

DH-IPC-MBW4231-AS/M12

2MP IR Mobile Network Camera



- 1/2.8" 2Megapixel progressive scan STRAVIS™ CMOS
- H.265&H.264 triple-stream encoding
- 50/60fps@1080(1920×1080)
- WDR(120dB), Day/Night(ICR), 3DNR,AWB,AGC,BLC,
- Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- 2.8mm fixed lens (3.6mm, 6mm optional)
- Max. IR LEDs Length 30m
- Micro SD memory, IP67, IK10, IP6K9K, PoE
- E-MARK(ECE-Regulation No.10)



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

IP6K9K

IP6K9K is the Degrees of protection (IP code, ISO 20653) for Road vehicles, Protection of electrical equipment against foreign objects, water and access. Products meet the IP6K9K standard, can be directly used high pressure / steam jet cleaning.

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.

Environmental

With a temperature range of -40 °C to +70 °C (-40 °F to +158 °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.

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) x 1080(V) | | | | |
| RAM/ROM | 256MB/32MB | | | | |
| Scanning System | Progressive | | | | |
| Electronic Shutter Speed | Auto/Manual, 1/3~1/100000s | | | | |
| Minimum Illumination | 0.009Lux/F2.0(Color,1/3s,30IRE) 0.07Lux/2.0(Color,1/30s,30IRE) 0Lux/F2.0(IR on) | | | | |
| S/N Ratio | More than 50dB | | | | |
| IR Distance | Distance up to 30m (98ft) | | | | |
| IR On/Off Control | Auto/ Manual | | | | |
| IR LEDs | 2 | | | | |
| Lens | | | | | |
| Lens Type | Fixed | | | | |
| Mount Type | Board-in | | | | |
| Focal Length | 2.8mm (3.6mm, 6mm optional) | | | | |
| Max. Aperture | F2.0 (F2.0, F2.0) | | | | |
| Angle of View | 2.8mm: Horizontal::110°; vertical: 58°; diagonal:131° 3.6mm: Horizontal::87°; vertical: 46°; diagonal:105° 6.0mm: Horizontal::52°; vertical: 30°; diagonal:60° | | | | |
| Optical Zoom | N/A | | | | |
| Focus Control | Fixed | | | | |
| Close Focus Distance | N/A | | | | |
| DORI Distance | Lens | Detect | Observe | Recognize | Identify |
| | 2.8 mm | 44m(144ft) | 17m(52ft) | 9m(30ft) | 4m(13ft) |
| | 3.6 mm | 55m(180ft) | 22m(72ft) | 11m(36ft) | 6m(20ft) |
| | 6.0 mm | 81m(266ft) | 32m(105ft) | 16m(52ft) | 8m(26ft) |
| Pan/Tilt/Rotation | | | | | |
| Pan/Tilt/Rotation Range | Pan:0°~20°; Tilt:±15°; Rotation:0°~360° | | | | |
| Intelligence | | | | | |
| IVS | Tripwire, Intrusion, Object Abandoned/Missing | | | | |
| Advanced Intelligent Functions | Face Detection | | | | |
| Video | | | | | |
| Compression | H.265+/H.265/H.264+/H.264 | | | | |
| Streaming Capability | 3 Streams | | | | |
| Resolution | 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: 1080P(1~50/60fps) | | | | |
| | Sub Stream: D1(1~50/60fps) | | | | |
| | Third Stream: 1080P(1~25/30fps) | | | | |
| Bit Rate Control | CBR/VBR | | | | |
| Bit Rate | H.264: 24~10240Kbps H.265: 14~9984Kbps | | | | |
| 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 | | | | |
| Defog | N/A | | | | |
| Digital Zoom | 16x | | | | |
| Flip | 0°/90°/180°/270° | | | | |
| Mirror | Off / On | | | | |
| Privacy Masking | Off / On (4 Area, Rectangle) | | | | |
| Audio | | | | | |
| Compression | N/A | | | | |
| Network | | | | | |
| Ethernet | -AS: RJ45(10/100Base-T) -M12:M12 D-Coding(10/100Base-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 E-mark(ECE-Regulation No.10) EN50155(Environment) | | | | |
| Interface | | | | | |
| Video Interface | N/A | | | | |
| Audio Interface | 1/1 channel In/Out (-AS Model) | | | | |
| RS485 | N/A | | | | |
| Alarm | 1 channel In: 5mA 5VDC 1 channel Out: 300mA 12VDC (-AS Model) | | | | |
| Electrical | | | | | |
| Power Supply | -AS: DC12V, PoE (802.3af)(Class 0) -M12: PoE (802.3af)(Class 0) | | | | |
| Power Consumption | <6.5W | | | | |

