

DH-IPC-MDW4330-M12

3MP IR Mini Eyeball Network Camera



- 1/3" 3Megapixel progressive scan CMOS
- H.265&H.264 triple-stream encoding
- 25fps@3M(2048×1536)
- DWDR, Day/Night(ICR), 3DNR, AWB, AGC, BLC,
- Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- 2.1mm fixed lens (2.8mm, 3.6mm optional)
- Max. IR LEDs Length 20m
- Micro SD memory
- EN50155, E-MARK(ECE-Regulation No.10)



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.

Functions

EN50155

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.

Protection

Supporting $\pm 30\%$ 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.

Environmental

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

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

Camera	
Image Sensor	1/3" 3Megapixel progressive scan CMOS
Effective Pixels	2048(H) x 1536(V)
RAM/ROM	512MB/16MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3~1/100000s
Minimum Illumination	2.1mm: 0.06Lux/F2.2 (Color,1/3s,30IRE) 0.35Lux/2.2 (Color,1/25s,30IRE) 0Lux/F2.2 (IR on) 2.8mm, 3.6mm: 0.04Lux/F2.0 (Color,1/3s,30IRE) 0.25Lux/2.0 (Color,1/25s,30IRE) 0Lux/F2.0 (IR on)
S/N Ratio	More than 50dB
IR Distance	Distance up to 20m (65ft)
IR On/Off Control	Auto/ Manual
IR LEDs	2

Lens	
Lens Type	Fixed
Mount Type	Board-in
Focal Length	2.1mm (2.8mm, 3.6mm optional)
Max. Aperture	F2.2 (F2.0, F2.0)
Angle of View	H: 121° (86°, 64°), V: 87° (62°, 50°)
Optical Zoom	N/A
Focus Control	Fixed
Close Focus Distance	0.4m (0.7m, 1.3m)

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	2.1 mm	38m(124ft)	15m(49ft)	7m(23ft)	4m(13ft)
	2.8 mm	50m(164ft)	20m(65ft)	10m(33ft)	5m(16ft)
	3.6 mm	72m(236ft)	29m(95ft)	14m(46ft)	7m(23ft)

Pan/Tilt/Rotation	
Pan/Tilt/Rotation Range	Pan:0°~360°; Tilt:±40°; Rotation:0°~360°

Intelligence	
Event Trigger	Motion detection, Video tampering, Scene changing, Network disconnection, Ip address conflict, Illegal access, Storage anomaly
IVS	Tripwire, Intrusion, Object Abandoned/Missing
Advanced Intelligent Functions	Face Detection

Video	
Compression	H.265/H.264H/MJPEG(Sub Stream)
Smart Codec	Support H.265+/H.264+
Streaming Capability	3 Streams
Resolution	3M(2048x1536)/1080P(1920x1080)/1.3M(1280x960)/720P(1280x720)/D1(704x576/704x480)/VGA(640x480)/CIF(352x288/352x240)

Frame Rate	Main Stream: 3M(1~25fps)
	Sub Stream 1: D1(1~25fps)
	Sub Stream 2: 1080P(1~7fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 32~10240Kbps H.265: 12~8960Kbps
Day/Night	Auto(ICR) / Color / B/W
BLC Mode	BLC / HLC / DWDR
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	Off / On (4 Zone)
Electronic Image Stabilization (EIS)	N/A
Smart IR	Support
Defog	N/A
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/ G.726

Network	
Ethernet	M12 Connector (10/100Base-T)
Protocol	HTTP;HTTPS;TCP;ARP;RTSP;RTP;RTCP;UDP;SMTP; FTP;DHCP;DNS;DDNS;PPPoE;IPV4/V6;QoS;UPnP; NTP;Bonjour;IEEE 802.1X;Multicast;ICMP;IGMP;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 Mirco SD card 128GB
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	Smart PSS, DSS, DMSS
Smart Phone	IOS, Android

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

Interface	
Video Interface	N/A
Audio Interface	1 Built-in Mic
RS485	N/A
Alarm	N/A

Electrical

Power Supply	DC 12V (M12 Connector)
Power Consumption	< 4W

Environmental

Operating Conditions	-30° C ~ +60° C (-22° F ~ +140° F) / Less than 95% RH
Storage Conditions	-30° C ~ +60° C (-22° F ~ +140° F) / Less than 95% RH
Ingress Protection	N/A
Vandal Resistance	N/A

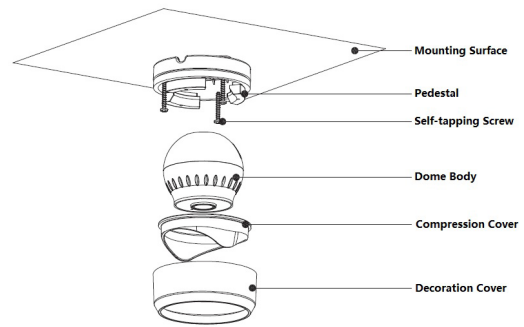
Construction

Casing	Metal+Plastic
Dimensions	Φ77.16mm×72.27mm (Φ3.03"×2.84")
Net Weight	0.25Kg (0.55lb)
Gross Weight	0.37Kg (0.81lb)

Ordering Information

Type	Part Number	Description
3MP camera	DH-IPC-MDW4330P-M12-0210B	3MP IR Mini Eyeball Network Camera, PAL
	DH-IPC-MDW4330N-M12-0210B	3MP IR Mini Eyeball Network Camera, NTSC
	IPC-MDW4330P-M12-0210B	3MP IR Mini Eyeball Network Camera, PAL
	IPC-MDW4330N-M12-0210B	3MP IR Mini Eyeball Network Camera, NTSC
	DH-IPC-MDW4330P-M12-0280B	3MP IR Mini Eyeball Network Camera, PAL
	DH-IPC-MDW4330N-M12-0280B	3MP IR Mini Eyeball Network Camera, NTSC
	IPC-MDW4330P-M12-0280B	3MP IR Mini Eyeball Network Camera, PAL
	IPC-MDW4330N-M12-0280B	3MP IR Mini Eyeball Network Camera, NTSC
	DH-IPC-MDW4330P-M12-0360B	3MP IR Mini Eyeball Network Camera, PAL
	DH-IPC-MDW4330N-M12-0360B	3MP IR Mini Eyeball Network Camera, NTSC
	IPC-MDW4330P-M12-0360B	3MP IR Mini Eyeball Network Camera, PAL
	IPC-MDW4330N-M12-0360B	3MP IR Mini Eyeball Network Camera, NTSC

Installation



Dimensions (mm/inch)

