

# DH-IPC-MW1230D-HM12/VM12

2MP 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(optional), 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**

#### **ІР6К9К**

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.

# EN50155(Optional)

EN50155 is an European standard for Railway applications- Electronic equipment used on rolling stock. The mobile camera meets the requirements of EN50155, making the camera able to withstand the tough conditions like vibrations, shocks and other harsh vehicle environment, to meet the needs of vehicle monitoring.

### Environmental

Dahua cameras operate in extreme temperature environments, rated for use in temperatures from-30° C to +60° C (-22° F to +140° F) with 95% humidity.

#### Protection

Supporting  $\pm 30\%$  input voltage tolerance, this camera suits even the most unstable conditions for outdoor applications. Its 4KV lightning rating provides protectection 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+

- · 1/2.7" 2Megapixel progressive scan CMOS
- · H.265&H.264 triple-stream encoding
- · 25/30fps@1080(1920×1080)
- · DWDR, 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(6mm lens)
- · IP67, IP6K9K
- · EN50155(Optional), E-MARK(ECE-Regulation No.10)













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

#### Adjustment

This Dahua mobile camera supports mounting in two directions. -HM12 model can be mounted on the roof of vehicles and capture the horizontal images. -VM12 model can be mounted on the side of carriage and automatically flip the captured image 90°.



Technical S	pecification					Day/Night	Auto(ICR) / Color / B/W
Camera					BLC Mode	BLC / HLC / DWDR	
Image Sensor		1/2.7" 2Megapixel progressive scan CMOS				White Balance	Auto/Natural/Street Lamp/Outdoor/Manual
Effective Pixels		1920(H) x 1080(V)				Gain Control	Auto/Manual
		1920(n) x 1080(v)					3D DNR
RAM/ROM		Progressive				Noise Reduction	
	Scanning System		1/3~1/10000	)∩c		Motion Detetion	Off / On (4 Zone, Rectangle)
Electronic Shutter Speed		Auto/Manual, 1/3~1/100000s 0.02Lux/F2.1( Color,1/3s,30IRE)				Region of Interest  Electronic Image Stabilization	Off / On (4 Zone)
Minimum Illumination		0.2Lux/2.1(Color,1/30s,30IRE) 0.Lux/E2.1(IR on)				(EIS)	N/A
S/N Ratio	S/N Ratio		dB			Smart IR	Support
IR Distance	·		o 30m (98ft)			Defog	N/A
IR On/Off Cont	rol	Auto/ Manual				Digital Zoom	N/A
IR LEDs		1				Flip	0°/90°/180°/270°
Lens						Mirror	Off / On
Lens Type		Fixed				Privacy Masking	Off / On (4 Area, Rectangle)
Mount Type		Board-in				Audio	
		2.8mm (3.6mm, 6mm optional)				Compression	N/A
Max. Aperture	Focal Length  May Aperture			,		Network	
Angle of View		F2.1 (F2.0, F2.0) H: 115° (86°, 53°), V: 62° (47°, 30°)				Ethernet	-M12:M12 A-Coding(10/100Base-T)
Optical Zoom		N/A					HTTP; HTTPs; TCP; ARP; RTSP; RTP; UDP; SMTP;
Focus Control		Fixed				Protocol	FTP; DHCP; DNS; DDNS; PPPOE; IPv4/v6; QoS; UPnP;NTP; Bonjour; 802.1x; Multicast; ICMP; IGMP; SNMP
Close Focus Dis	tance	N/A				Interoperability	ONVIF profile S, CGI
	Lens	Detect	Observe	Recognize	Identify	Streaming Method	Unicast / Multicast
DORI Distance	2.8 mm 3.6 mm	40m(131ft) 53m(173ft)	16m(52ft) 21m(68ft)	8m(26ft) 11m(36ft)	4m(13ft) 5m(16ft)	Max. User Access	10 Users /20 Users
	6.0 mm	80m(262ft)	32m(104ft)	16m(52ft)	8m(26ft)	Edge Storage	NAS Local PC for instant recording
Pan/Tilt/Ro	tation					Web Viewer	IE, Chrome, Firefox, Safari
Pan/Tilt/Rotati	on Range	N/A				Management Software	Smart PSS, DSS, Easy4ip
Intelligence						Smart Phone	IOS, Android
IVS		N/A				Certifications	
Advanced Intelligent Functions		N/A					CE (EN 60950:2000)
Video						Certifications	FCC: FCC Part 15 Subpart B E-mark(ECE-Regulation No.10)
Compression		H.265+/H.265/H.264+/H.264					EN50155(Optional)
Streaming Capability		2 Streams				Interface	
Resolution		1080P(1920×1080)/1.3M(1280x960)/ 720P(1280×720)/D1(704×576/704×480)/ VGA(640×480)/CIF(352×288/352×240)				Video Interface	N/A
						Audio Interface	N/A
Frame Rate		Main Stream: 1080P(1~25/30fps)				RS485	N/A
		Sub Stream: D1(1~25/30fps)				Alarm	N/A
Bit Rate Control		CBR/VBR				Electrical	
Bit Rate		H.264: 32~6144Kbps H.265: 12~6144Kbps				Power Supply	DC12V
						Power Consumption	<3.7W

