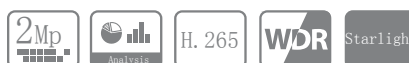


# DH-IPC-MW4231A-E2

## 2MP Dual Lens Dash Camera



- 1/2.8" 2Megapixel progressive scan STARVIS™ CMOS
- H.265&H.264 double-stream encoding
- 25/30fps@1080P(1920×1080)
- WDR(120dB), Day/Night(ICR), 3DNR,AWB,AGC,BLC
- Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- 2.1mm(Rear),2.8mm(Front) Fixed lens
- Micro SD memory



### System Overview

Dahua Dual Lens dash camera is specially designed for taxi, online car-hailing and other vehicles. The camera is equipped with two lens which can meet the view requirement of both front and rear. Besides, the device owns some smart technologies such as starlight, intelligent image analysis and so on. With its intelligent functions, the device can provide excellent image quality and efficient event reminders

data compression ratio at the same level of video quality, or substantially improved video quality at the same bit rate, as compared to older video compression technologies. H.265 offers such impressive compression by expanding the pattern comparison and difference-coding, improving motion vector prediction and motion region merging, and incorporating an additional filtering step called sample-adaptive offset filtering.

### Functions

#### Starlight Technology

For challenging low-light applications, Dahua's Starlight Ultra-low Light Technology offers best-in-class light sensitivity, capturing color details in low light down to 0.005lux. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

#### Wide Dynamic Range (WDR)

The camera achieves vivid images, even in the most intense contrast lighting conditions, using industry-leading wide dynamic range (WDR) technology. For applications with both bright and low lighting conditions that change quickly, true WDR (120 dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

#### Intelligent Video analysis (IVS)

IVS is a built-in video analytic algorithm that delivers intelligent functions to monitor a scene for Tripwire violations, intrusion detection, and abandoned or missing objects. A camera with IVS quickly and accurately responds to monitoring events in a specific area. In addition to scene analytics, the camera supports face detection to quickly capture a face and upload the image to a server. The camera also offers tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.

#### HEVC (H.265)

The H.265 (ITU-T VCEG) video compression standard offers double the

**Technical Specification**

Camera

Image Sensor	1/2.8" 2Megapixel progressive scan CMOS
Effective Pixels	1920(H)x1080(V)
RAM/ROM	512MB/32MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3~1/100000s
Minimum Illumination	Front : 0.009Lux/F2.2( Color,1/3s,30IRE) 0.07Lux/F2.2( Color,1/30s,30IRE) 0Lux/F2.2(B/W) Rear : 0.009Lux/F2.0( Color,1/3s,30IRE) 0.07Lux/F2.0( Color,1/30s,30IRE) 0Lux/F2.0(IR on)
S/N Ratio	More than 50dB
IR Distance	Distance up to 2m(6.56ft)
IR On/Off Control	Auto/Manual
IR LEDs	1

Lens

Lens Type	Fixed				
Mount Type	Board-in				
Focal Length	2.1mm(Rear)/2.8mm(Front)				
Max. Aperture	F2.0(Rear)F2.2(Front)				
Angle of View	Rear : H:133.6° V:78.4° Front : H:114.6° V:57.5°				
Optical Zoom	N/A				
Focus Control	N/A				
Predictive Focus Algorithm (PFA)	N/A				
Close Focus Distance	0.5m(1.64ft)				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.1mm	36.7m(120ft)	14.7m(48ft)	7.3m(24ft)	3.7m(12ft)
	2.8mm	38.6m(127ft)	15.4m(51ft)	7.7m(25ft)	3.9m(13ft)

Pan/Tilt/Rotation

Pan/Tilt/Rotation Range	Bracket :Pan:0°~330°; Tilt:-15°-15° Rear Camera :Pan:15°-15°; Tilt:-15°-15°
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Intelligence

Event Trigger	Motion detection, Video tampering , Scene changing, 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	N/A
Streaming Capability	2X2 Streams
Resolution	1080P(1920x1080)/ 1.3M(1280x960)/ 720P(1280x720)/ D1(704x576/704x480) /CIF(352x288/342x240)
Frame Rate	Main Stream: CH1: 1080P (1~25/30fps) CH2: 1080P (1~25/30fps)
	Sub Stream: CH1: D1(1~25/30fps) CH2: D1(1~25/30fps)

Bit Rate Control	CBR/VBR
Bit Rate	H.264: 32~ 10240Kbps H.265: 12~ 6400Kbps
Day/Night	Rear : Auto(ICR) / Color / B/W Front: Electronic
BLC Mode	BLC / HLC / WDR(120dB)
White Balance	Auto/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	N/A
Defog	N/A
Digital Zoom	16x
Flip	0°/90°/270°
Mirror	Off / On
Privacy Masking	Off / On (4 Area, Rectangle)

Audio

Compression	G.711A/G.711Mu/G.726/AAC
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Network

Ethernet	M12 (10/100Base-T)
Protocol	HTTP;HTTPS;TCP;ARP;RTSP;RTP;UDP;RTCP;SMTP; FTP;DHCP;DNS;DDNS;PPPOE;IPv4/v6;QoS;UPnP; NTP;Bonjour;IEEE 802.1x;Multicast;ICMP;IGMP;S NMP;TLS
Interoperability	ONVIF;CGI
Streaming Method	Unicast / Multicast
Max. User Access	10Users/20Users
Edge Storage	NAS FTP Mirco SD card 128GB
Web Viewer	IE, Chrome
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
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Interface

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

Electrical

Power Supply	DC12V(±30%)
Power Consumption	DC 12V: 4.4W 5.4W(IR on)

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

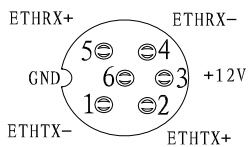
Casing	Metal,Plastic
Dimensions	123mm×126mm×48.1mm (4.84"×4.96"×1.89")
Net Weight	250g (0.55lb)
Gross Weight	320g (0.71lb)

Ordering Information

Type	Part Number	Description
2MP camera	DH-IPC-MW4231AP-E2	2MP Dual Lens Dash Camera,PAL
	DH-IPC-MW4231AN-E2	2MP Dual Lens Dash Camera,NTSC
	IPC-MW4231AP-E2	2MP Dual Lens Dash Camera,PAL
	IPC-MW4231AN-E2	2MP Dual Lens Dash Camera,NTSC

M12 Connector

SN	Function
1	ETHX-
2	ETHX+
3	+12V
4	ETHRX-
5	ETHRX+
6	GND



Dimensions (mm/inch)

