

# DH-IPC-HDBW4239R-ASE

2MP WDR Full-color Starlight Dome Network Camera





#### **System Overview**

With upgraded H.265 encoding technology, Eco-savvy series brings high efficient video compression capability. It can save bandwidth and storage. Meanwhile, the series features starlight, full-color starlight, smart IR technology and intelligent image analysis techniques. This series supports reminder function, meanwhile fully protected from dust and water, certified to IP67 and vandal resistant to IK10 standard.

#### **Functions**

# Full-color Starlight

With the adoption of high performance sensor and large-sized aperture lens, the camera is able to provide a more colorful image even under lowlight environment. Full-color starlight cameras are prefect for applications of low-light conditions which is over 1 lux, such as parking lots, urban streets, schools, museums, etc.

\*Full-color starlight cameras can not work in total darkness environment.

#### ePoE technology

The ePoE technology of Dahua, designed internally, adopts advanced 2D-PAM3 coding modulation from physical layer, and realizes full duplex transmission over 800 meters at the speed of 10Mbps, or 300 meters at the speed of 100Mbps via Cat 5 or coaxial cable media. Besides, it supports PoE and PoC power supply technology which has greatly simplified construction and wiring. Dahua ePoE technology offer a new way to accomplish long distance transmission between IP camera and network switch. It allows more flexible surveillance system design, improves reliability and saves construction and wiring cost.

#### Wide Dynamic Range

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.

- · 1/2.8" 2Megapixel progressive scan STARVIS™ CMOS
- · H.265&H.264 triple-stream encoding
- ·50/60fps@1080(1920×1080)
- · Smart Detection supported
- · WDR(120dB), Day/Night(ICR), 3DNR, AWB, AGC, BLC
- · Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- · 3.6mm fixed lens (6mm optional)
- · 1/1 Alarm in/out, 1/1 audio in/out
- · Micro SD memory, IP67, IK10, PoE













#### Intelligent Video System (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.

#### Protection(IP67, IK10, wide voltage)

The camera allows for ±30% input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 6KV lightning rating provides effective protection for both the camera and its structure against lightning. Subjected and certified to rigorous dust and immersion tests (IP67) and impact tests (IK10), the camera is the choice for installation in even the most unforgiving environments.

#### Smart H.265+

Smart H.265+ is the optimized implementation of the H.265 codec that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality video without straining the network. Smart H.265+ technology reduces bit rate and storage requirements by up to 70% when compared to standard H.265 video compression.



