DH-IPC-HFW8242E-Z20FD-IRA-LED

2MP Starlight Bullet Network Camera

- 1/1.8” 2Megapixel progressive scan CMOS
- H.265&H.264 triple-stream encoding
- 50/60fps@1080P(1920×1080)
- WDR(120dB), Day/Night(ICR), 3DNR,AWB,AGC,BLC
- Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- Micro SD memory, PoE+
- Max. LED Length 30m
- Support face capture, face attributes

Dahua AI series products adopt the most advanced AI technologies, including deep learning algorithms that primarily target people and vehicles, which provides higher flexibility and accuracy for end-users. This enables the Dahua AI series to offer various advanced applications such as Face Recognition, ANPR, Metadata, People Counting, traffic data statistics, etc.The complete lineup of Dahua AI includes network (PTZ) cameras, network video recorders, servers, and platform management products. Beyond seeing the world, the power of AI allows devices to perceive the environment and understand the world in a better way.

System Overview

Face detection AI network camera is designed to focus on the detection of frontal human faces, it adopts high performance smart chip with deep learning technology, which can provide high precision face detection. This product supports real-time face detection, face optimized snapshot, face enhancement and face attributes analysis.

Functions

Face Capture

Face capture is a software application that automatically captures faces from within a digital image or a video frame from a video source. Dahua cameras use advanced deep learning algorithms and are trained by a large number of face data sources, enabling the camera to locate faces quickly and accurately from the video source and capture facial images.

Face Attributes

Through the use of deep learning algorithms to analyze facial images, Dahua cameras can extract six facial attributes from each frame, including gender, age, expression (happy, calm, surprised, sad, and angry), glasses, masks, and mustaches. Customers can acquire data of interest via face attributes statistics.

Metadata

Metadata is feature attribute information extracted from a target object which can be used for data retrieval. Dahua face recognition camera can extract six facial attributes and output the metadata for analysis.

Starlight Technology

Featuring Dahua’s Starlight Technology, this camera is ideal for applications with challenging lighting conditions. Its low-light performance delivers usable video with minimal ambient light. Even in extreme low-light conditions, Starlight Technology is capable of delivering color images in near complete darkness .

Wide dynamic range (WDR)

Embeded with industry leading wide dynamic range (WDR) technology, vivid picutures are achieved even in the most intense contrast lighting conditions. For applications with both bright and low lighting conditions that change quickly, True WDR (120dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

Smart Codec (H.265+ & H.264+)

Smart Codec is the optimized implementation of standard video compression (H.265 & H.264) that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality video without straining the network. Smart Codec technology reduces bit rate and storage requirements by up to 70% when compared to the standard video compression.

Technical Specification

Camera

Image Sensor	1/1.8" 2Megapixel progressive scan CMOS
Effective Pixels	1920(H)x1080(V)
RAM/ROM	2048MB/4096MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3~1/100000s
Minimum Illumination	0.005Lux/F1.4(Color,1/3s,30IRE) 0.03Lux/F1.4(Color,1/30s,30IRE) 0Lux/F1.4(LED on)
S/N Ratio	More than 50dB
LED Distance	Distance up to 30m(98ft)
LED On/Off Control	Auto/Manual
LEDs	6

Lens

Lens Type	Motorized				
Mount Type	Board-in				
Focal Length	6.7~134mm motorized				
Max. Aperture	F1.4				
Angle of View	H: 60°~4.1° V:36°~2.2°				
Optical Zoom	20x				
Focus Control	Motorized				
Close Focus Distance	3m(9.84ft)				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	W	71m(233ft)	28m(92ft)	14m(46ft)	7m(23ft)
	T	1258m(4127ft)	503m(1650ft)	251m(823ft)	125m(410ft)

Pan/Tilt/Rotation

Pan/Tilt/Rotation Range	Pan:0°~360°; Tilt:0°~90°; Rotation:0°~360°

Artificial Intelligence

Face Caputure	Support face image caputure
Face Attributes	Support 6 kinds of face attributes extraction: Age, Gender, Expression(Jolly, Calm, Surprise, Sad, Rage), Glasses, Mouth Mask, Moustache & Beard

General Intelligence

Event Trigger	Motion detection, Video tampering , Scene changing, Network disconnection , IP address conflict, Illegal Access,Storage anomaly
General Intelligence	Tripwire, Intrusion, Object Abandoned/Missing, People Counting, Heat Map

Video

Compression	H.265/H.264/H.264B/H.264H/MJPEG(sub stream)
Smart Codec	Support H.265+/H.264+
Streaming Capability	3 Streams
Resolution	1080P(1920×1080)/ 1.3M(1280x960)/ 720P(1280x720)/ D1(704×576/704x480)/ VGA(640x480)
Frame Rate	Main Stream: 1080P(1~50/60fps) Sub Stream: D1 (1 ~ 50/60fps) Third Stream: 1080P(1~50/60fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 24~ 10240Kbps H.265: 14~ 6144Kbps
Day/Night	Auto(ICR) / Color / B/W
BLC Mode	BLC / HLC / WDR(120dB)/ SSA
White Balance	Auto/Manual
Gain Control	Auto/Manual
Noise Reduction	3D DNR
Motion Detection	Off / On (4 Zone, Rectangle)
Region of Interest	Off / On (4 Zone)
Electronic Image Stabilization (EIS)	Support
Smart IR	N/A
Defog	Support
Digital Zoom	16x
Flip	0°/90°/180°/270°
Mirror	Off / On
Privacy Masking	Off / On (4 Area, Rectangle)