Environmental				
Operating Conditions	-30° C $^{\sim}$ +60° C (-22° F $^{\sim}$ +140° F) / Less than 95% RH			
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Ingress Protection	IP67,IP6K9K			
Construction				
Casing	Metal			
Dimensions	80.2mm×65.8mm×59.2mm (3.16"×2.59"×2.33")			
Net Weight	0.28Kg (0.62lb)			
Gross Weight	0.35Kg (0.77lb)			

Ordering I	nformation	
Туре	Part Number	Description
	DH-IPC-MW1230DP- HM12-0280B	2MP IR Mobile Network Camera,PAL, Horizontal Mount
	DH-IPC-MW1230DN- HM12-0280B	2MP IR Mobile Network Camera,NTSC, Horizontal Mount
	IPC-MW1230DP- HM12-0280B	2MP IR Mobile Network Camera,PAL, Horizontal Mount
	IPC-MW1230DN- HM12-0280B	2MP IR Mobile Network Camera,NTSC, Horizontal Mount
	DH-IPC-MW1230DP- HM12-0360B	2MP IR Mobile Network Camera,PAL, Horizontal Mount
	DH-IPC-MW1230DN- HM12-0360B	2MP IR Mobile Network Camera,NTSC, Horizontal Mount
2MP camera	IPC-MW1230DP- HM12-0360B	2MP IR Mobile Network Camera,PAL, Horizontal Mount
Zivir Camera	IPC-MW1230DN- HM12-0360B	2MP IR Mobile Network Camera,NTSC, Horizontal Mount
	DH-IPC-MW1230DP- HM12-0600B	2MP IR Mobile Network Camera,PAL, Horizontal Mount
	DH-IPC-MW1230DN- HM12-0600B	2MP IR Mobile Network Camera,NTSC, Horizontal Mount
	IPC-MW1230DP- HM12-0600B	2MP IR Mobile Network Camera,PAL, Horizontal Mount
	IPC-MW1230DN- HM12-0600B	2MP IR Mobile Network Camera,NTSC, Horizontal Mount
	DH-IPC-MW1230DP- VM12-0280B	2MP IR Mobile Network Camera,PAL, Vertical Mount
	DH-IPC-MW1230DN- VM12-0280B	2MP IR Mobile Network Camera,NTSC, Vertical Mount

	IPC-MW1230DP- VM12-0280B	2MP IR Mobile Network Camera,PAL, Vertical Mount
	IPC-MW1230DN- VM12-0280B	2MP IR Mobile Network Camera,NTSC, Vertical Mount
	DH-IPC-MW1230DP- VM12-0360B	2MP IR Mobile Network Camera,PAL, Vertical Mount
	DH-IPC-MW1230DN- VM12-0360B	2MP IR Mobile Network Camera,NTSC, Vertical Mount
2MD camora	IPC-MW1230DP- VM12-0360B	2MP IR Mobile Network Camera,PAL, Vertical Mount
Zivir Camera	IPC-MW1230DN- VM12-0360B	2MP IR Mobile Network Camera,NTSC, Vertical Mount
	DH-IPC-MW1230DP- VM12-0600B	2MP IR Mobile Network Camera,PAL, Vertical Mount
	DH-IPC-MW1230DN- VM12-0600B	2MP IR Mobile Network Camera,NTSC, Vertical Mount
	IPC-MW1230DP- VM12-0600B	2MP IR Mobile Network Camera,PAL, Vertical Mount
	IPC-MW1230DN- VM12-0600B	2MP IR Mobile Network Camera,NTSC, Vertical Mount
2MP camera	VM12-0360B  DH-IPC-MW1230DN-VM12-0360B  IPC-MW1230DP-VM12-0360B  IPC-MW1230DN-VM12-0360B  DH-IPC-MW1230DP-VM12-0600B  DH-IPC-MW1230DP-VM12-0600B  IPC-MW1230DP-VM12-0600B	Mount  2MP IR Mobile Network Camera, NTSC, Vertical Mount  2MP IR Mobile Network Camera, PAL, Vertical Mount  2MP IR Mobile Network Camera, NTSC, Vertical Mount  2MP IR Mobile Network Camera, PAL, Vertical Mount  2MP IR Mobile Network Camera, NTSC, Vertical Mount  2MP IR Mobile Network Camera, PAL, Vertical Mount  2MP IR Mobile Network Camera, PAL, Vertical Mount

Side Mount	Plane Mount

# Dimensions (mm/inch)



