SHOGUN
Technology Solution

IPC-HF5541E-E
5MP Starlight Bullet AI Network Camera

Analytic | **H.265 HEVC** High Efficiency Video Coding **Codec** | **WDR** | **SD Card** | **3D DNR**

Overview

Pro AI series contains Face Capture, Perimeter Protection and People Counting functions.Powered by deep-learning Artificial Intelligence algorithms, significantly improved accuracy. Active Deterrence and Full Color camera are also in this series. Meanwhile, the series features starlight and smart IR technology. This series fully protected from dust and water.

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. The 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, The cameras can extract six facial attributes from each frame, including Age, Gender,Expression (Jolly/Surprise/Normal/Rage/Sad/Disgusted/Confused/Frightened), Glasses, Mouth Mask, Moustache & Beard. Customers can acquire data of interest via face attributes statistics.

People Counting
People Counting function uses advanced image processing technology to capture depth information from within images. The camera pairs this information with deep learning algorithms to analyze and detect human bodies and track target objects in real time. The camera provides statistics for separate individuals' entrance and exit with up to 95% counting accuracy.

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

Technical Specification

Camera

Image Sensor	1/2.7" 5Megapixel progressive scan CMOS
Effective Pixels	2592(H)x1944(V)
RAM/ROM	1GB/128MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3~1/100000s
Minimum Illumination	0.009Lux/F1.7 (Color,1/3s,30IRE) 0.084Lux/F1.7 (Color,1/30s,30IRE) 0Lux/F1.7 (IR on)
LED Distance	N/A
LED On/Off Control	N/A
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
Aperture Type	N/A
Close Focus Distance	N/A

Pan/Tilt/Rotation

Pan/Tilt/Rotation Range	N/A

Artificial Intelligence

Face Capture	Support face image capture
Face Attributes	Support 6 kinds of face attributes extraction: Age, Gender,Expression(Jolly/Surprise/Normal/Rage/Sad/Disgusted/Confused/Frightened), Glasses,Mouth Mask, Moustache & Beard
Perimeter Protection	Tripwire, Intrusion(Human & Vehicle classification)
People Counting	Line crossing people counting, Region people counting

General Intelligence

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

Video

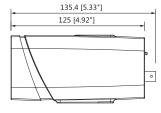|	
Compression	H.265+/H.265/H.264+/H.264/H.264B/H.264H/MJPEG(sub stream)
Streaming Capability	3 Streams
Resolution	2592×1944/2688×1520/2304×1296/1080P(1920×1080)/1.3M(1280×960)/720P(1280×720)/D1(704×576/704×480)/VGA(640×480)/CIF(352×288/352×240)

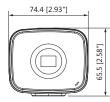## Onvif

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Frame Rate	Main Stream: 2592×1944(1~20fps)
	Sub Stream: D1(1~20/30fps)
	Third Stream: 1080P(1~13fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 32~ 8192Kbps H.265: 19~ 8192Kbps
Day/Night	Auto(ICR) / Color / B/W
BLC Mode	BLC / HLC / WDR(120dB)
White Balance	Auto/Natural/Street Lamp/Outdoor/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	N/A
Flip	0°/90°/180°/270°
Mirror	Off / On
Privacy Masking	Off / On (4 Area, Rectangle)

Audio

Compression	G.711a/ G.711Mu/ AAC/ G.726/G.723

Network

Ethernet	RJ-45 (10/100Base-T)
Protocol	HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP;SMTP; FTP; DHCP; DNS; DDNS; PPPoE; IPv4/v6; SNMP;QoS; UPnP;NTP
Interoperability	ONVIF(Profile S/Profile G), CGI,Milstone,Genetec,P2P
Streaming Method	Unicast / Multicast
Max. User Access	20 Users
Edge Storage	NAS FTP Micro SD card 256GB
Web Viewer	IE(versions newer than IE8), Chrome, Firefox, Safari(versions newer than Safari 12)
Management Software	Smart PSS, DSS, P2P
Smart Phone	iOS, Android

Certifications

Certifications	CE-LVD:EN60950-1 CE-EMC:Electromagnetic Compatibility Directive 2014/30/EU FCC:47 CFR FCC Part 15, Subpart B UL/CUL: UL60950-1 CAN/CSA C22.2 No.60950-1-07

Interface

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

Electrical

Power Supply	DC12V(±25%), AC24V(±25%), PoE(802.3af)(Class 0)
Power Consumption	DC12V:4.1W 9.2W(IR on) AC24V: 4.3W 8.7W(IR on) PoE:4.4W 9.2W(IR on)

Environmental

Operating Conditions	-30° C ~ +60° C (-22° F ~ +140° F) / 10%RH~95% RH
Storage Conditions	+5° C ~ +40° C (+41° F ~ +104° F) (daily temperature difference within 15° C/59° F) / 10%RH~95% RH
Ingress Protection	N/A
Vandal Resistance	N/A

Construction

Casing	Metal
Dimensions	135.4mm*74.4mm*65.5mm(5.33"×2.93"×2.58")
Net Weight	0.53Kg (1.17lb)
Gross Weight	0.62Kg (1.37lb)

135.4 [5.33"]
125 [4.92"]
74.4 [2.93"]
65.5 [2.58"]