Environmental

| | |
|----------------------|---|
| Operating Conditions | -40° C ~ +70° C (-40° F ~ +158° F) / Less than 95% RH |
| Storage Conditions | -40° C ~ +70° C (-40° F ~ +158° F) / Less than 95% RH |
| Ingress Protection | IP67,IP6K9K |
| Vandal Resistance | IK10 |

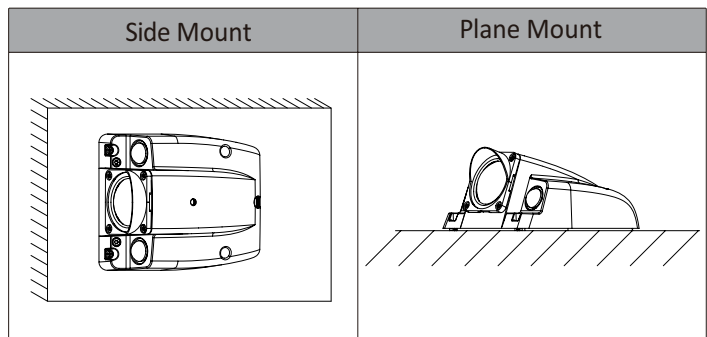
Construction

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|--------------|--|
| Casing | Metal |
| Dimensions | 140.6mm×112.9mm×69.4mm (5.53"×4.44"×2.73") |
| Net Weight | 0.59Kg (1.3lb) |
| Gross Weight | 0.8Kg (1.76lb) |

Ordering Information

| Type | Part Number | Description |
|------------|---------------------------|---------------------------------------|
| 2MP camera | DH-IPC-MBW4231P-M12-0280B | 2MP IR Mobile Network Camera,WDR,PAL |
| | DH-IPC-MBW4231N-M12-0280B | 2MP IR Mobile Network Camera,WDR,NTSC |
| | IPC-MBW4231P-M12-0280B | 2MP IR Mobile Network Camera,WDR,PAL |
| | IPC-MBW4231N-M12-0280B | 2MP IR Mobile Network Camera,WDR,NTSC |
| | DH-IPC-MBW4231P-AS-0280B | 2MP IR Mobile Network Camera,WDR,PAL |
| | DH-IPC-MBW4231N-AS-0280B | 2MP IR Mobile Network Camera,WDR,NTSC |
| | IPC-MBW4231P-AS-0280B | 2MP IR Mobile Network Camera,WDR,PAL |
| | IPC-MBW4231N-AS-0280B | 2MP IR Mobile Network Camera,WDR,NTSC |
| | DH-IPC-MBW4231P-M12-0360B | 2MP IR Mobile Network Camera,WDR,PAL |
| | DH-IPC-MBW4231N-M12-0360B | 2MP IR Mobile Network Camera,WDR,NTSC |
| | IPC-MBW4231P-M12-0360B | 2MP IR Mobile Network Camera,WDR,PAL |
| | IPC-MBW4231N-M12-0360B | 2MP IR Mobile Network Camera,WDR,NTSC |
| | DH-IPC-MBW4231P-AS-0360B | 2MP IR Mobile Network Camera,WDR,PAL |
| | DH-IPC-MBW4231N-AS-0360B | 2MP IR Mobile Network Camera,WDR,NTSC |

| | | |
|-----------------------|---------------------------------------|---------------------------------------|
| 2MP camera | IPC-MBW4231P-AS-0360B | 2MP IR Mobile Network Camera,WDR,PAL |
| | IPC-MBW4231N-AS-0360B | 2MP IR Mobile Network Camera,WDR,NTSC |
| | DH-IPC-MBW4231P-M12-0600B | 2MP IR Mobile Network Camera,WDR,PAL |
| | DH-IPC-MBW4231N-M12-0600B | 2MP IR Mobile Network Camera,WDR,NTSC |
| | IPC-MBW4231P-M12-0600B | 2MP IR Mobile Network Camera,WDR,PAL |
| | IPC-MBW4231N-M12-0600B | 2MP IR Mobile Network Camera,WDR,NTSC |
| | DH-IPC-MBW4231P-AS-0600B | 2MP IR Mobile Network Camera,WDR,PAL |
| | DH-IPC-MBW4231N-AS-0600B | 2MP IR Mobile Network Camera,WDR,NTSC |
| IPC-MBW4231P-AS-0600B | 2MP IR Mobile Network Camera,WDR,PAL | |
| IPC-MBW4231N-AS-0600B | 2MP IR Mobile Network Camera,WDR,NTSC | |



Dimensions (mm/inch)

