DH-IPC-HDW5831R-ZE

8MP WDR IR Eyeball Network Camera

- 1/2.5” 8Megapixel progressive scan CMOS
- H.265&H.264 dual-stream encoding
- 15fps@4K(3840×2160),25/30fps@3M(2304×1296)
- Day/Night(ICR), 3DNR, AWB, AGC, BLC
- Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- 2.7mm ~12mm motorized lens
- Built-in Mic
- Max. IR LEDs Length 50m
- Micro SD card memory, IP67, PoE

System Overview

Eco-savvy products by upgrading H.265 encoding technology, bringing high efficient video compression. It saves bandwidth and storage , energy-saving design to enhance the monitoring system . Meanwhile, the series offers features such as starlight , Smart IR technology , intelligent image analysis techniques. It provides excellent image quality and intelligent and efficient event reminders . This series provides IP67 weatherproof and IK10 vandal-proof protection feature. Give customers more value

Functions

ePoE technology

The ePoE technology of Dahua, designed internally, adopts advanced 2D-PAM3 coding modulation from physical layer, and realizes full duplex transmission over 800 meters at the speed of 10Mbps, or 300 meters at the speed of 100Mbps via Cat 5 or coaxial cable media. Besides, it supports PoE and PoC power supply technology which has greatly simplified construction and wiring. Dahua ePoE technology offer a new way to accomplish long distance transmission between IP camera and network switch. It allows more flexible surveillance system design, improves reliability and saves construction and wiring cost.

4K technology

4K technology as a revolutionary breakthrough in image, which enhance the expressive image of essence, allowing users to experience the best picture quality brought about by the visual feast . For the purposes of 4K surveillance with four times the 1080P resolution, presented to the user with more details . Under the same scenario by raising the pixels , reduce the camera cost.

Wide Dynamic Range

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)

With built-in intelligent video analytics, the camera has the ability to detect and analyze moving objects for improved video surveillance. The camera provides optional standard intelliegence at the edge allowing detection of multiple object behaviors such as abandoned or missing objects. IVS also supports Tripwire analytics, allowing the camera to detect when a pre-determined line has been crossed, ideal for business intelligence, and Facial Detection, for searching or identification of individuals.

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 effective protection for both the camera and its structure against lightning.IP67 is supported by the camera, which makes it suitable for both indoor and outdoor environments.

Smart H.265+

Deliver high quality video without straining the network, Smart H.265+ is the optimized implementation of H.265. The Smart H.265+ encoding technology includes a scene adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction, providing saving of up to 70% of bandwidth and storage when compared with standard H.265.

Technical Specification

Camera

Image Sensor	1/2.5" 8Megapixel progressive scan CMOS
Effective Pixels	3840(H)x2160(V)
RAM/ROM	512MB/32MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3~1/100000s
Minimum Illumination	0.05Lux/F1.8 (Color,1/3s,30IRE) 0.2Lux/F1.8 (Color,1/30s,30IRE) 0Lux/F1.8(IR on)
S/N Ratio	More than 50dB
IR Distance	Distance up to 50m (164ft)
IR On/Off Control	Auto/ Manual
IR LEDs	2

Lens

Lens Type	Motorized/ Auto Iris(DC)
Mount Type	Board-in
Focal Length	2.7mm~12mm
Max. Aperture	F1.8
Angle of View	H:110°~40° , V:58°~23°
Optical Zoom	4x
Focus Control	Motorized
Close Focus Distance	0.3m

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	W	85m(280ft)	34m(112ft)	17m(56ft)	8.5m(28ft)
	T	228m(748ft)	91m(299ft	46m(151ft)	23m(75ft)

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	4K(3840×2160)/ 6M(3072×2048)/5M(3072x1728)/ 5M(2592×1944)/ 4M(2688×1520)/ 3M(2048x1536)/ 3M(2304×1296)/ 1080P(1920×1080)/1.3M(128 0x960)/ 720P(1280×720)/ D1(704×576/704×480)/ VGA(640×480)/ CIF(352×288/352×240)
Frame Rate	Main Stream: 4K(1~15fps)/3M(1~25/30fps)
	Sub Stream: D1(1~25/30fps)
	Third Stream: 720P(1~25/30fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 24K ~ 10240Kbps H.265: 14K ~ 9984Kbps
Day/Night	Auto(ICR) / Color / B/W
BLC Mode	BLC / HLC / WDR
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	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	N/A
Audio Interface	Built-in Mic
RS485	N/A
Alarm	N/A

Electrical

Power Supply	DC12V, PoE(802.3af)(Class 0)
Power Consumption	<8.5W

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	Φ122mm×104mm(4.8”×4.09”)
Net Weight	0.6Kg (1.32lb)
Gross Weight	0.76Kg (1.67lb)

Ordering Information

Type	Part Number	Description
8MP camera	DH-IPC-HDW5831RP-ZE	8MP IR Eyeball Network Camera, WDR, PAL
	DH-IPC-HDW5831RN-ZE	8MP IR Eyeball Network Camera, WDR, NTSC
	IPC-HDW5831RP-ZE	8MP IR Eyeball Network Camera, WDR, PAL
	IPC-HDW5831RN-ZE	8MP IR Eyeball Network Camera, WDR, NTSC
Accessories (optional)	PFB203W	Wall mount
	PFA137	Junction box
	PFA152-E	Pole Mount
	LR1002	ePoE Over Coax Converter

Accessories

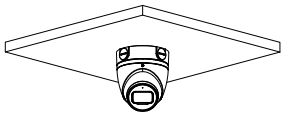
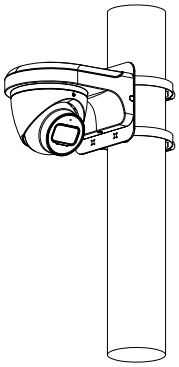
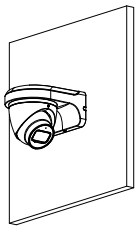
Optional:

PFA137
Junction Box

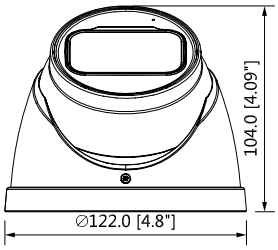
PFB203W
Wall Mount

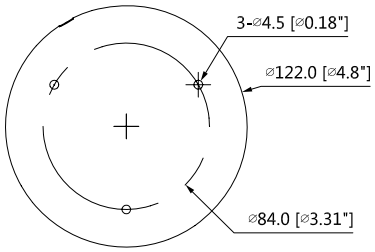
PFA152-E
Pole Mount

LR1002
ePoE Over Coax Converter

Junction Mount	Pole Mount
PFA137	PFB203W+PFA152-E
	
Wall Mount	
PFB203W	
	

Dimensions (mm/inch)





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