



# DH-IPC-HF5842F-ZE

8MP Box WizMind Network Camera









Launched by Dahua Technology, Dahua WizMind is a full portfolio of solutions composed of project-oriented products including IPC, IVSS,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 Al solutions for verticals.

#### **Series Overview**

Driven by deep learning algorithms, Dahua WizMind S Series network camera offers a variety of intelligent functions that greatly improve the accuracy of audio and video analysis. It supports video metadata, smart sound detection, face detection, perimeter protection, people counting and more. The camera also adopts advanced image processing Al ISP technology and has the Deeplight night vision effect. The camera is dustproof, waterproof and vandal-proof, and is certified as IP67 and IK10 (the type of protection varies depending on the model).

## **Functions**

#### AI-ISP

With AI ISP technology, the camera is able to easily adapt to scenes, producing high quality images that reveal the fine details of targets.

## **Self-Learning**

Empowered by deep learning technology, the device recognizes different types of targets and their statuses through learning and analyzing target features to detect targets and filter out false alarms.

#### **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.

#### **AcuPick**

This industry-leading search technology effectively utilizes both frontend and back-end intelligence to help with searching through massive video data to quickly and conveniently locate targets with greater precision.

## \* The parameters and datasheets below can only be applied to 5842-Z-S3 series.

- 8-MP 1/1.8" CMOS image sensor, low luminance, and high definition
- · Outputs max. 8MP (3840×2160) @25/30 fps.
- ROI, SVC, SMART H.264+/H.265+, AI H.264/H.265, encoding after filter, flexible coding, applicable to various bandwidth and storage environments.
- Rotation mode, WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
- · With deep learning algorithm, it supports: video metadata, smart sound detection, IVS, face detection, smart object detection, and people counting, etc.
- · Alarm: 2 in, 2 out; audio: 2 in, 1 out; 485; BNC; supports max. 1 TB Micro SD card, built-in MIC.
- Supports P-Iris, the camera can control the iris more precisely for better image effect.
- 12 VDC/24 VAC/PoE power supply; ePoE.
- 12 VDC power output, and max. current 165 mA, easy for installation.
- SMD 3.0.













## **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.

## 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.

### **Protection (Wide Voltage)**

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.



Technical Specification		Smart Sound Detection	Yes	
Camera		Video		
Image Sensor	1/1.8" CMOS	Video Compression	H.265; H.264; H.264H; H.264B; MJPEG (Only supported by the sub stream)	
Max. Resolution	3840 (H) × 2160 (V)	Smart Codec	Smart H.265+; Smart H.264+	
ROM	4 GB	Al Coding	AI H.265; AI H.264	
RAM	2 GB	Arcoung	Main stream: 3840 × 2160@(1–25/30 fps)	
Scanning System	Progressive	Video Frame Rate	*The values above are the max. frame rates of each stream; for multiple streams, the values will be subjected to the total encoding capacity.	
Electronic Shutter Speed	Auto/Manual 1/3 s-1/100,000 s			
Min. Illumination	With 10mm–40mm lens: 0.0007 lux@F1.2 (Color, 30 IRE) 0.0003 lux@F1.2 (B/W, 30 IRE)	Stream Capability		
S/N Ratio	>56 dB		8M (3840 × 2160); 6M (3072 × 2048); 5M (3072 × 1728);	
Lens Lens Mount	c/cs	Resolution	5M (2592 × 1944); 4M (2688 × 1520); 3.6M (2560 × 1440); 3M (2048 × 1536); 3M (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 ×	
	o, co		288/352 × 240)	
Intelligence	Yes	Bit Rate Control	CBR/VBR	
EPIZ	Intrusion, tripwire, fast moving (the three functions	Video Bit Rate	H.264: 32 kbps–16384 kbps; H.265: 12 kbps–13568 kbps	
IVS (Perimeter Protection)	support the classification and accurate detection of vehicle, animal and human); loitering detection, people	Day/Night	Auto(ICR)/Color/B/W	
,	gathering, parking detection. Supports long- distance mode. Supports self-learning, it filters out false alarms.	BLC	Yes	
Smart Object Detection	Smart abandoned object; smart missing object	HLC	Yes	
SMD	SMD 3.0	WDR	120 dB	
	Uses deep learning algorithms and works with back-end devices to accurately match targets, such as people, animal, and motor vehicles, and search through live and recorded videos to quickly locate targets.	Scene Self-adaptation (SSA)	Yes	
AcuPick		White Balance	Auto; natural; street lamp; outdoor; manual; regional custom	
AISSA	Yes	Gain Control	Auto	
	Face detection; track; snapshot; snapshot optimization; optimal face snapshot upload; face enhancement; face exposure; face attributes extraction including 6 attributes and 8 expressions; face snapshot set as face, one-inch photo or custom; snapshot strategies (real-time snapshot, quality priority and optimization snapshot); face angle filter; optimization time setting	Noise Reduction	3D NR	
		Motion Detection	OFF/ON (4 areas, rectangular)	
Face Detection		Region of Interest (RoI)	Yes (4 areas)	
		Image Stabilization	Electronic Image Stabilization (EIS)	
	Tripwire people counting, generating and exporting report (day/week/month/year); people counting in area and queue management, generating and exporting report (day/week/month); 4 rules can be set for tripwire, people counting in area and queue management.	Defog	Yes	
People Counting		Image Rotation	0°/90°/180°/270° (Support 90°/270° with 4M (2688 $\times$ 1520) resolution and lower)	
		Mirror	Yes	
Heat Map	Yes	Privacy Masking	8 areas	
	Motor vehicle, non-motor vehicle, face, human body detection; track; snapshot; snapshot optimization; optimal face snapshot upload.  Motor vehicle attributes: vehicle type, vehicle color, vehicle logo and other attributes: seatbelt, smoking, calling.  Non-motor vehicle attributes: type, color, number of people, top type and color, hat.  Human body attributes: gender, top/bottom type and color, bag, hat and umbrella.  Face attributes: gender, age, expressions, glasses, face mask and beard.	Audio	Audio	
Video Metadata		Built-in MIC	Yes	
		Audio Compression	G.711a; G.711Mu; PCM; G.726; G.723	
		Alarm		
			No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; fast moving; abandoned object; missing object; loitering detection; people gathering; parking detection; scene	
Smart Search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos	Alarm Event	changing; audio detection; voltage detection; scene changing; audio detection; voltage detection; external alarm; face detection; video metadata; SMD; people counting in area; stay detection; people counting; people number error detection; queue people number alarm; queue time alarm; security exception; defocus detection	