Cameria	Technical C	nocification						Day/Night	Auto/ICR) / Color / R/W
Thingain Sention	Technical Specification								
### Paralle   P									
RAM/ROM	-							White Balance	Auto/Natural/Street Lamp/Outdoor/Manual
Searning System								Gain Control	Auto/Manual
Motion Deletion   Multiple   M								Noise Reduction	3D DNR
Minimum III								Motion Detetion	Off / On (4 Zone, Rectangle)
Maintonitionition   Maintonitionition   Maintonitionitionitionitionitionitionitio								Region of Interest	Off / On (4 Zone)
Matter	Minimum Illumination							•	N/A
Record   Personal	S/N Ratio		More than 50dB						Support
Lens Type	IR LEDs		N/A						
Fine	Lens							-	
Mount Type   Board-In	Lens Type		Fixed					_	
Focal Length	Mount Type		Board-in					Flip	0°/90°/180°/270°
Max Appeture F1.0/F1.0/  Angle of View	Focal Length		3.6mm (6mm	optional)				Mirror	Off / On
Na	Max. Aperture		F1.0(F1.0)					Privacy Masking	Off / On (4 Area, Rectangle)
Focus Control   Fixed   Fix	Angle of View		H: 87°/54°, V:	47°/20°				Audio	
	Optical Zoom		N/A					Compression	G.711a/ G.711Mu/ AAC/ G.726
Close Focus Distance   1.6m(5.3ft)/3.5m (11.5ft)   1.0m (8.5m)   3.6 m   0.0m (8.0m)   0.0m (8.0m	Focus Control		Fixed						
Lens	Close Focus Dis	tance	1.6m(5.3ft)/3	.5m (11.5ft)					PL 45 (10/100Rase T)
DON		Lens	Detect	Observe	Recognize	Identify		Ethernet	
Pan/Tilt/Rotation Pan/Tilt/Rotation Range Pan:0~360°; Tilt:0~80°; Rotation:0~360° Max. User Access 10 Users / 20 Users /								Protocol	EE802.1X;SMTP;SNMP;FTP;DHCP;DNS;DDNS;PPPoE;IPV4/V6;QoS;UPnP;NTP;Bonjour;IEEE 802.1X;Multic
Pan/Tilt/Rotation Range   Pan:0~360°; Tilt:0~80°; Rotation:0~360°   Max. User Access   10 Users /20 Users	D /T:U/D I		83111(28911)	33111(10811)	1/111(5611)	8111(2011)		Interoperability	
Pan/Title/Rotation Range   Pan:0~360'; Tilt:0~80'; Rotation:0~360'   Max. User Access   10 Users /20 Users								Streaming Method	Unicast / Multicast
Event Trigger   Motion detection, Video tampering, Scene changing, Network disconnection, IP address conflict, Illegal Access, Storage anomaly   Motion detection, IP address conflict, Illegal Access, Storage anomaly   Web Viewer   E, Chrome, Firefox, Safari	Pan/Tilt/Rotation	on Range	Pan:0°~360°;	Tilt:0°~80°; Ro	tation:0°~360	)°			10 Users /20 Users
Event Trigger         Motion detection, Victor Language Access, Storage anomaly         Edge Storage         Local PC for instant recording Mirco SD card 1286B           IVS         Tripwire, Intrusion, Object Abandoned/Missing         Web Viewer         IE, Chrome, Firefox, Safari           Advanced Intelligent Function         Face Detection         Management Software         Smart PSS, DSS, DMSS           VideO         Smart Phone         IOS, Android           Compression         H.265/H.264/H.264B/H.264B/H.264H/MJPEG(Sub Stream)         Certifications         CE (EN 60950:2000) U.:U.60950-1 FCC: FCC Part 15 Subpart B           Streaming Capability         3 Streams         Interface           Resolution         1080P(1920x1080)/1.3M(1280x960)/ 720P(1280x720)/D1(704x576/704x480)/ VGA(640x480)/(CIE(52x288/352x240)         Video Interface         N/A           Frame Rate         Sub Stream: 1080P(1**060fps)         Audio Interface         1/1 channel In/Out           Frame Rate         Sub Stream: D1(1**05/60fps)         Alarm         1 channel In: 5mA 5VDC 1 channel Out: 300mA 12VDC           Bit Rate Control         CBR/VBR         Electrical           Bit Rate         H.264: 24K ~ 10240Kbps H.265: 14K ~ 9984Kbps         Power Supply         DC12V, PoE(802.3af)(Class 0)	Intelligence							Max. Osci / teeess	
Advanced Intelligent Functions Face Detection  Video  Compression H.265/H.264/H.264B/H.264H/MJPEG(Sub Stream)  Smart Phone IOS, Android  Certifications  Certifications  Certifications  Streaming Capability Streaming Capability  3 Streams  Resolution  Top(1280×720)/D1704×576/704×480)/VGA(640×480)/CVGA(640×480)/CVGA(640×480)/CIF(352×288/352×240)  Frame Rate  Main Stream: 1080P(1*25/30fps)  Bit Rate Control  CBR/VBR  Management Software  Smart PSS, DSS, DMSS  Smart PSS, DSS, DMS  Smart PSS, DSS, DMSS  Smart PSS, DSS, DMS  Smart PSS, DSS, DMSS  Smart PSS, DSS, DMS  Smart PSS, DS, DES  Smart PSS, DS, DES  Smart PSS, DS, DES  Smart PSS, DS, DMS  Smart PSS, DS, DES  Scale Picture  Scale Picture	Event Trigger		Network disconnection , IP address conflict, Illegal					Edge Storage	Local PC for instant recording
