alhua TECHNOLOGY

DH-IPC-MW1230D-HM12/VM12

2MP IR Mobile Network Camera

· 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)
· IP Filter,User Authentication
· Supports motion detection, temper alarm and IPC disconnection alarm.
· Supports watermark.

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

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.

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 ±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+ 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 acquistion 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 Specification

Camera

Image Sensor	1/2.7" 2Megapixel progressive scan CMOS
Effective Pixels	1920(H) x 1080(V)
RAM/ROM	128MB/16MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3~1/100000s
Minimum Illumination	0.02Lux/F2.1(Color,1/3s,30IRE) 0.2Lux/2.1(Color,1/30s,30IRE) 0Lux/F2.1(IR on)
S/N Ratio	More than 50dB
IR Distance	Distance up to 30m (98ft)
IR On/Off Control	Auto/ Manual
IR LEDs	1

Lens

Lens Type	Fixed
Mount Type	Board-in
Focal Length	2.8mm (3.6mm, 6mm optional)
Max. Aperture	F2.1 (F2.0, F2.0)
Angle of View	H: 115° (86°, 53°), V: 62° (47°, 30°)
Optical Zoom	N/A
Focus Control	Fixed
Close Focus Distance	N/A

DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8 mm	40m(131ft)	16m(52ft)	8m(26ft)	4m(13ft)
	3.6 mm	53m(173ft)	21m(68ft)	11m(36ft)	5m(16ft)
	6.0 mm	80m(262ft)	32m(104ft)	16m(52ft)	8m(26ft)

Pan/Tilt/Rota

Pan/Tilt/Rotation Range	N/A

Intelligence

IVS	N/A
Advanced Intelligent Functions	N/A

Video

Compression	H.265+/H.265/H.264+/H.264
Streaming Capability	2 Streams
Resolution	1080P(1920×1080)/1.3M(1280x960)/ 720P(1280x720)/D1(704×576/704×480)/ VGA(640×480)/CIF(352×288/352×240)
Frame Rate	Main Stream: 1080P(1~25/30fps)
	Sub Stream: D1(1~25/30fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 32~6144Kbps H.265: 12~6144Kbps
Day/Night	Auto(ICR) / Color / B/W

BLC Mode

BLC Mode	BLC / HLC / DWDR
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	N/A
Flip	0°/90°/180°/270°
Mirror	Off / On
Privacy Masking	Off / On (4 Area, Rectangle)

Audio

Compression	N/A

Network

Ethernet	-M12:M12 A-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 profile S, CGI
Streaming Method	Unicast / Multicast
Max. User Access	10 Users /20 Users
Edge Storage	NAS Local PC for instant recording
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	Smart PSS, DSS, Easy4ip
Smart Phone	IOS, Android

Certifications

Certifications	CE (EN 60950:2000) FCC: FCC Part 15 Subpart B E-mark(ECE-Regulation No.10) EN50155(Optional)

Port

Video	N/A
Audio	N/A
RS-485	N/A
Alarm	N/A
RJ45	Yes

Electrical

Power Supply	DC12V
Power Consumption	<3.7W

Environmental

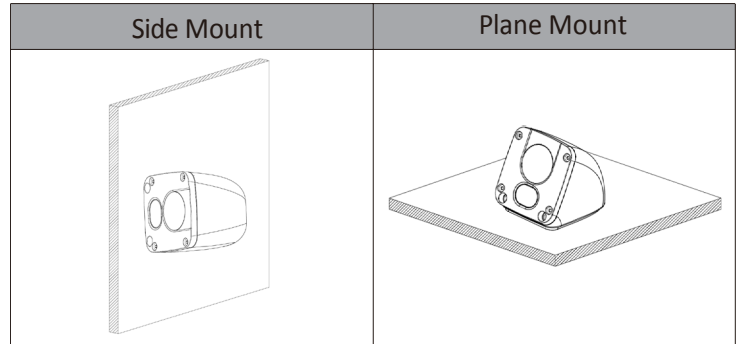|	
Operating Conditions	-30° C ~ +60° C (-22° F ~ +140° F) / Less than 95% RH
Strorage Conditions	-30° C ~ +60° C (-22° F ~ +140° F) / Less than 95% RH
Ingress Protection	IP67,IP6K9K

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 Information

Type	Part Number	Description
2MP camera	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
	IPC-MW1230DP-HM12-0360B	2MP IR Mobile Network Camera,PAL, Horizontal Mount
	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

Type	Part Number	Description
2MP camera	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
	IPC-MW1230DP-VM12-0360B	2MP IR Mobile Network Camera,PAL, Vertical Mount
	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

Side Mount	Plane Mount

Dimensions (mm/inch)