

DH-IPC-MBW4431-AS/M12

4MP 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

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.

- 1/3" 4Megapixel progressive scan CMOS
- 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 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.

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						Day/Night		Auto(ICR) / Color / B/W	
Camera						BLC Mode		BLC / HLC / WDR(120dB)	
Image Sensor		1/3" 4Megapixel progressive scan CMOS				White Balance		Auto/Natural/Street Lamp/Outdoor/Manual	
Effective Pixels		2688(H) x 1520(V)				Gain Control		Auto/Manual	
RAM/ROM		512MB/32MB				Noise Reduction		3D DNR	
Scanning System		Progressive				Motion Detetion		Off / On (4 Zone, Rectangle)	
Electronic Shutter Speed		Auto/Manual, 1/3~1/100000s				Region of Interest		Off / On (4 Zone)	
Minimum Illumination		0.08Lux/F2.0(Color,1/3s,30IRE) 0.3Lux/2.0(Color,1/30s,30IRE) 0Lux/F2.0(IR on)				Electronic Image Stabilization (EIS)		N/A	
S/N Ratio		More than 50dB				Smart IR		Support	
IR Distance		Distance up to 30m (98ft)				Defog		N/A	
IR On/Off Control		Auto/ Manual				Digital Zoom		16x	
IR LEDs		2				Flip		0°/90°/180°/270°	
Lens						Mirror		Off / On	
Lens Type		Fixed				Privacy Masking		Off / On (4 Area, Rectangle)	
Mount Type		Board-in				Audio			
Focal Length		2.8mm (3.6mm, 6mm optional)				Compression		N/A	
Max. Aperture		F2.0 (F2.0, F2.0)				Network			
Angle of View		2.8mm: Horizontal::104°; vertical: 55°; diagonal:125° 3.6mm: Horizontal::82.5°; vertical: 45°; diagonal:97° 6.0mm: Horizontal::55°; vertical: 31°; diagonal:65°				Ethernet		-AS: RJ45(10/100Base-T) -M12:M12 D-Coding(10/100Base-T)	
Optical Zoom		N/A				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	
Focus Control		Fixed				Interoperability		ONVIF, PSIA, CGI	
Close Focus Distance		N/A				Streaming Method		Unicast / Multicast	
DORI Distance	Lens	Detect	Observe	Recognize	Identify	Max. User Access		10 Users /20 Users	
	2.8 mm	56m(184ft)	22m(72ft)	11m(36ft)	6m(20ft)	Edge Storage		NAS Local PC for instant recording Mirco SD card 128GB	
	3.6 mm	80m(262ft)	32m(105ft)	16m(52ft)	8m(26ft)	Web Viewer		IE, Chrome, Firefox, Safari	
	6.0 mm	120m(394ft)	48m(157ft)	24m(79ft)	12m(39ft)	Management Software		Smart PSS, DSS, Easy4ip	
Pan/Tilt/Rotation						Smart Phone		IOS, Android	
Pan/Tilt/Rotation Range		Pan:0°~20°; Tilt:±15°; Rotation:0°~360°				Certifications			
Intelligence						Certifications		CE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart B E-mark(ECE-Regulation No.10) EN50155(Environment)	
IVS		Tripwire, Intrusion, Object Abandoned/Missing				Interface			
Advanced Intelligent Functions		Face Detection				Video Interface		N/A	
Video						Audio Interface		1/1 channel In/Out (-AS Model)	
Compression		H.265+/H.265/H.264+/H.264				RS485		N/A	
Streaming Capability		3 Streams				Alarm		1 channel In: 5mA 5VDC 1 channel Out: 300mA 12VDC (-AS Model)	
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)				Electrical			
Frame Rate		Main Stream: 4M(1~25/30fps)				Power Supply		-AS: DC12V, PoE (802.3af)(Class 0) -M12: PoE (802.3af)(Class 0)	
		Sub Stream: D1(1~25/30fps)				Power Consumption		<6.5W	
		Third Stream: 720P(1~25/30fps)							
Bit Rate Control		CBR/VBR							
Bit Rate		H.264: 24~10240Kbps H.265: 14~9984Kbps							

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

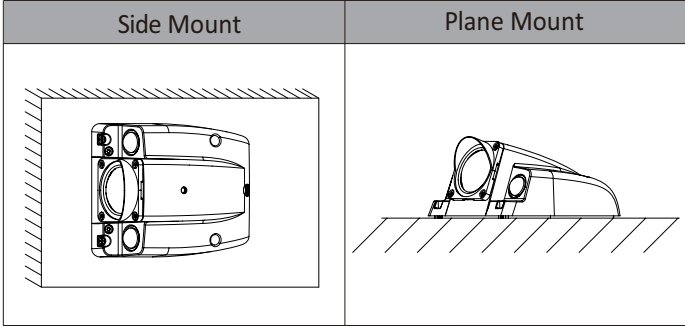
Construction

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
4MP camera	DH-IPC-MBW4431P-M12-0280B	4MP IR Mobile Network Camera,WDR,PAL
	DH-IPC-MBW4431N-M12-0280B	4MP IR Mobile Network Camera,WDR,NTSC
	IPC-MBW4431P-M12-0280B	4MP IR Mobile Network Camera,WDR,PAL
	IPC-MBW4431N-M12-0280B	4MP IR Mobile Network Camera,WDR,NTSC
	DH-IPC-MBW4431P-AS-0280B	4MP IR Mobile Network Camera,WDR,PAL
	DH-IPC-MBW4431N-AS-0280B	4MP IR Mobile Network Camera,WDR,NTSC
	IPC-MBW4431P-AS-0280B	4MP IR Mobile Network Camera,WDR,PAL
	IPC-MBW4431N-AS-0280B	4MP IR Mobile Network Camera,WDR,NTSC
	DH-IPC-MBW4431P-M12-0360B	4MP IR Mobile Network Camera,WDR,PAL
	DH-IPC-MBW4431N-M12-0360B	4MP IR Mobile Network Camera,WDR,NTSC
	IPC-MBW4431P-M12-0360B	4MP IR Mobile Network Camera,WDR,PAL
	IPC-MBW4431N-M12-0360B	4MP IR Mobile Network Camera,WDR,NTSC
	DH-IPC-MBW4431P-AS-0360B	4MP IR Mobile Network Camera,WDR,PAL
	DH-IPC-MBW4431N-AS-0360B	4MP IR Mobile Network Camera,WDR,NTSC

4MP camera	IPC-MBW4431P-AS-0360B	4MP IR Mobile Network Camera,WDR,PAL
	IPC-MBW4431N-AS-0360B	4MP IR Mobile Network Camera,WDR,NTSC
	DH-IPC-MBW4431P-M12-0600B	4MP IR Mobile Network Camera,WDR,PAL
	DH-IPC-MBW4431N-M12-0600B	4MP IR Mobile Network Camera,WDR,NTSC
	IPC-MBW4431P-M12-0600B	4MP IR Mobile Network Camera,WDR,PAL
	IPC-MBW4431N-M12-0600B	4MP IR Mobile Network Camera,WDR,NTSC
	DH-IPC-MBW4431P-AS-0600B	4MP IR Mobile Network Camera,WDR,PAL
	DH-IPC-MBW4431N-AS-0600B	4MP IR Mobile Network Camera,WDR,NTSC
	IPC-MBW4431P-AS-0600B	4MP IR Mobile Network Camera,WDR,PAL
	IPC-MBW4431N-AS-0600B	4MP IR Mobile Network Camera,WDR,NTSC



Dimensions (mm/inch)

