

DH-IPC-HDBW8242E-Z4FR

2MP IR Starlight Dome Network Camera



Deep · Sense

DeepSense 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 DeepSense series to offer various advanced applications such as Face Recognition, ANPR, Metadata, People Counting, traffic data statistics, etc.The complete lineup of Dahua DeepSense 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 recognition AI network camera is designed to focus on the recognition of frontal human faces, it adopts high performance smart chip with deep learning technology, which can provide high precision face image snapshot and comparison. This product supports real-time face detection, face attributes analysis, face images comparison and face image database management.

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

- · 1/1.9" 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
- \cdot Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- · Micro SD memory, PoE+
- · Max. IR LEDs Length 100m
- · Support face capture, face attributes, face recognition















extract six facial attributes and output the metadata for analysis.

Face Recognition

Once facial features are extracted from captured faces, they are stored in a database where they can be easily searched and compared against other images. Once a successful match is found, the system outputs the result. The Dahua Face Recognition camera supports a built-in database that stores up to 10,000 facial images, helping the camera achieve real-time face capture and comparison.

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 S	pecification						Main Stream: 1080P(1~50/60fps)
Camera						Frame Rate	Sub Stream: D1 (1 ~ 50/60fps)
Image Sensor		1/1.9" 2Megapixel progressive scan CMOS					Third Stream: 1080P(1~50/60fps)
Effective Pixels		1920(H)x1080(V)				Bit Rate Control	CBR/VBR
RAM/ROM		2048MB/4096MB				Diction Control	H.264: 24~ 10240Kbps
Scanning System	m	Progressive				Bit Rate	H.265: 14~ 6144Kbps
Electronic Shut	ter Speed	Auto/Manual, 1/3~1/100000s				Day/Night	Auto(ICR) / Color / B/W
		0.002Lux/F1.53(Color,1/3s,30IRE)				BLC Mode	BLC / HLC / WDR(120dB)/ SSA
Minimum Illumination		0.01Lux/F1.53(Color,1/30s,30IRE) 0Lux/F1.53(IR on)				White Balance	Auto/Manual
S/N Ratio		More than 50dB					Auto/Manual
IR Distance		Distance up to 100m(328ft)				Gain Control	
IR On/Off Contr	rol	Auto/Manual				Noise Reduction	3D DNR
IR LEDs		3				Motion Detection	Off / On (4 Zone, Rectangle)
Lens						Region of Interest	Off / On (4 Zone)
Lens Type		Motorized				Electronic Image Stabilization	Support
Mount Type		Board-in				(EIS)	N/A
Focal Length		8~32mm moto	rized			Smart IR	N/A
Max. Aperture		F1.53				Defog	Support
Angle of View		H: 40°~12.9° V:22°~7.2°				Digital Zoom	16x
Optical Zoom Focus Control		4x				Flip	0°/90°/180°/270°
Close Focus Dis	tance	Motorized 3m(9.84ft)				Mirror	Off / On
0.000 1 0000 2.0	Lens	Detect Observe Recognize Identify				Privacy Masking	Off / On (4 Area, Rectangle)
DORI Distance	W	106m(348ft)	42m(138ft)	21m(69ft)	10m(32ft)		
Distance	Т	320m(1050ft)	128m(420ft)	64m(210ft)	32m(105ft)	Audio	
Pan/Tilt/Rot	tation					Compression	G.711a/ G.711Mu/ AAC/ G.726
Pan/Tilt/Rotati	on Range	Pan:0°~355°; Ti	lt:0°~75°; Rotat	ion:0°~355°		Network	
Artificial Int	elligence					Ethernet	RJ-45 (100/1000Base-T)
Face Capture		Support face image capture Support 6 kinds of face attributes extraction: Age,				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;S NMP;TLS
Face Attributes		Gender, Expres Glasses, Mouth			d, Rage),	Interoperability	ONVIF Profile S&G, API
		Support face images matching, support up to 10000				. ,	
Face Recognition	า	face images an				Streaming Method	Unicast / Multicast
General Inte	elligence					Max. User Access	10 Users/20 Users
Event Trigger		Motion detection, Video tampering , Scene changing, Network disconnection , IP address conflict, Illegal				Edge Storage	NAS Local PC for instant recording Micro SD card 128GB
		Access, Storage anomaly				Web Viewer	IE, Chrome, Firefox, Safari
General Intelligence		Tripwire, Intrusion, Object Abandoned/Missing, People Counting, Heat Map				Management Software	Smart PSS, DSS, DMSS
Video						Smart Phone	IOS, Android
Compression		H.265/H.264/H.264B/H.264H/MJPEG(sub stream)				Certifications	
Smart Codec		Support H.265+/H.264+					CE (EN 60950:2000)
Streaming Capability		3 Streams				Certifications	UL:UL60950-1 FCC: FCC Part 15 Subpart B
Resolution		1080P(1920×1080)/ 1.3M(1280x960)/ 720P(1280x720)/ D1(704×576/704x480)/ VGA(640x480)					

Interface

Video Interface	1 Port(For adjustment only)	
Audio Interface	1/1 channel In/Out	
RS485	1 port	
Alarm	1 channel In: 5mA 5VDC 1 channel Out: 1A 30VDC / 0.5A 50VAC	

Electrical

Power Supply	DC12V, AC24V, PoE+(802.3at)(Class 4)	
Power Consumption	DC12V:6.6W 15.84W(IR on) PoE:6.1W 14W(IR on)	

Environmental

Operating Conditions	-30° C $^{\sim}$ +60° C (-22° F $^{\sim}$ +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	Ф159.1mm*117.9mm
Net Weight	0.99Kg (2.18lb)
Gross Weight	1.9Kg (4.19lb)

Ordering Information Type Part Number Description DH-IPC-2MP IR Starlight Dome Network Camera, HDBW8242EP-PAL ZFR-0832 DH-IPC-HDBW8242EN-ZFR-0832 2MP IR Starlight Dome Network Camera, 2MP Camera IPC-HDBW8242EP-2MP IR Starlight Dome Network Camera, ZFR-0832 IPC-HDBW8242EN-2MP IR Starlight Dome Network Camera, ZFR-0832 Accessories PFA138 Junction Box (included) PFB210W Wall mount PFB201C In-ceiling mount Accessories Ceiling mount PFB300C (optional) PFA152-E Pole mount PFA101 Mount adapter

Accessories

Optional:







PFA138 Junction box

PFB210W Wall mount

PFA152-E Pole mount







PFA101 Mount adapter

PFB300C Ceiling mount

PFB201C In-ceiling mount

In-ceiling Mount	Junction Mount	Pole Mount		
PFB201C	PFA138	PFB210W+PFA152-E		
6				
Ceiling Mount	Wall Mount			
PFA101+PFB300C	PFB210W (Indoor)	PFB210W (Outdoor)		

Dimensions (mm/inch)





