DH-IPC-HDBW3231F-M-DAE

2MP IR Mini Dome Network camera

- 1/2.8" 2Megapixel progressive scan CMOS
- H.265&H.264 dual-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
- 2.8mm, 3.6mm, 6mm fixed lens
- Max. IR LEDs Length 23m
- Micro SD memory,IP67,IK10,PoE+

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

Starlight Technology

Featuring Dahua's Starlight Technology, this camera is ideal for applications with challenging lighting conditions. Its low-light performance delivers usable video with minimal ambient light. Even in extreme low-light conditions, Starlight Technology is capable of delivering color images in near complete darkness (0.009 lux).

Wide Dynamic Range

Embeded with industry leading wide dynamic range (WDR) technology, vivid picutures 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.

Intelligent Video System (IVS)

With built-in intelligent video analytics, the camera has the ability to detect and analyze moving objects for improved video surveillance. The camera provides optional standard intelliegence at the edge allowing detection of multiple object behaviors such as abandoned or missing objects. IVS also supports Tripwire analytics, allowing the camera to detect when a pre-determined line has been crossed, ideal for business intelligence, and Facial Detection, for searching or identification of individuals.

Environmental

With a temperature range of-30 °C to +60 °C (-22 °F to +140 °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. For enviorments with rain, sleet, snow and fog, an integrated wiper provides users with clear visibility at all times.

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 acquisition time and a random access delay , reduce complexity , etc

Technical Specification

Camera

Image Sensor	1/2.8 2Megapixel progressive scan CMOS
Effective Pixels	1920(H)x1080(V)
RAM/ROM	256MB/32MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3~1/100000s
Minimum Illumination	0.001Lux/F2.1 (Color,1/3s,30IRE) 0.03Lux/F2.1 (Color,1/30s,30IRE) 0Lux/F2.1 (IR on)
S/N Ratio	More than 50dB
IR Distance	Distance up to 23m(75.5ft)
IR On/Off Control	Auto/Manual
IR LEDs	10

Lens

Lens Type	Fixed
Mount Type	Board-in
Focal Length	2.8mm(3.6mm, 6mm optional)
Max. Aperture	F2.1(F2.2, F2.1)
Angle of View	H: 110 ˚ (89.5°, 52.8°) , V: 58 ˚ (50˚, 30°)
Optical Zoom	N/A
Focus Control	Fixed
Close Focus Distance	0.6m(0.9m, 2m)

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	2.8mm	44m(144ft)	18m(59ft)	9m(29ft)	4m(13ft)
	3.6mm	55m(180ft)	22m(187ft)	11m(95ft)	5.5m(46ft)
	6mm	83m(272ft)	33m(108ft)	17m(56ft)	8m(26ft)

Pan/Tilt/Rotation

Pan/Tilt/Rotation Range	Pan:-30˚~30˚; Tilt:0˚~80˚; Rotation:0˚~360˚

Intelligence

Event Trigger	Motion detection, Video tampering, Scene changing, Network disconnection, Ip address conflict, Illegal access, Storage anomaly
IVS	Tripwire, Intrusion

Video

Compression	H.265/H.264H/MJPEG(Sub Stream)
Smart Codec	Support H.265+/H.264+
Streaming Capability	2 Streams
Resolution	1080P(1920×1080)/ 1.3M(1280x960)/ 720P(1280x720)/ D1(704×576/704x480)/ VAG(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.264H:16Kbps ~ 10240Kbps H.6Kbps~ 7424Kbps
Day/Night	Auto(ICR) / Color / B/W
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	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

Network

Ethernet	GX -6 Pins - No PoE
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;SNMP;TLS
Interoperability	ONVIF Profile S&G, API
Streaming Method	Unicast / Multicast
Max. User Access	10Users/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 EN50155(Environment)

Interface

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

Electrical

Power Supply	DC12V, PoE (IEEE 802.3af)(Class 0)
Power Consumption	DC 12V: 2.6W 3.7W(IR on) PoE: 3.5W 5W(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	IP67
Vandal Resistance	IK10

Construction

Casing	Metal
Dimensions	106mm×50.3mm(4.17"x1.98")
Net Weight	0.33kg(0.73lb)
Gross Weight	0.46 kg(1.01lb)

Ordering Information

Type	Part Number	Description
2MP camera	DH-IPC-HDBW3231FP-M-DAE-0280	2MP IR Starlight Dome Network Camera, PAL
Accessories (optional)	PFA139	Junction box
	PFB204W	Wall mount
	PFA152	Pole mount

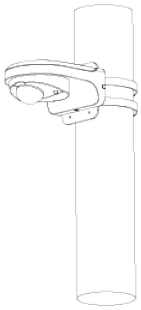
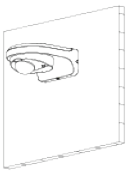
Accessories

Optional:

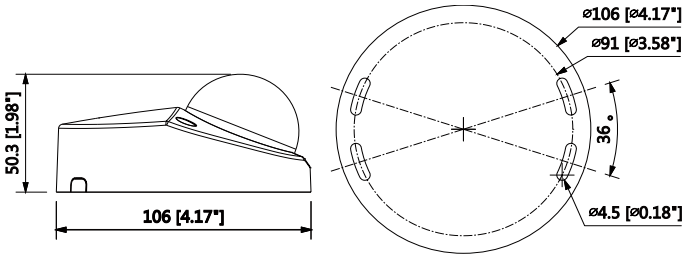
PFA139
Junction box

PFB204W
Wall mount

PFA152
Pole mount

Junction Mount	Pole Mount
PFA139	PFB204W + PFA152
	
Wall Mount	
PFB204W	
	

Dimensions (mm/inch)



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