Advanced Intelligent Functions         Face Detection           Video           Compression         H.265/H.264/H.264H/MJPEG(Sub Stream)         Certifications           CE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart B           Streaming Capability         3 Streams           Interface           Video Interface         N/A           Resolution         Main Stream: 1080P(1*250/60fps)         Audio Interface         N/A           Frame Rate         Sub Stream: 1080P(1*25/30fps)         Alarm         1 channel In: 5mA 5VDC           Third Stream: 1080P(1*25/30fps)         Electrical           Bit Rate Control         CBR/VBR         Electrical           Bit Rate         H.264: 24K ~ 10240Kbps H.265: 14K ~ 9984Kbps         Power Supply         DC12V, PoE(802.3af)(Class 0)	IVS							Web Viewer	IE, Chrome, Firefox, Safari
Video         Certifications           Compression         H.265/H.264/H.264H/MJPEG(Sub Stream)           Smart Codec         Support H.265+/H.264+         Certifications         CE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart B           Streaming Capability         3 Streams         Interface           Resolution         1080P(1920x1080)/1.3M(1280x960)/720P(1280x720)/D1(704x576/704x480)/VGA(640x480)/CIF(352x288/352x240)         Video Interface         N/A           Frame Rate         Main Stream: 1080P(1~50/60fps)         Audio Interface         1/1 channel In/Out           RS485         N/A           Alarm         1 channel In: 5mA 5VDC 1 channel Out: 300mA 12VDC           Bit Rate Control         CBR/VBR         Electrical           Bit Rate         H.264: 24K ~ 10240Kbps H.265: 14K ~ 9984Kbps         Power Supply         DC12V, PoE(802.3af)(Class 0)	Advanced Intell	ligent Functions						Management Software	Smart PSS, DSS, DMSS
Compression         H.265/H.264/H.264H/MJPEG(Sub Stream)         Certifications           Smart Codec         Support H.265+/H.264+         Certifications         CE (EN 60950:2000) UI:UI:60950-1 FCC: FCC Part 15 Subpart B           Streaming Capability         3 Streams         Interface           Resolution         1080P(1920x1080)/1.3M(1280x960)/720P(1280x720)/DI(704x576/704x480)/V VGA(640x480)/CIF(352x288/352x240)         Video Interface         N/A           Video Interface         N/A         Audio Interface         1/1 channel In/Out           Frame Rate         Sub Stream: D1(1°50/60fps)         RS485         N/A           Alarm         1 channel In: 5mA 5VDC 1 channel Out: 300mA 12VDC           Bit Rate Control         CBR/VBR         Electrical           Bit Rate         H.264: 24K~10240Kbps H.265: 14K~9984Kbps         Power Supply         DC12V, PoE(802.3af)(Class 0)	Video							Smart Phone	IOS, Android
Smart Codec         Support H.265+/H.264+         Certifications         CE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart B           Streaming Capability         3 Streams         Interface           Resolution         1080P(1920x1080)/1.3M(1280x960)/720P(1280x720)/D1(704x576/704x480)//VGA(640x480)/CIF(352x288/352x240)         Video Interface         N/A           Frame Rate         Main Stream: 1080P(1^250/60fps)         Audio Interface         1/1 channel In/Out           RS485         N/A           Alarm         1 channel In: 5mA 5VDC 1 channel Out: 300mA 12VDC           Bit Rate Control         CBR/VBR         Electrical           Bit Rate         H.264: 24K~ 10240Kbps H.265: 14K~ 9984Kbps         Power Supply         DC12V, PoE(802.3af)(Class 0)			LI 265/LI 264/LI 264B/LI 264LI/MIDEC/Sub Stroom)					Certifications	
Streaming Capability   3 Streams   Interface								Certifications	,
1080P(1920x1080)/1.3M(1280x960)/   720P(1280x720)/D1(704x576/704x480)/   VGA(640x480)/CIF(352x288/352x240)	Streaming Capability								FCC: FCC Part 15 Subpart B
VGA(640×480)/CIF(352×288/352×240)           VGA(640×480)/CIF(352×288/352×240)           Main Stream: 1080P(1~50/60fps)         Audio Interface         1/1 channel In/Out           RS485         N/A           Alarm         1 channel In: 5mA 5VDC           1 channel In: 5mA 5VDC           1 channel Out: 300mA 12VDC           Bit Rate Control         CBR/VBR         Electrical           Bit Rate         H.264: 24K~10240Kbps H.265: 14K~9984Kbps         Power Supply         DC12V, PoE(802.3af)(Class 0)			1080P(1920x1080)/1.3M(1280x960)/ 720P(1280x720)/D1(704x576/704x480)/					Interface	
RS485   N/A								Video Interface	N/A
Alarm   1 channel In: 5mA 5VDC   1 channel In: 5mA 5VDC   1 channel Out: 300mA 12VDC	Frame Rate							Audio Interface	1/1 channel In/Out
Third Stream: 1080P(1~25/30fps)  Alarm 1 channel In: 5mA 5VDC 1 channel Out: 300mA 12VDC  Bit Rate Control CBR/VBR Electrical  Bit Rate 4 H.264: 24K~10240Kbps H.265: 14K~9984Kbps  Power Supply DC12V, PoE(802.3af)(Class 0)			Sub Stream: D1(1~50/60fps)					RS485	N/A
Bit Rate H.264: 24K ~ 10240Kbps Power Supply DC12V, PoE(802.3af)(Class 0)								Alarm	
H.265: 14K ~ 9984Kbps	Bit Rate Control		CBR/VBR					Electrical	
H.265: 14K ~ 9984Kbps	Bit Rate		·					Power Supply	DC12V, PoE(802.3af)(Class 0)
Power Consumption <3.7W			u.zoo: 14k AA84kob2					Power Consumption	<3.7W

