

DH-IPC-HDBWD2A1F-M

2MP Professional Ultra Smart IR Mobile Network Camera



System Overview

The Dahua mobile camera is specially designed for trains, buses and other vehicles. Due to its high-specification design, the mobile camera meets the requirements of vehicle standards such as EN50155, E-MARK(ECE-Regulation No.10), making the camera able to withstand the tough conditions like vibrations, shocks and wide range temperature fluctuations. The external camera meets the IP6K9K standard, which makes it dustproof and waterproof, sustaining high pressure / steam jet cleaning directly.

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 (0.009 lux).

Wide Dynamic Range

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)

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 intelligence 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.

Environmental

- 1/2.8" 2Megapixel progressive scan CMOS
- H.265&H.264 dual-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
- 2.8mm, 3.6mm, 6mm fixed lens
- Max. IR LEDs Length 23m
- Micro SD memory,IP67,IK10,PoE+
- Supports Watermark
- 3th party software support
- Ultra Smart
- EN50155(Environment), E-MARK



With a temperature range of -30 °C to +60 °C (-22 °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. For environments with rain, sleet, snow and fog, an integrated wiper provides users with clear visibility at all times.

Protection

Supporting ±30% input voltage tolerance, this camera suits even the most unstable conditions for outdoor applications. Its 4KV lightning rating provides protection against the camera and its structure from the effects of lightning.

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.

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 | 256MB/32MB |
| Scanning System | Progressive |
| Electronic Shutter Speed | Auto/Manual, 1/3~1/100000s |
| Minimum Illumination | 0.001Lux/F2.1 (Color,1/3s,30IRE) 0.03Lux/F2.1 (Color,1/30s,30IRE) 0Lux/F2.1 (IR on) |
| S/N Ratio | More than 50dB |
| IR Distance | Distance up to 23m(75.5ft) |
| IR On/Off Control | Auto/Manual |
| IR LEDs | 10 |

Lens

| | | | | | |
|----------------------|--|------------|------------|-----------|------------|
| Lens Type | Fixed | | | | |
| Mount Type | Board-in | | | | |
| Focal Length | 2.8mm(3.6mm, 6mm optional) | | | | |
| Max. Aperture | F2.1(F2.2, F2.1) | | | | |
| Angle of View | H: 110 ° (89.5°, 52.8°) , V: 58 ° (50°, 30°) | | | | |
| Optical Zoom | N/A | | | | |
| Focus Control | Fixed | | | | |
| Close Focus Distance | 0.6m(0.9m, 2m) | | | | |
| DORI Distance | Lens | Detect | Observe | Recognize | Identify |
| | 2.8mm | 44m(144ft) | 18m(59ft) | 9m(29ft) | 4m(13ft) |
| | 3.6mm | 55m(180ft) | 22m(187ft) | 11m(95ft) | 5.5m(46ft) |
| | 6mm | 83m(272ft) | 33m(108ft) | 17m(56ft) | 8m(26ft) |

Pan/Tilt/Rotation

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|-------------------------|---|
| Pan/Tilt/Rotation Range | Pan:-30°~30°; Tilt:0°~80°; Rotation:0°~360° |
|-------------------------|---|

Intelligence

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|---------------|--|
| Event Trigger | Motion detection, Video tampering, Scene changing, Network disconnection, Ip address conflict, Illegal access, Storage anomaly |
| IVS | Tripwire, Intrusion |

Video

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|----------------------|--|
| Compression | H.265/H.264H/MJPEG(Sub Stream) |
| Smart Codec | Support H.265+/H.264+ |
| Streaming Capability | 2 Streams |
| Resolution | 1080P(1920x1080)/ 1.3M(1280x960)/ 720P(1280x720)/ D1(704x576/704x480)/ VAG(640x480)/CIF(352x288/352x240) |
| Frame Rate | Main Stream: 1080P(1~25/30fps) Sub Stream: D1 (1 ~ 25/30fps) |
| Bit Rate Control | CBR/VBR |
| Bit Rate | H.264H:16Kbps ~ 10240Kbps H.6Kbps~ 7424Kbps |
| Day/Night | Auto(ICR) / Color / B/W |
| BLC Mode | BLC / HLC / WDR(120dB) |
| White Balance | Auto/Manual |
| Gain Control | Auto/Manual |

| | |
|--------------------------------------|------------------------------|
| Noise Reduction | 3D DNR |
| Motion Detection | 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