Network				
Network Port	RJ-45 (10/100 Enhancement Base-T)			
SDK and API	Yes			
Network Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMF SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; SAMBA; PPPoE; SNMP; P2P Auto Register			
Interoperability	ONVIF (Profile S/Profile G/Profile T/Profile M); CGI			
User/Host	20 (Total bandwidth: 80 M)			
Storage	FTP; SFTP; Micro SD card (support max. 1 TB); NAS			
Browser	IE: IE 9 and later Chrome: Chrome 102 and later Firefox: Firefox 88 and later			
Management Software	SmartPSS Lite; DSS; DMSS			
Mobile Client	iOS; Android			
Security	Trusted execution; Digest; Security logs; WSSE; Account lockout; Syslog; 802.1x; IP/MAC filtering; HTTPS; Trusted upgrade; Trusted boot; Generation and importing of X.509 certification			
Certification				
Certifications	CE-LVD: EN62368-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU; FCC: 47 CFR FCC Part 15, Subpart B; UL/CUL: UL62368-1 & CAN/CSA C22.2 No. 62368-1-14			
Port				
RS-485	1 (baud rate range:1200 bps–115200 bps)			
Audio Input	2 channels (3.5mm JACK port)			
Audio Output	1 channel (3.5mm JACK port)			
Alarm Input	2 channels in: wet contact, 5mA 3V–5V DC			
Alarm Output	2 channels out: dry contact, 1,000mA 30V DC/500mA 50V AC			
Analog Output	1 channel (CVBS output: BNC)			
Power Output	12 VDC power output, max. current 165 mA, peak current 700 mA			
Power				
Power Supply	12 VDC/24 VAC/PoE (802.3af)/ePoE			
Power Consumption	Basic: 6.3 W (12 VDC); 6.4 W (24 VAC); 6.7 W (PoE) Max. (H.265+ WDR+ Intelligence on): 10.2 W (12 VDC); 11.8 W (24 VAC); 12.0 W (PoE)			
Environment				
Operating Temperature	-30 °C to +60 °C (-22 °F to +140 °F)			
Operating Humidity	≤95%			
Storage Temperature	-40 °C to +60 °C (-40 °F to +140 °F)			
Storage Humidity	10%–95% (RH), non-condensing			
Structure				
Casing Material	Metal			
Product Dimensions	161.6 mm × 86.8 mm × 74.0 mm (6.36" × 3.42" × 2.91")			
	$(L \times W \times H)$			

Net Weight	0.76 kg (1.68 lb)
Gross Weight	0.98 kg (2.16 lb)

Ordering Information				
Туре	Model	Description		
8MP Camera	DH-IPC-HF5842F-ZE	8MP Box WizMind Network Camera		
	IPC-HF5842F-ZE	8MP Box WizMind Network Camera		
	PFB121W	Wall Mount Bracket		
	PFB110W	Ceiling Mount Bracket		
	DH-PFL1040-A12PE	10-40mm Motorized Vari-Focal Lens		
Accessories (Optional)	PFH610V Series	Housings		
	PFM321D	12 VDC 1 A Power Adapter		
	PFM900-E	Integrated Mount Tester		
	TF-P100	MicroSD Memory Card		

## Accessories

# Optional:







PFB110W Ceiling Mount Bracket



DH-PFL1040-A12PE 10-40mm Motorized Vari-Focal Lens



PFH610V Series Housings



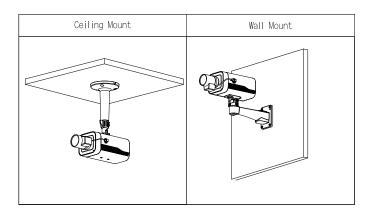
PFM321D 12 VDC 1 A Power Adapter



PFM900-E Integrated Mount Tester



TF-P100 MicroSD Memory Card



# Dimensions (mm[inch])

