DH-IPC-HF8242F-FD

2MP Starlight Face Detection Box Network Camera

· 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
· Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
· Auto back focus(ABF)
· Micro SD memory, PoE
· Face Detection: built-in deep learning algorithm, support face images capture and facial attributes analysis

System Overview

Ultra series product adopts high performance DSP and Sony advanced image sensor technology, which can provide excellent image effects for users such as UHD resolution, starlight and super WDR etc. The series utilizes Dahua advanced software algorithm, which is able to support people counting and heat map, bringing extra business analysis value for customers; IP67, IK10 and heater compliance enables the product to be applied in a more harsh environment.

Functions

Deep Learning

Deep learning is part of a broader family of machine learning methods based on learning data representations, as opposed to task-specific algorithms. As a breakthrough technology in the field of artificial intelligence (AI), deep learning architectures such as deep neural networks, deep belief networks and recurrent neural networks have been applied to fields including computer vision, natural language processing, audio recognition, and machine translation, where they have shown excellent performance.

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 (0.005 lux).

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.

Intelligent Video System (IVS)

Dahua camera has a built-in video analysis based on intelligent

algorithms and can achieve the following:Tripwire,Intrusion,Abandoned/Missing can timely, quickly and accurately respond to monitoring events in specific area. It enhances monitoring efficiency. At the same time, the camera can support face detection,it can quickly capture a face and upload the image to the server. In addition the camera also supports intelligent tamper detection,through dramatic changes in the scene it will send out warning information to ensure effective monitoring.

Business intelligent analysis (People counting, Heatmap)

Dahua Camera also supports more advanced intelligent features such as people counting and heat map besides basic IVS functions. These two functions can be applied to business intelligence and bring extra values to customers. It is available to acquire daily, weekly, monthly and yearly people flow via people counting and output data report. Heat map can be based on a moving object in time of space movement for analysis, find the most active area and output the report, which is to provide valuable data support for commercial applications.

Smart Scene Adaptive (SSA)

Smart Scene Adaptive (SSA) is a Dahua self-developed intelligent image technology, the camera automatically evaluates the change in scene, in particular strong lights.In a strong backlight environment, it will automatically regulate exposure parameters to get better image quality. This can effectively address the impact of traffic lights, providing excellent video quality.

HEVC (H.265)

H.265 ITU-T VCEG is a new video coding standard. H.265 Following standard developed around the existing video coding standard H.264 , some retain the original technology , while some of the relevant technology to improve the new technology uses advanced technology to improve the relationship between the code stream , encoding quality , and the delay between algorithm complexity , optimize settings specific contents include : Improve compression efficiency , improve the robustness and error recovery capabilities, real-time to reduce the delay, reduce channel acquisition time and a random access delay , reduce complexity , etc

Technical Specification

Camera

Image Sensor	1/1.9" 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	0.001Lux/F1.2(Color,1/3s,30IRE) 0.01Lux/F1.2(Color,1/30s,30IRE) 0.0005Lux/F1.2(B/W,1/3s,30IRE) 0.005Lux/F1.2(B/W,1/30s,30IRE)
S/N Ratio	More than 50dB
IR Distance	N/A
IR On/Off Control	N/A
IR LEDs	N/A

Lens

Lens Type	N/A
Mount Type	C/CS
Focal Length	N/A
Max. Aperture	N/A
Angle of View	N/A
Optical Zoom	N/A
Focus Control	N/A
Close Focus Distance	N/A

Pan/Tilt/Rotation

Pan/Tilt/Rotation Range	N/A

Intelligence

IVS	Tripwire, Intrusion, Object Abandoned/Missing
Advanced Intelligent Functions	Face Detection: Support 6 kinds of facial features extraction: Age, Gender, Expression(Jolly, Calm, Surprise, Sad, Rage), Glasses, Mask, Moustache; People Counting, Heat Map

Video

Compression	H.265+/H.265/H.264+/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/Natural/Street Lamp/Outdoor/Manual
Gain Control	Auto/Manual
Noise Reduction	3D DNR
Motion Detetion	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;802.1x;Multicast;ICMP;IGMP;SNMP
Interoperability	ONVIF, PSIA, CGI
Streaming Method	Unicast / Multicast
Max. User Access	10 Users/20 Users
Edge Storage	NAS Local PC for instant recording Mirco SD card 128GB
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	Smart PSS, DSS, Easy4ip
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	2/1 channel In/Out, 1 Built-in Mic
RS485	1 port
Alarm	2 channel In: 5mA 5VDC 2 channel Out: 1A 30VDC / 0.5A 50VAC

Electrical

Power Supply	DC12V, AC24V, PoE(802.3af)(Class 0)
Power Consumption	< 10W

Environmental

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

Construction

Casing	Metal
Dimensions	161.6mm×85.5mm×74.0mm (6.36"×3.37"×2.91")
Net Weight	0.78Kg (1.72lb)
Gross Weight	0.92Kg (2.03lb)

Ordering Information

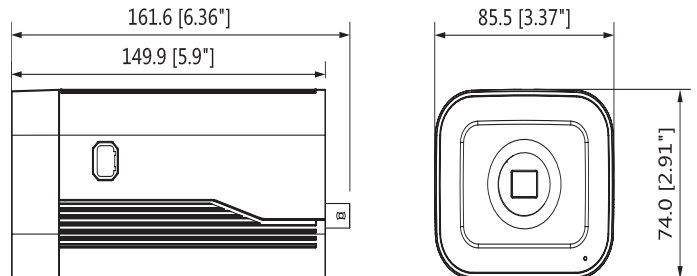| Type	Part Number	Description
2MP camera	DH-IPC-HF8432FP-FD	2MP Starlight Face Detection Box Network Camera, PAL
	DH-IPC-HF8242FN-FD	2MP Starlight Face Detection Box Network Camera, NTSC
	IPC-HF8242FP-FD	2MP Starlight Face Detection Box Network Camera, PAL
	IPC-HF8242FN-FD	2MP Starlight Face Detection Box Network Camera, NTSC
Accessories (optional)	PFB110W	Wall mount
	PFB121W	Wall mount

Link: http://www.dahuasecurity.com/products/ipc-hf8242f-fd-18301.html

Accessories

Optional:

PFB110W
Wall mount

PFB121W
Wall mount

Wall Mount	Wall/Ceiling/Plane Mount
PFB121W	PFB110W

Dimensions (mm/inch)

161.6 [6.36"]
149.9 [5.9"]
85.5 [3.37"]
74.0 [2.91"]

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