Camera

· 8MP 1/1.8" CMOS image sensor, low illuminance, high image definition

· Outputs max. 8MP (3840 × 2160) @25/30 fps

· H.265 codec, high compression rate, ultra-low bit rate

· Built-in efficient warm light, max. illumination distance: 80 m

· ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments

· Rotation mode, WDR, 3D NR, HLC, BLC, digital watermarking

· With deep learning algorithm, it supports people counting, face detection,perimeter protection, video metadata etc

· Alarm: 7 in, 3 out; audio: 2 in, 1 out; 485; BNC; supports max. 256 G SD card

· 12V DC power supply; easy for installation

· IP67 protection

· GPS/BDS

· Support 5G module (N41, N78, and N79 frequency range), and NSA and SA network

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.

| 8Mp | 5G | Smart Codec | Video Metadata | ANPR | Perimeter Protection |

Series Overview

With advanced deep learning algorithm, Dahua WizMind 7 Series network camera supports various intelligent functions and satisfies the requirements in different scenes. The camera can accurately recognize person, vehicle, and non-motor vehicle, face, ANPR, and liveness. This series camera has ultra starlight night version effect, and works with ultra-low stream. It supports dust-proof function, waterproof function and vandal-proof function, complying with the standards of IP67.

People Counting

With deep learning algorithm, Dahua People Counting technology can track and process moving human body targets to realize the accurate statistics of enter No., leave No., and In Area No. Working with management platform, it outputs reports to meet your requirements.

Functions

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.

5G

Equipped with built-in high-performance 5G mobile communication module, the network camera supports 5G network connection and two networking methods: Non-Standalone (NSA) and Standalone (SA). It is backward compatible with 4G connection (The module is different for band compatibility). It can be registered on the platform through wireless connection, and can transmit videos, pictures, intelligent feature information, and alarm events. Through the client, you can remotely monitor and operate in real time.

Video Metadata

With deep learning algorithm, Dahua Video Metadata technology can detect, track, capture vehicle, non-motor vehicle and people, and select the best images, and extract attributes.

Face Detection

Dahua Face Detection technology can detect the face in the image. With deep learning algorithm, the technology supports detecting, tracking, capturing and selecting the best face image, and then outputs face snapshot.

Protection (IP67, 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.

Wide voltage: The camera allows ±30% (for some power supplies) input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

ANPR

With high-performance GPU chip, deep learning algorithm, and lots of sample training learning, Dahua ANPR technology can automatically collect and recognize the vehicle information, including license plate, logo, vehicle type, and vehicle color.

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.

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.

Technical Specification

Camera

Image Sensor	1/1.8"8Megapixel progressive CMOS
Max. Resolution	3840 (H) × 2160 (V)
ROM	4 GB
RAM	2 GB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.003 Lux@F1.2 (Color,30IRE) 0.0003 Lux@F1.2 (B/W,30IRE) 0 Lux (Illuminator on)
S/N Ratio	> 56 dB
Illumination Distance	80 m
Illuminator On/Off Control	Auto/Manual
Illuminator Number	6 (Warm light)

Lens

Lens Type	Motorized vari-focal
Mount Type	Module
Focal Length	8 mm–56 mm
Max. Aperture	F1.2 (Constant)
Field of View	Horizontal: 40° (W)–9° (T) Vertical: 22° (W)–5° (T) Diagonal: 46° (W)–10° (T)
Iris Type	Auto
Close Focus Distance	W: 2 m (6.6 ft) T: 3 m (9.8ft)

DORI Distance	Lens	Detect	Observe	Recognize	Identify
	W	151.1 m (495.4 ft)	60.7 m (199.1 ft)	30.3 m (99.4 ft)	15.1 m (49.5 ft)
	T	400.0 m (1312.3 ft)	160.0m (524.9 ft)	80.0m (262.5 ft)	40.0m (131.2 ft)

