

DH-IPC-MBW4431N-AS

4MP IR Mobile 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

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 -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.

Highlights

- 1/3" 4 Megapixel progressive scan CMOS(2.8mm, 3.6mm, 6mm)
- 1/2.7" 4 Megapixel progressive scan CMOS(8mm)
- H.265&H.264 triple-stream encoding
- 25/30fps@4M(2688×1520)
- 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, 8mm optional)
- Max. IR LEDs Length 30m
- Micro SD memory, IP67, IK10, IP6K9K, PoE
- E-MARK(ECE-Regulation No.10)



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	1/3" 4 Megapixel progressive scan CMOS(2.8mm, 3.6mm, 6mm) 1/2.7" 4 Megapixel progressive scan CMOS(8mm)
Max. Resolution	2688(H) x 1520(V)
ROM	512 MB/32MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.08Lux/F2.0(Color,1/3s,30IRE) 0.3Lux/2.0(Color,1/30s,30IRE) 0Lux/F2.0(IR on)
S/N Ratio	> 50 dB
IR Distance	Distance up to 30m (98ft)
IR On/Off Control	Auto/Manual
IR LEDs	2
Pan/Tilt/Rotation Range	Pan:0°–20°; Tilt:±15°; Rotation:0°–360°

Lens					
Lens Type		Fixed			
Mount Type		Board-in			
Focal Length		2.8mm, 3.6mm, 6mm, 8mm optional			
Max. Aperture		2.8mm: F2.0 3.6mm: F2.0 6mm: F2.0 8mm: F2.0			
Field of View		2.8mm: 104°(H)×55°(V)×125°(D) 3.6mm: 82.5°(H)×45°(V)×97°(D) 6mm: 55°(H)×31°(V)×65°(D) 8mm: 41.34°(H)×23.06°(V)×47.52°(D)			
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8mm	56m(184ft)	22m(72ft)	11m(36ft)	6m(20ft)
	3.6mm	80m(262ft)	32m(105ft)	16m(52ft)	8m(26ft)
	6mm	120m(394ft)	48m(157ft)	24m(79ft)	12m(39ft)
	8mm	143m(469ft)	57m(187ft)	29m(95ft)	14m(46ft)

Intelligence	
Advanced Intelligent Functions	Face Detection
IVS	Tripwire, Intrusion, Object Abandoned/Missing

Video	
Compression	H.265+/H.265/H.264+/H.264
Streaming Capability	3 Streams
Resolution	4M(2688×1520)/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: 4M(1~25/30fps) Sub Stream: D1(1~25/30fps) Third Stream: 720P(1~25/30fps)
Bit Rate	CBR/VBR
Video Bit Rate	H.264: 24Kbps–1024Kbps H.265: 14Kbps–9984Kbps

Day/Night	Auto(ICR)/ Color / B/W
BLC	BLC / HLC / WDR(120dB)
White Balance	Auto/Natural/Street Lamp/Outdoor/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)

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 Micro SD card 128GB
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	Smart PSS, DSS, DMSS
Mobile Phone	iOS; Android

Certification	CE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart B E-mark(ECE-Regulation No.10) EN50155(Environment)
---------------	--

Interface	
Audio Interface	1/1 channel In/Out (-AS Model)
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

Structure	
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)

Environment

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

Dimensions (mm[inch])

