

DH-IPC-HDBW8232E-Z

2MP Starlight 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).

Wide dynamic range (WDR)

Embedded with industry leading wide dynamic range (WDR) technology, vivid pictures 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)

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

- 1/1.9" 2Megapixel progressive scan CMOS
- H.265&H.264 triple-stream encoding
- 50/60fps@1080P(1920×1080)
- WDR(120dB), Day/Night(ICR), 3DNR,AWB,AGC,BLC
- Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- 4.1mm ~16.4mm motorized lens
- Max. IR LEDs Length 50m
- 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.

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. 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

Camera

| | |
|--------------------------|---|
| Image Sensor | 1/1.9" 2Megapixel progressive scan CMOS |
| Effective Pixels | 1920(H)x1080(V) |
| RAM/ROM | 1024MB/128MB |
| Scanning System | Progressive |
| Electronic Shutter Speed | Auto/Manual, 1/3~1/100000s |
| Minimum Illumination | 0.002Lux/F1.53 (Color,1/3s,30IRE) 0.01Lux/F1.53 (Color,1/30s,30IRE) 0Lux/F1.53(IR on) |
| S/N Ratio | More than 50dB |
| IR Distance | Distance up to 50m(164ft) |
| IR On/Off Control | Auto/ Manual |
| IR LEDs | 3 |

Lens

| | | | | | |
|----------------------|----------------------------|-------------|------------|-----------|-----------|
| Lens Type | Motorized /Auto Iris(HALL) | | | | |
| Mount Type | Board-in | | | | |
| Focal Length | 4.1~16.4mm motorized | | | | |
| Max. Aperture | F1.53 | | | | |
| Angle of View | H: 92°~32 ° V:53 ° ~18 ° | | | | |
| Optical Zoom | 4x | | | | |
| Focus Control | Motorized | | | | |
| Close Focus Distance | 1m(3.28ft) | | | | |
| DORI Distance | Lens | Detect | Observe | Recognize | Identify |
| | W | 57m(187ft) | 23m(75ft) | 11m(36ft) | 6m(20ft) |
| | T | 137m(449ft) | 55m(180ft) | 27m(89ft) | 14m(49ft) |

Pan/Tilt/Rotation

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|-------------------------|--|
| Pan/Tilt/Rotation Range | Pan:0°~355°; Tilt:0°~65°; Rotation:0°~355° |
|-------------------------|--|

Intelligence

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|--------------------------------|---|
| IVS | Tripwire, Intrusion, Object Abandoned/Missing |
| Advanced Intelligent Functions | Face Detection, People Counting, Heat Map |

Video

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|----------------------|--|
| Compression | H.265+/H.265/H.264+/H.264 |
| Streaming Capability | 3 Streams |
| Resolution | 1080P(1920x1080)/ 1.3M(1280x960)/ 720P(1280x720)/ D1(704x576/704x480) / VGA(640x480)/ CIF(352x288/342x240) |
| Frame Rate | Main Stream: 1080P(1~50/60fps) |
| | Sub Stream: D1 (1 ~ 50/60fps) |
| | Third Stream: 1080P(1~50/60fps) |
| Bit Rate Control | CBR/VBR |
| Bit Rate | H.264: 24~ 1024Kbps H.265: 14~ 6144Kbps |

| | |
|-------------------------------------|---|
| Day/Night | Auto(ICR) / Color / B/W |
| BLC Mode | BLC / HLC / WDR(120dB)/ 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

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|-------------|---------------------------|
| Compression | G.711a/G.711Mu/AAC/ G.726 |
|-------------|---------------------------|

Network

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|---------------------|---|
| Ethernet | RJ-45 (100/1000Base-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

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

Electrical

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|-------------------|--------------------------------------|
| Power Supply | DC12V,AC24V, PoE+ (802.3at)(Class 4) |
| Power Consumption | <18W |

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-HDBW8232EP-Z | 2MP Starlight IR Dome Network Camera,PAL |
| | DH-IPC-HDBW8232EN-Z | 2MP Starlight IR Dome Network Camera,NTSC |
| | IPC-HDBW8232EP-Z | 2MP Starlight IR Dome Network Camera,PAL |
| | IPC-HDBW8232EN-Z | 2MP Starlight 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 | Wall Mount | |
| PFA101 + PFB300C | PFA101 + PFB302S | |
| | | |

Dimensions (mm/inch)

