IPC-HDBW8231E-ZH-S2

2MP WDR IR Dome Network Camera

- 1/2.8" 2Megapixel progressive scan STARVIS™ CMOS
- H.265&H.264 triple-stream encoding
- 25/30fps@1080P(1920×1080)
- WDR(120dB), Day/Night(ICR), 3DNR,AWB,AGC,BLC
- Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- 2.4mm ~6mm motorized lens
- Max. IR LEDs Length 20m
- Micro SD memory,IP67,IK10,PoE+

2Mp | H.265+ | Analysis | WDR | Starlight | IP67 | Vandal-proof | -40°C

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 to140dB.

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	1/2.8" 2Megapixel progressive scan CMOS
Effective Pixels	1920(H)x1080(V)
RAM/ROM	512MB/128MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3~1/100000s
Minimum Illumination	0.005Lux/F1.4 (Color,1/3s,30IRE) 0.03Lux/F1.4 (Color,1/30s,30IRE) 0Lux/F1.4(IR on)
IR Distance	Distance up to 20m
IR On/Off Control	Auto/ Manual
IR LEDs	3(940nm)

Lens

Lens Type	Motorized
Mount Type	Board-in
Focal Length	2.4~6mm motorized
Max. Aperture	F1.4
Angle of View	H: 132 ˚~54 ˚ V:73 ˚ ~30 ˚
Optical Zoom	2.5x
Focus Control	Motorized
Close Focus Distance	0.5m(1.64ft)

DORI Distance	Lens	Detect	Observe	Recognize	Identify
	W	33m(108ft)	13m(43ft)	6m(20ft)	3m(10ft)
	T	81m(266ft)	32m(105ft)	16m(52ft)	8m(26ft)

Pan/Tilt/Rotation

Pan/Tilt/Rotation Range	Pan:0˚~355˚; Tilt:0˚~65˚; Rotation:0˚~355˚

Intelligence

IVS	Tripwire, Intrusion, Object Abandoned/Missing
Advanced Intelligent Functions	Face Detection, 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)/ CIF(352×288/342x240)
Frame Rate	Main Stream: 1080P(1~25/30fps) Sub Stream: D1 (1 ~ 25/30fps) Third Stream: 1080P(1~25/30fps)
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(140dB)/ 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	Support
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/MPEG2-Layer2/ G.722.1/G.729

Network

Ethernet	RJ-45 (100/1000Base-T)
Protocol	HTTP;TCP/IP;ARP;IGMP;ICMP;RTSP;RTP;UDP;RTCP;SMTP;FTP;DHCP;DNS;DDNS;PPPoE;UPnP;NTP;Bonjour;SNMP;Qos;802.1x
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
Smart Phone	IOS, Android

Certifications

Certifications	N/A

Interface

Video Interface	1 Port(For adjustment only)
Audio Interface	2/1 channel In/Out
RS485	1 Port
Alarm	2 channel In: 5mA 5VDC 1 channel Out: 1A 30VDC / 0.5A 50VAC

Electrical

Power Supply	DC12V,AC24V, PoE (802.3af)(Class 0)

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	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	IPC-HDBW8231EP-ZH-S2	2MP WDR IR Dome Network Camera,PAL
	IPC-HDBW8231EN-ZH-S2	2MP WDR IR Dome Network Camera,NTSC
	IPC-HDBW8231EP-ZH-S2	2MP WDR IR Dome Network Camera,PAL
	IPC-HDBW8231EN-ZH-S2	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	PFA138	PFB201C
Wall mount	Juntion Box	In-ceiling mount

PFB300C	PFA152	PFA101
Ceiling mount	Pole mount	Mount adapter

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

Dimensions (mm/inch)

159.1 [6.26"]

117.9 [4.64"]

⌀159.1 [⌀6.26"]

⌀140.0 [⌀5.51"]

3-⌀4.7 [⌀0.19"]