

DH-IPC-HDBW1831R

8MP WDR IR Dome Network Camera



System Overview

The IR Megapixel Fixed camera delivers 8MP resolution with a motorized 2.8/4.0/6.0mm fixed lens.The camera's elegant blend of aesthetics combined with a range of easy mounting solutions provides an excellent choice for a variety of small to mid-size applications at an affordable price.

Functions

Smart Codec (H.265+ & H.264+)

Smart Codec is the optimized implementation of standard video compression (H.265 & H.264) 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 Codec technology reduces bit rate and storage requirements by up to 70% when compared to the standard video compression.

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.

Intelligent Video Analysis (IVS)

Dahua camera is equipped with a built-in intelligent analytic algorithm based on video, which can realize intelligent functions like Tripwire and Intrusion, to quickly and accurately respond to monitoring events in specific area, It can enhance monitoring efficiency. In addition, the camera supports intelligent tamper detection, which is to generate warning message via detecting dramatic scene change and to guarantee effective video surveillance.

- · 1/2" 8Megapixel progressive CMOS
- · H.265 & H.264 dual-stream encoding
- · 25/30fps@8MP(3840×2160)
- · WDR(120dB), Day/Night(ICR), 3DNR, AWB, AGC, BLC
- \cdot Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- · 4.0mm fixed lens (6mm optional)
- \cdot Max IR LEDs Length 30m
- · IP67, IK10, PoE



Wide Dynamic Range (WDR)

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.

Smart IR Technology

With IR illumination, detailed images can be captured in low light or total darkness. The camera's Smart IR technology adjusts the intensity of camera's infrared LEDs to compensate the distance of an object. Smart IR technology prevents IR LEDs from whitening out images as they come closer to the camera. The camera's integrated infrared illumination provides high performance in extreme low-light environments up to 30m (98ft).

Protection (IP67, IK10, wide voltage)

The camera allows for ±10% input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 2KV lightning rating provides effective protection for both the camera and its structure against lightning. Subjected and certified to rigorous dust and immersion tests (IP67) and impact tests (IK10), the camera is the choice for installation in even the most unforgiving environments.

Environmental

Dahua cameras operate in extreme temperature environments, rated for use in temperatures from-30° C to +60° C (-22° F to +140° F) with 95% humidity.

Interoperability

The camera conforms to the ONVIF (Open Network Video Interface Forum) specifications, ensuring interoperability between network video products regardless of manufacturer.



Lite Series | DH-IPC-HDBW1831R

Technical Specification

| | - | | | | | |
|--------------------------|----------------|---|---|------------|-----------|--|
| Camera | | | | | | |
| Image Sensor | | 1/2" 8Megapixel progressive CMOS | | | | |
| Effective Pixels | | 3840(H) x2160(V) | | | | |
| RAM/ROM | | 512MB/128MB | | | | |
| Scanning System | | Progressive | | | | |
| Electronic Shutter Speed | | Auto/Manual, 1/3~1/100000s | | | | |
| Minimum Illumination | | 0.003Lux/F1.6(Color,1/3s,30IRE) 0.02Lux/F1.6 Color,1/30s,30IRE) 0Lux/F1.6(IR on) | | | | |
| S/N Ratio | | More than 50dB | | | | |
| IR Distance | | Distance up to 30m(98ft) | | | | |
| IR On/Off Control | | Auto/ Manual | | | | |
| IR LEDs | | 1 | | | | |
| Lens | | | | | | |
| Lens Type | | Motorized | | | | |
| Mount Type | | Board-in | | | | |
| Focal Length | | 4 mm (6mm optional) | | | | |
| Max. Aperture | | F1.6 | | | | |
| Angle of View | | H:87°/55°, V:47°/30° | | | | |
| Focus Control | | Fixed | | | | |
| Close Focus Distance | | 1.5m (4.9ft) | | | | |
| | Lens | Detect | Observe | Recognize | Identify | |
| DORI Distance | 4mm | 104m(341ft) | 42m(138ft) | 21m(69ft) | 10m(33ft) | |
| | 6mm | 164m(538ft) | 66m(217t) | 33m(108ft) | 16m(52ft) | |
| PTZ | | | | | | |
| Pan/Tilt Range | Pan/Tilt Range | | Pan:0° ~355° ;Tilt:0° ~75° ;Rotation:0° ~355° | | | |
| Intelligence | | | | | | |
| Event Trigger | | Motion detection, Video tampering, Scene changing, Network disconnection, IP address conflict, Illegal access, Storage anomaly | | | | |
| IVS | | Tripwire, Intrusion | | | | |
| Video | | | | | | |
| Compression | | H.265/H.264H/MJPEG(Sub Stream) | | | | |
| Smart Codec | | Support H.265+/H.264+ | | | | |
| Streaming Capability | | 2 Streams | | | | |
| Resolution | | 4K(3840×2160)/6M(3072×2048)/5M(2560×1920)/ 3M(2048×1536)/3M(2304×1296)/ 1080P(1920×1080)/1.3M(1280×960)/ 720P(1280×720)/D1(704×576/704×480) / VGA(640×480)/CIF(352×288/352×240) | | | | |
| Frame Rate | | Main Stream: 4K (1~25/30fps) | | | | |
| | | Sub Stream: D1(1~25/30fps) | | | | |
| Bit Rate Control | | CBR/VBR | | | | |
| Bit Rate | | H.264:32Kbps~8192Kbps H.265: 16Kbps~8192Kbps | | | | |
| | | | | | | |

