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WE PROTECT

## IP-4EB-F28-PA

4MP IR Eyeball Network Camera

System Overview

With upgraded H.265 encoding technology, Eco-savvy series brings high efficient video compression capability. It can save bandwidth and storage. Meanwhile, the series features starlight, smart IR technology and intelligent image analysis techniques. This series supports reminder function, meanwhile fully protected from dust and water, certified to IP67 and vandal resistant to IK10 standard.

Features

- 1/3" 4Megapixel progressive scan CMOS
- H.265&H.264 triple-stream encoding
- 25/30fps@4M(2688×1520)
- Smart Detection supported
- WDR(120dB), Day/Night(ICR), 3DNR, AWB, AGC, BLC
- Multiple network monitoring: Web viewer, Unisight VMS
- 2.8mm fixed lens
- Built-in Mic
- Max. IR LEDs Length 50m
- Micro SD memory, IP67, PoE

Dimensions(mm/inch)

∅106 [∅4.17"]
∅69 [∅2.72"]
93.6 [3.69"]
4-∅4.5 [∅0.18"]

4Mp | H.265 | WDR | Temperature | IP67
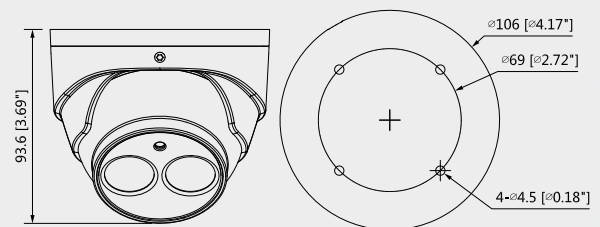
Functions

Wide Dynamic Range

The camera achieves vivid images, even in the most intense contrast lighting conditions, using industry-leading wide dynamic range(WDR) technology. For applications with both bright and low lighting conditions that change quickly, true WDR (120 dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

Intelligent Video System (IVS)

IVS is a built-in video analytic algorithm that delivers intelligent functions to monitor a scene for Tripwire violations, intrusion detection, and abandoned or missing objects. A camera with IVS quickly and accurately responds to monitoring events in a specific area. In addition to scene analytics, the camera supports face detection to quickly capture a face and upload the image to a server. The camera also offers tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.

Protection(IP67, wide voltage)

Supporting ±30% input voltage tolerance, this camera suits even the most unstable conditions for outdoor applications. Its 4KV lightning rating provides protection against the camera and its structure from the effects of lightning.

Smart H.265+

Smart H.265+ is the optimized implementation of the H.265 codec 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 H.265+ technology reduces bit rate and storage requirements by up to 70% when compared to standard H.265 video compression.

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.

Environmental

With a temperature range of -40 °C to +60 °C (-40 °F to +140 °F), the camera is designed for extreme temperature environments. Subjected and certified to rigorous dust and water immersion tests, the IP67 rating makes it suitable for demanding outdoor applications. For environments with rain, sleet, snow and fog, an integrated wiper provides users with clear visibility at all times.

Onvif | PSIA

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Technical Specification

Camera

Image Sensor	1/3" 4Megapixel progressive scan CMOS
Effective Pixels	2688(H)x1520(V)
RAM/ROM	512MB/32MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3(4)~1/100000s
Minimum Illumination	0.08Lux/F2.0(Color,1/3s,30IRE) 0.3Lux/2.0(Color,1/30s,30IRE) 0Lux/F2.0(IR on)
S/N Ratio	More than 50dB
IR Distance	Distance up to 50m (164ft)
IR On/Off Control	Auto/ Manual
IR LEDs	1

Lens

Lens Type	Fixed
Mount Type	Board-in
Focal Length	2.8mm
Max. Aperture	F2.0 (F2.0, F2.0)
Angle of View	H:104° (87°, 55°), V:57° (48°, 31°)
Optical Zoom	N/A
Focus Control	Fixed
Close Focus Distance	N/A

DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8 mm	63m(207ft)	25m(82ft)	13m(43ft)	6m(20ft)
	3.6 mm	80m(262ft)	32m(105ft)	16m(52ft)	8m(26ft)
	6.0 mm	117m(384ft)	47m(154ft)	23m(75ft)	12m(39ft)

Pan/Tilt/Rotation

Pan/Tilt/Rotation Range	Pan:0˚~360˚; Tilt:0˚~78˚; Rotation:0˚~360˚

Intelligence

IVS	Tripwire, Intrusion, Object Abandoned/Missing
Advanced Intelligent Functions	Face Detection

Video

Compression	H.265+/H.265/H.264+/H.264
Streaming Capability	3 Streams
Resolution	4M(2688×1520)/3M(2304×1296)/ 1080P(1920×1080)/1.3M(1280x960)/ 720P(1280×720)/D1(704×576/704×480)/ VGA(640×480)/CIF(352×288/352×240)
Frame Rate	Main Stream: 4M(1~25/30fps) Sub Stream: D1(1~25/30fps) Third Stream: 720P(1~25/10fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 24~10240Kbps H.265: 14~9984Kbps
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 Detetion	Off / On (4 Zone, Rectangle)
Region of Interest	Off / On (4 Zone)
Electronic Image Stabilization (EIS)	N/A
Smart IR	Support
Defog	N/A
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 (10/100Base-T)
Protocol	HTTP; HTTPs; TCP; ARP; RTSP; RTP; UDP; 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	Unisight VMS
Smart Phone	IOS, Android

Certifications

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

Interface

Video Interface	N/A
Audio Interface	Built-in Mic
RS485	N/A
Alarm	N/A

Electrical

Power Supply	DC12V, PoE (802.3af)(Class 0)
Power Consumption	<5W

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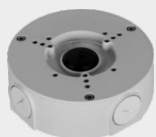| Environmental	
Operating Conditions	-30° C ~ +60° C (-22° F ~ +140° F) / Less than 95% RH
Strorage Conditions	-30° C ~ +60° C (-22° F ~ +140° F) / Less than 95% RH
Ingress Protection	IP67
Vandal Resistance	N/A
Construction	
Casing	Metal
Dimensions	Φ106mm×93.7mm (4.17"×3.69")
Net Weight	0.47Kg (1.04lb)
Gross Weight	0.65Kg (1.43lb)

Accessories (optional)

PFA130-E
Junction Box
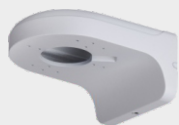
PFB204W
Wall Mount

PFA152-E
Pole Mount

PFA130-E	PFB204W	PFB204W+PFA152-E
Junction Mount	**Wall Mount**	**Pole Mount**

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