

DH-IPC-HDBW8231E-Z5

2MP WDR IR Dome Network Camera



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

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).

Ultra WDR

Standard WDR/HDR camera can provide 120dB dynamic range, However, for some scenes with wider contrast range, 120dB is slightly insufficient. By adopting the latest technology, Dahua Cameras can provide an amazing dynamic range up to 140dB.

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

- 1/2.8" 2Megapixel progressive scan STARVIS™ CMOS
- H.265&H.264 triple-stream encoding
- 50/60fps@1080P(1920×1080)
- WDR(140dB), Day/Night(ICR), 3DNR,AWB,AGC,BLC
- Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- 7mm ~35mm motorized lens
- Max. IR LEDs Length 100m
- Micro SD memory,IP67,IK10,PoE+



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.

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.

Environmental

With a temperature range of -40 °C to +60 °C (-40 °F to +140 °F), the camera is designed for extreme temperature environments. The camera complies to an IK10 impact rating making it capable of withstanding the equivalent of 55 kg (120 lbs) of force. Subjected and certified to rigorous dust and water immersion tests, the IP67 rating makes it suitable for demanding outdoor applications.

Technical Specification						Day/Night	Auto(ICR) / Color / B/W
Camera						BLC Mode	BLC / HLC / WDR(140dB)/ SSA
Image Sensor	1/2.8" 2Megapixel progressive scan CMOS					White Balance	Auto/Natural/Street Lamp/Outdoor/Manual
Effective Pixels	1920(H)x1080(V)					Gain Control	Auto/Manual
RAM/ROM	1024MB/128MB					Noise Reduction	3D DNR
Scanning System	Progressive					Motion Detetion	Off / On (4 Zone, Rectangle)
Electronic Shutter Speed	Auto/Manual, 1/3~1/100000s					Region of Interest	Off / On (4 Zone)
Minimum Illumination	0.005Lux/F1.4 (Color,1/3s,30IRE) 0.03Lux/F1.4 (Color,1/30s,30IRE) 0Lux/F1.4(IR on)					Electronic Image Stabilization(EIS)	Support
S/N Ratio	More than 50dB					Smart IR	Support
IR Distance	Distance up to 100m(328ft)					Defog	Support
IR On/Off Control	Auto/ Manual					Digital Zoom	16x
IR LEDs	3					Flip	0°/90°/180°/270°
Lens						Mirror	Off / On
Lens Type	Motorized /Auto Iris(HALL)					Privacy Masking	Off / On (4 Area, Rectangle)
Mount Type	Board-in					Audio	
Focal Length	7~35mm motorized					Compression	G.711a/G.711Mu/AAC/ G.726
Max. Aperture	F1.4					Network	
Angle of View	H: 35°~12°, V:19°~7°					Ethernet	RJ-45 (100/1000Base-T)
Optical Zoom	5x					Protocol	HTTP;HTTSP;TCP;ARP;RTSP;RTP;UDP;SMTP;FTP; DHCP;DNS;DDNS;PPPOE;IPv4/v6;QoS;UPnP;NTP; Bonjour;802.1x;Multicast;ICMP;IGMP;SNMP
Focus Control	Motorized					Interoperability	ONVIF, PSIA, CGI
Close Focus Distance	0.3m(0.98ft)					Streaming Method	Unicast / Multicast
DORI Distance	Lens	Detect	Observe	Recognize	Identify	Max. User Access	10 Users/20 Users
	W	131m(430ft)	52m(170ft)	26m(85ft)	13m(42ft)	Edge Storage	NAS Local PC for instant recording Mirco SD card 128GB
	T	427m(1400ft)	171m(561ft)	85m(280ft)	42m(140ft)	Web Viewer	IE, Chrome, Firefox, Safari
Pan/Tilt/Rotation						Management Software	Smart PSS, DSS, Easy4ip
Pan/Tilt/Rotation Range	Pan:0°~355°; Tilt:0°~65°; Rotation:0°~355°					Smart Phone	IOS, Android
Intelligence						Certifications	
IVS	Tripwire, Intrusion, Object Abandoned/Missing					Certifications	CE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart B
Advanced Intelligent Functions	Face Detection, People Counting, Heat Map					Interface	
Video						Video Interface	1 Port(For adjustment only)
Compression	H.265+/H.265/H.264+/H.264					Audio Interface	1/1 channel In/Out
Streaming Capability	3 Streams					RS485	N/A
Resolution	1080P(1920x1080)/ 1.3M(1280x960)/ 720P(1280x720)/ D1(704x576/704x480) / VGA(640x480)/ CIF(352x288/342x240)					Alarm	1 channel In: 5mA 5VDC 1 channel Out: 1A 30VDC / 0.5A 50VAC
Frame Rate	Main Stream: 1080P(1~50/60fps)					Electrical	
	Sub Stream: D1 (1 ~ 50/60fps)					Power Supply	DC12V,AC24V, PoE+ (802.3at)(Class 4)
	Third Stream: 1080P(1~50/60fps)					Power Consumption	<18W
Bit Rate Control	CBR/VBR						
Bit Rate	H.264: 24~ 10240Kbps H.265: 14~ 6144Kbps						

Environmental

Operating Conditions	-40° C ~ +60° C (-40° F ~ +140° F) / Less than 95% RH
Storage Conditions	-40° C ~ +60° C (-40° F ~ +140° F) / Less than 95% RH
Ingress Protection	IP67
Vandal Resistance	IK10

Construction

Casing	Metal
Dimensions	Φ159.1mm×117.9mm(Φ6.26"×4.64")
Net Weight	0.96kg(2.12lb)
Gross Weight	1.75 kg(3.56lb)

Ordering Information

Type	Part Number	Description
2MP camera	DH-IPC-HDBW8231EP-Z5	2MP WDR IR Dome Network Camera,PAL
	DH-IPC-HDBW8231EN-Z5	2MP WDR IR Dome Network Camera,NTSC
	IPC-HDBW8231EP-Z5	2MP WDR IR Dome Network Camera,PAL
	IPC-HDBW8231EN-Z5	2MP WDR IR Dome Network Camera,NTSC
Accessories (included)	PFA138	Junction Box
Accessories (optional)	PFB302S	Wall mount
	PFB201C	In-ceiling mount
	PFB300C	Ceiling mount
	PFA152	Pole mount
	PFA101	Mount adapter

Accessories

Optional:



PFB302S
Wall mount



PFA138
Junction Box



PFB201C
In-ceiling mount



PFB300C
Ceiling mount



PFA152
Pole mount



PFA101
Mount adapter

In-ceiling Mount	Junction Mount	Pole Mount
PFB201C	PFA138	PFA101 + PFB302S + PFA152
Ceiling Mount PFA101 + PFB300C	Wall Mount PFA101 + PFB302S	

Dimensions (mm/inch)