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

Network

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|---------------------|--|
| Ethernet | RJ-45 (10/100Base-T) |
| Protocol | HTTP;HTTPS;TCP;ARP;RTSP;RTP;UDP;RTCP;SMTP; FTP;DHCP;DNS;DDNS;PPPOE;IPv4/v6;QoS;UPnP; NTP;Bonjour;IEEE 802.1x;Multicast;ICMP;IGMP;S NMP;TLS |
| Interoperability | ONVIF Profile S&G, API |
| Streaming Method | Unicast / Multicast |
| Max. User Access | 10Users/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, DMSS |
| Smart Phone | IOS, Android |

Certifications

| | |
|----------------|--|
| Certifications | CE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart B EN50155(Environment) |
|----------------|--|

Interface

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|------------------|------------------------------------|
| Video Interface | N/A |
| Audio Interface | Built-in Mic |
| RS485 | N/A |
| Alarm | N/A |
| Interoperability | SDK & API support |
| Max. User Access | 10 Users / Unlimited(Up to 64Mbps) |
| IR | Starlight |

Electrical

| | |
|-------------------|---|
| Power Supply | DC12V, PoE (IEEE 802.3af)(Class 0) |
| Power Consumption | DC 12V: 2.6W 3.7W(IR on) PoE: 3.5W 5W(IR on) |

Environmental

| | |
|----------------------|---|
| Operating Conditions | -30° C ~ +60° C (-22° F ~ +140° F) / Less than 95% RH |
| Storage Conditions | -30° C ~ +60° C (-22° F ~ +140° F) / Less than 95% RH |
| Ingress Protection | IP67 |
| Vandal Resistance | IK10 |

Construction

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|--------------|---------------------------|
| Casing | Aluminum alloy |
| Dimensions | 106mmx50.3mm(4.17"x1.98") |
| Net Weight | 0.33kg(0.73lb) |
| Gross Weight | 0.46 kg(1.01lb) |

Ordering Information

| Type | Part Number | Description |
|------------------------|--------------------|---|
| 2MP camera | DH-IPC-HDBWD2A1F-M | 2MP Professional Ultra Smart IR Mobile Network Camera, PAL |
| | DH-IPC-HDBWD2A1F-M | 2MP Professional Ultra Smart IR Mobile Network Camera, NTSC |
| | DH-IPC-HDBWD2A1F-M | 2MP Professional Ultra Smart IR Mobile Network Camera, PAL |
| | DH-IPC-HDBWD2A1F-M | 2MP Professional Ultra Smart IR Mobile Network Camera, NTSC |
| | DH-IPC-HDBWD2A1F-M | 2MP Professional Ultra Smart IR Mobile Network Camera, PAL |
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| | DH-IPC-HDBWD2A1F-M | 2MP Professional Ultra Smart IR Mobile Network Camera, NTSC |
| Accessories (optional) | PFA139 | Junction box |
| | PFB204W | Wall mount |
| | PFA152 | Pole mount |

Accessories

Optional:



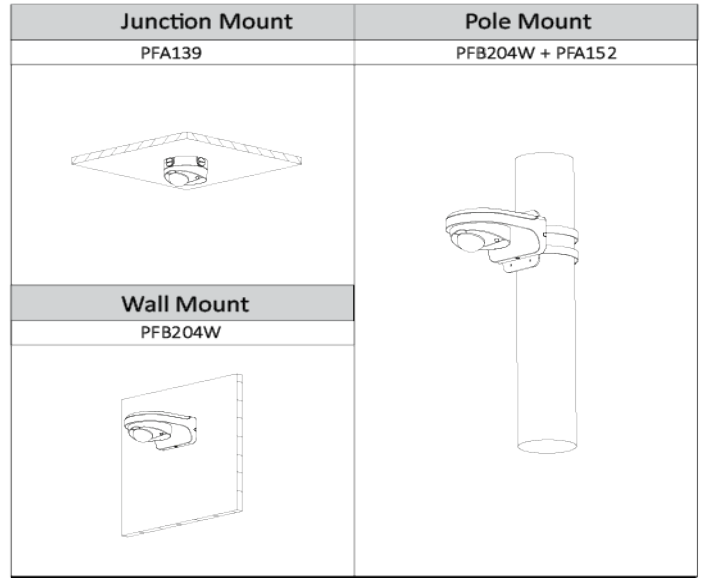
PFA139
Junction box



PFB204W
Wall mount



PFA152
Pole mount



Dimensions (mm/inch)