Smart Event

IVS	Abandoned object; missing object

Professional, intelligent

IVS (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
Face Detection	Face detection; track; optimization; snapshot; report high quality picture; face enhancement; face exposure; face attribute extract, 6 attributes and 8 expressions: Gender, age, glasses, expressions (anger, calm, happiness, sadness, disgust, surprise, confusion and fear), mask, beard; face matting setting: Face, single inch photo; three snapshot methods: Real-time snapshot, optimization snapshot, quality priority; face angle filter; optimization time setting
People Counting	Support the people counting of tripwire, people counting in area, and displaying and outputting yearly/monthly/daily reports Support queue management, and displaying and outputting monthly/daily reports Support 4 rules configuration for people counting of tripwire, 4 rules configuration for people counting in area , 4 rules configuration for queue management
ANPR	ANPR, track, priority, snapshot Vehicle attributes: license plate, vehicle type, vehicle color, vehicle brand Other attributes: sun visor, seat belt, smoking, phoning, in-car accessories, annual vehicle inspection mark
Video Metadata	Support human body, human face, motor vehicle and non-motor vehicle image capture and attributes extraction.
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+/H.264+
Video Frame Rate	Main Stream: 3840 × 2160 (1-25/30 fps) Sub stream: 704 × 576 (1-25 fps)/704 × 480 (1–30 fps) Third stream: 1920 × 1080 (1-25/30 fps) Fourth stream: 1920 × 1080 (1-25/30 fps) Fifth stream: 704 × 576 (1-25fps)/704 × 480 (1–30 fps)
Stream Capability	5 streams
Resolution	8M (3840 × 2160); 6M (3072 × 2048/3072 × 1728); 5M (2592 × 1944)/4M (2688 × 1520); 3M (2048 × 1536/2304 × 1296); 1080p (1920 × 1080); 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: 9 kbps–17664 kbps H.265: 9 kbps–17664 kbps
Day/Night	Auto (ICR)/Color/B/W
BLC	Yes
HLC	Yes
WDR	120 dB
Scene Self-adaptation (SSA)	Yes

White Balance	Auto/natural/street lamp/outdoor/manual/regional custom
Gain Control	Auto/Manual
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
Defog	Yes
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 1080p resolution and lower)
Mirror	Yes
Privacy Masking	4 areas

Audio

Audio Compression	G.711A; G.711Mu; G.726; G.723

Alarm Event

Alarm Event	No SD card; SD card full; SD card error; network disconnection; illegal access; security exception; IP conflict; motion detection; video tampering; intrusion; tripwire; abandoned object; missing object; fast moving; parking detection; people gathering; loitering detection; scene changing; audio detection; defocus detection; people counting; people counting in area; face detection; video metadata; external alarm; voltage detection

Network

Network	RJ-45 (10/100/1000 Base-T)
5G	Support 5G module (N41, N78, and N79 frequency range), and NSA and SA network
SDK and API	Yes
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; trusted upgrade
Protocol	IPv4; IPv6; HTTP; HTTPS; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; SAMBA; PPPoE; 802.1x; SNMP; Bonjour
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; P2P; Milestone; Genetec
User/Host	20 (Total bandwidth: 80 M)
Storage	FTP; SFTP; Micro SD card (support max. 256 G); NAS
Browser	IE: IE9 and later Chrome: 50 and later Firefox: 48 and later
Management Software	Smart PSS; DSS; DMSS
Mobile Phone	IOS; Android

Certifications

Certification	CE-LVD: EN62368-1CE-EMC: Electromagnetic Compatibility Directive 2014/30/EUFCC: 47 CFR FCC Part 15,Support B

Port

RS-485	1 (baud rate range: 1200 bps–115200 bps)
Audio Input	2 channel (RCA port)
Audio Output	1 channel (RCA port)
Alarm Input	7 channels in: 5mA 3V–5V DC
Alarm Output	3 channels out: 1,000mA 30V DC/500mA 50V AC

Power

Power Supply	12V DC
Power Consumption	Basic power consumption: 5.2W (12V DC) Max. power consumption (ICR + warm light full intensity + 5G acquiring): 25.5W (12V DC)

Environment

Operating Conditions	−30°C to +60°C (−22°F to +140°F)/Less than 95% RH
Protection Grade	IP67

Construction

Casing	Metal + Plastic
Dimensions	404.3 mm × 163.8 mm × 211.8 mm (15.9 × 6.4" × 8.3") (L × W × H)
Net Weight	4.02 kg (8.9 lb)
Gross Weight	4.98 kg (11 lb)

Ordering Information

Type	Model	Description
8MP Camera	DH-IPC-HFS7842P-Z-5G-LED-0856	8MP 5G Bullet WizMind Network Camera, PAL
	DH-IPC-HFS7842N-Z-5G-LED-0856	8MP 5G Bullet WizMind Network Camera, NTSC
Accessories	PFA150-SG	Pole Mount
	PFA162-SG	Plane Mount
	PFB605W-SG	Wall Mount

Accessories

Optional:

PFA150-SG
Pole Mount

PFA162-SG
Plane Mount

PFB605W-SG
Wall Mount

Pole Mount(Horizontal)	Pole Mount(Vertical)	Wall Mount

Dimensions (mm[inch])

404.3 [15.92]

352.4 [13.87]

163.8 [6.45]

211.8 [8.34]

132.2 [5.2]

50.0 [1.97]

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