#### Environmental

Operating Conditions	-30° C $^{\sim}$ +60° C (-22° F $^{\sim}$ +140° F) / Less than 95% RH
Strorage Conditions	-30° C ~ +60° C (-22° F ~ +140° F) / Less than 95% RH
Ingress Protection	IP67
Vandal Resistance	IK10

#### Construction

Casing	Metal
Dimensions	Ф122mm×88.9mm (4.8"×3.5")
Net Weight	0.44kg (0.97lb)
Gross Weight	0.58kg (1.29lb)

Ordering Information					
Туре	Part Number	Description			
	DH-IPC- HDBW4239RP-ASE	2MP Full-color Starlight Dome Network Camera,WDR, PAL			
2MD 00 70 070	DH-IPC- HDBW4239RN-ASE	2MP Full-color Starlight Dome Network Camera WDR,NTSC			
2MP camera	IPC-HDBW4239RP- ASE	2MP Full-color Starlight Dome Network Camera,WDR, PAL			
	IPC-HDBW4239RN- ASE	2MP Full-color Starlight Dome Network Camera WDR,NTSC			
	PFB203W	Wall mount			
	PFA137	Junction box			
Accessories (optional)	PFB200C	In-ceiling mount			
	PFA152-E	Pole Mount			
	LR1002	ePoE Over Coax Converter			

## **Accessories**

## Optional:









PFA152-E Pole Mount

PFB203W Wall Mount

PFA137 Junction Box

In-ceiling Mount



LR1002 ePoE Over Coax Converter

Junction Mount	Inceiling Mount	
PFA137	PFB200C	
Wall Mount	Pole Mount	
PFB203W	PFB203W + PFA152	

# Dimensions (mm/inch)