Audio

Compression	G.711a/ G.711Mu/ AAC/ G.726

Network

Ethernet	RJ-45 (100/1000Base-T)
Protocol	HTTP;HTTPs;TCP;ARP;RTSP;RTP;UDP;RTCP;SMTP;FTP;DHCP;DNS;DDNS;PPPOE;IPv4/v6;QoS;UPnP;NTP;Bonjour;IEEE 802.1x;Multicast;ICMP;IGMP;SNMP;TLS
Interoperability	ONVIF Profile S&G, API
Streaming Method	Unicast / Multicast
Max. User Access	10 Users/20 Users
Edge Storage	NAS Local PC for instant recording Micro SD card 256GB
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	Smart PSS, DSS, DMSS
Smart Phone	IOS, Android

Certifications

Certifications	CE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart B

Interface

Video Interface	1 port(BNC,1Vp-p,75Ω)
Audio Interface	1/1 channel In/Out
RS485	1 port
Alarm	3 channel In: 5mA 5VDC 2 channel Out: 1A 30VDC / 0.5A 50VAC
Power Out	165mA 12VDC

Electrical

Power Supply	DC12V, PoE+(802.3at)(Class 4)
Power Consumption	DC12V:5W 20W(IR on) PoE:5W 21W(IR on)

Environmental

Operating Conditions	-30° C ~ +60° C (-22° F ~ +140° F) / Less than 95% RH
Storage Conditions	-30° C ~ +60° C (-22° F ~ +140° F) / Less than 95% RH
Ingress Protection	IP67
Vandal Resistance	IK10

Construction

Casing	Metal
Dimensions	457mm*124.3mm*108mm(18”×4.89”×4.25”)
Net Weight	2.46Kg (5.42lb)
Gross Weight	3.43Kg (7.56lb)

Ordering Information

Type	Part Number	Description
2MP camera	DH-IPC-HFW8242EP-ZFD-BIRA-LED-67134	2MP Starlight Bullet Network Camera, PAL
	DH-IPC-HFW8242EN-ZFD-BIRA-LED-67134	2MP Starlight Bullet Network Camera, NTSC
	IPC-HFW8242EP-ZFD-BIRA-LED-67134	2MP Starlight Bullet Network Camera, PAL
	IPC-HFW8242EN-ZFD-BIRA-LED-67134	2MP Starlight Bullet Network Camera, NTSC
Accessories (optional)	PFA150	Pole Mount
	PFA151	Corner Mount
	PFA140	Water-proof Power Box

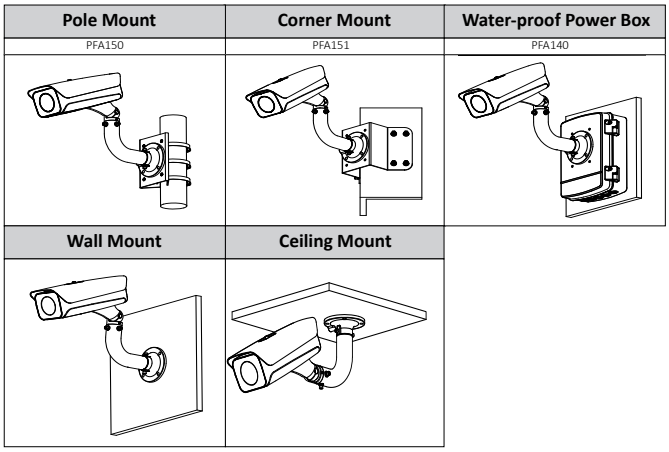
Accessories

Optional:

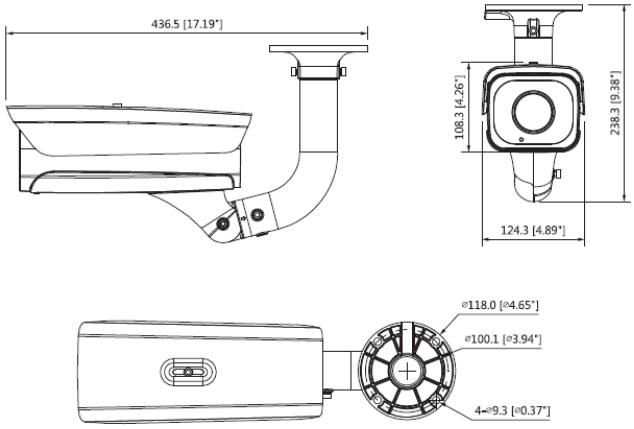
PFA150
Pole Mount

PFA151
Corner Mount

PFA140
Water-proof PowerBox



Dimensions (mm/inch)



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