

DH-IPC-HDBW3231FP-M12

2MP IR Mini Dome Network camera



Series 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

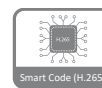
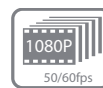
Embedded with industry leading wide dynamic range (WDR) technology, vivid pictures are achieved even in the most intense contrast lighting conditions. For applications with both bright and low lighting conditions that change quickly, True WDR (120dB) optimizes both the bright and dark areas of a scene 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.

Highlights

- 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
- 2.1mm, 2.8mm, 3.6mm, 6mm fixed lens
- Max. IR LEDs Length 23m
- Micro SD memory, IP67, IK10, PoE+
- Supports Watermark
- EN50155(Environment), E-MARK



Environmental

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.

Technical Specification	
Camera	
Image Sensor	1/2.8" 2 Megapixel progressive scan CMOS
Max. Resolution	1920 (H) × 1080 (V)
ROM	256 MB/32MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.001 Lux/F2.1 (Color, 1/3s, 30IRE) 0.03 Lux/F2.1 (Color, 1/30s, 30IRE) 0 Lux/F2.1 (IR on)
S/N Ratio	> 50 dB
IR Distance	Distance up to 23m(75.5ft)
IR On/Off Control	Auto/Manual
IR LEDs	10
Pan/Tilt/Rotation Range	Pan:-30°–30°; Tilt:0°–80°; Rotation:0°–360°

Lens					
Lens Type		Fixed			
Mount Type		M12			
Focal Length		2.1mm, 2.8mm, 3.6mm, 6mm optional			
Max. Aperture		2.1mm: F2.0 2.8mm: F2.1 3.6mm: F2.2 6mm: F2.1			
Field of View		2.1mm: 126°(H)×66.3°(V)×156°(D) 2.8mm: 110°(H)×58°(V) 3.6mm: 89.5°(H)×50°(V) 6mm: 52.8°(H)×30°(V)			
Close Focus Distance		2.1mm: 0.3m(0.98ft) 2.8mm: 0.6m(1.97ft) 3.6mm: 0.9m(2.95) 6mm: 2m(6.56)			
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.1mm	22m(72ft)	9m(29ft)	4m(13ft)	2m(6ft)
	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)

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	1080P(1920×1080)/ 1.3M(1280×960)/ 720P(1280×720)/ D1(704×576/704×480)/ VAG(640×480)/CIF(352×288/352×240)
Frame Rate	Main Stream: 1080P(1–25/30fps) Sub Stream: D1 (1 – 25/30fps)

Bit Rate	CBR/VBR
Video Bit Rate	H.264H: 16Kbps–10240Kbps H.265: 6Kbps–7424Kbps
Day/Night	Auto(ICR)/ Color / B/W
BLC	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 (ROI)	Off/On (4 Zone)
Smart IR	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

Network	
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	10 Users/20 Users
Edge Storage	NAS Local PC for instant recording Micro SD card 128GB
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	Smart PSS, DSS, DMSS
Mobile Phone	iOS; Android

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

Interface	
Audio Interface	Built-in Mic

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

Structure	
Casing	Metal

Dimensions	106mm×50.3mm(4.17"x1.98")
Net Weight	0.33kg(0.73lb)
Gross Weight	0.46 kg(1.01lb)

Environment

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

Dimensions (mm[inch])