| 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 | |
| Digital Zoom | 16x | |
| Flip | 0°/90°/180°/270° | |
| Mirror | Off / On | |
| Privacy Masking | Off / On (4 Area, Rectangle) | |
| Audio | | |
| Compression | N/A | |
| Network | | |
| Ethernet | RJ-45 (10/100Base-T) | |
| Protocol | HTTP;HTTPS;TCP;ARP;RTSP;RTP;RTCP;UDP;SMTP; FTP;DHCP;DNS;DDNS;PPPoE;IPV4/V6;QoS;UPnP; NTP;Bonjour;IEEE 802.1X;Multicast;ICMP;IGMP;TL S;SSH;NFS | |
| Interoperability | ONVIF Profile S&G, API | |
| Streaming Method | Unicast / Multicast | |
| Max. User Access | 10 Users / 20 Users | |
| Edge Storage | NAS Local PC for instant recording | |
| Web Viewer | IE, Chrome, Firefox, Safari | |
| Management Software | Smart PSS, DSS, DMSS | |
| 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 | N/A | |
| RS485 | N/A | |
| Alarm | N/A | |
| Electrical | | |
| Power Supply | DC12V PoE (802.3af)(Class 0) | |
| Power Consumption | <8.9W | |
| | | |

Lite Series | DH-IPC-HDBW1831R

Environmental

| Operating Conditions | -30° C $^{\sim}$ +60° C (-22° F $^{\sim}$ +140° F) / Less than 95% RH |
|----------------------|---|
| Strorage Conditions | -30° C $^{\sim}$ +60° C (-22° F $^{\sim}$ +140° F) / Less than 95% RH |
| Ingress Protection | IP67 |
| Vandal Resistance | IK10 |
| Construction | |
| Casing | Metal |
| Dimensions | φ122mm×88.9mm(4.80''x3.50'') |
| Net Weight | 0.45Kg (1.0lb) |
| Gross Weight | 0.60Kg(1.33lb) |

Ordering Information

| Туре | Part Number | Description | | |
|---------------------------|-----------------------|---|--|--|
| 8MP camera | DH-IPC-HDBW1831RP | 8MP WDR IR Dome Network Camera, PAL | | |
| | DH-IPC- HDBW1831RN | 8MP WDR IR Dome Network Camera, NTSC | | |
| | IPC-HDBW1831RP | 8MP WDR IR Dome Network Camera, PAL | | |
| | IPC-HDBW1831RN | 8MP WDR IR Dome Network Camera, NTSC | | |
| Accessories (optional) | PFA137 | Junction box | | |
| | PFB203W | Wall mount | | |
| | PFA152-E | Pole mount | | |
| | PFB200C | In-celling Mount | | |
| | PFA200W | Rain shade | | |

Accessories

Optional:











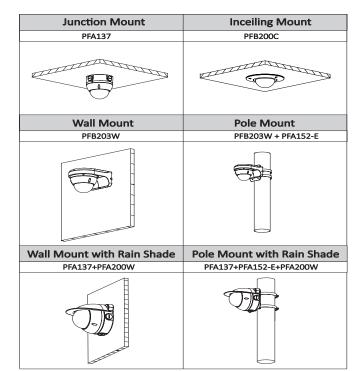
PFA137 PFB203W Function Box Wall mount

PFA152-E

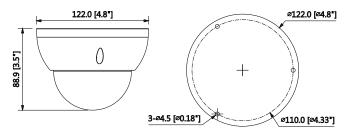
Pole mount In-celling Box

PFB200C

PFA200W Rain shade



Dimensions (mm/inch)





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