

DH-IPC-HDBW2231R-ZS/VFS

2MP WDR IR Dome Network Camera



System Overview

The IR Megapixel Vari-focal camera delivers 2MP resolution with a 2.7mm – 13.5mm varifocal lens. The camera's elegant blend of aesthetics combined with a range of easy mounting solutions provides an excellent choice for a variety of small to mid-size applications at an affordable price.

Functions

Smart Codec (H.265+ & H.264+)

Smart Codec is the optimized implementation of standard video compression (H.265 & H.264) 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 Codec technology reduces bit rate and storage requirements by up to 70% when compared to the standard video compression.

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 0.006lux. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

Intelligent Video analysis (IVS)

Dahua camera is equipped with a built-in intelligent analytic algorithm based on video, which can realize intelligent functions like Tripwire and Intrusion, to quickly and accurately respond to monitoring events in specific area, It can enhance monitoring efficiency. In addition, the camera supports intelligent tamper detection, which is to generate warning message via detecting dramatic scene change and to guarantee effective video surveillance.

- · 1/2.8" 2Megapixel progressive Starvis™ CMOS
- · H.265 & H.264 dual-stream encoding
- · 25/30fps@1080P(1920×1080)
- ·WDR(120dB), Day/Night(ICR), 3DNR, AWB, AGC, BLC
- \cdot Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- · Micro SD card slot, up to 128GB
- · 2.7~13.5mm varifocal lens
- · Max IR LEDs Length 30m
- IP67, IK10, PoE



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.

Smart IR Technology

With IR illumination, detailed images can be captured in low light or total darkness. The camera's Smart IR technology adjusts the intensity of camera's infrared LEDs to compensate the distance of an object. Smart IR technology prevents IR LEDs from whitening out images as they come closer to the camera. The camera's integrated infrared illumination provides high performance in extreme low-light environments up to 50m (164ft).

Protection (IP67, IK10, wide voltage)

The camera allows for $\pm 25\%$ input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 2KV 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 complies with an IK10 impact rating making it capable of withstanding the equivalent of 5 kg (11.02 lbs) of force dropped from a height of 40 cm (15.75 in.)

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.

Interoperability

The camera conforms to the ONVIF (Open Network Video Interface Forum) specifications, ensuring interoperability between network video products regardless of manufacturer.



Lite Series | DH-IPC-HDBW2231R-ZS/VFS

Pan/Tilt Range

Intelligence

Event Trigger

IVS

Video

Compression

Smart Codec

Resolution

Frame Rate

Bit Rate

Bit Rate Control

Streaming Capability

Technical Specification						
Camera						
Image Sensor		1/2.8" 2Megapixel progressive 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		0.006Lux/F1.4(Color,1/3s,30IRE) 0.05Lux/F1.4(Color,1/30s,30IRE) 0Lux/F1.4(IR on)				
S/N Ratio		More than 50dB				
IR Distance		Distance up to 30m(98ft)				
IR On/Off Control		Auto/ Manual				
IR LEDs		2				
Lens						
Lens Type		Motorized(-ZS),Manual(-VFS)				
Mount Type		Board-in				
Focal Length		2.7mm~13.5mm				
Max. Aperture		F1.4				
Angle of View		H:106°~29°, V:57°~17°				
Focus Control		Motorized(-ZS),Manual(-VFS)				
Close Focus Distance		0.2m				
DORI Distance	Lens	Detect	Observe	Recognize	Identify	
	W	46m(151ft)	18m(59ft)	9m(30ft)	5m(16ft)	
	т	153m(502ft)	61m(200ft)	30m(98ft)	15m(49ft)	
PTZ						

Pan:0° ~355° ;Tilt:0° ~75° ;Rotation:0° ~355°

Motion detection, Video tampering, Scene

H.265/H.264/MJPEG(Sub Stream)

1080P(1920×1080)/1.3M(1280×960)/

Main Stream: 1080P(1 ~ 25/30fps)

Sub Stream: D1(1 ~ 25/30fps)

H.265: 12K ~ 6400Kbps

H.264: 32K ~ 10240Kbps

720P(1280×720)/D1(704×576/704×480)/ VGA(640×480)/CIF(352×288/352×240)

Support H.265+/H.264+

2 Streams

CBR/VBR

Tripwire, Intrusion

changing,Network disconnection,IP address conflict, Illegal acess, Storage anomaly

Day/Night Auto(ICR) / Color / B/W BLC Mode BLC / HLC / WDR(120dB) White Balance Auto/Natural/Street Lamp/Outdoor/Manual Gain Control Auto/Manual 3D DNR Noise Reduction Motion Detection Off / On (4 Zone, Rectangle) **Region of Interest** Off / On (4 Zone) Electronic Image N/A Stabilization(EIS) Smart IR Support Digital Zoom 16x Flip 0°/90°/180°/270° Off/On Mirror Privacy Masking Off / On (4 Area, Rectangle) Audio N/A Compression Network RJ-45 (10/100Base-T) Ethernet HTTP;HTTPs;TCP;ARP;RTSP;RTP;RTCP;UDP;SMTP; FTP;DHCP;DNS;DDNS;PPPoE;IPv4/v6;QoS;UPnP; Protocol NTP;Bonjour;IEEE 802.1x;Multicast;ICMP;IGMP; TLS;SNMP Interoperability ONVIF Profile S&G, API Streaming Method Unicast / Multicast 10 Users / 20 Users Max. User Access NAS Edge Storage Local PC for instant recording Micro SD Card 128GB IE, Chrome, Firefox, Safari Web Viewer Smart PSS, DSS, DMSS Management Software Smart Phone IOS, Android Certifications CE (EN 60950:2000) Certifications UL:UL60950-1 FCC: FCC Part 15 Subpart B Interface Video Interface N/A Audio Interface N/A RS485 N/A Alarm N/A Electrical Power Supply DC12V, PoE (802.3af)(Class 0) **Power Consumption** <9W(-ZS), <7W(-VFS)

Lite Series | DH-IPC-HDBW2231R-ZS/VFS

Environmental

Operating Conditions	-30° C \sim +60° C (-22° F \sim +140° F) / Less than 95% RH				
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Ingress Protection	IP67				
Vandal Resistance	IK10				
Construction					
Casing	Metal				
Dimensions	φ122mm×88.9mm(4.80"x3.50")				
Net Weight	0.4Kg (0.88lb)				
Gross Weight	0.54Kg(1.19lb)				

Ordering Information

Туре	Part Number	Description		
2MP camera	DH-IPC- HDBW2231RP-ZS	2MP WDR IR Dome Network Camera, PAL		
	DH-IPC- HDBW2231RN-ZS	2MP WDR IR Dome Network Camera, NTSC		
	IPC-HDBW2231RP-ZS	2MP WDR IR Dome Network Camera, PAL		
	IPC-HDBW2231RN-ZS	2MP WDR IR Dome Network Camera, NTSC		
	DH-IPC- HDBW2231RP-VFS	2MP WDR IR Dome Network Camera, PAL		
	DH-IPC- HDBW2231RN-VFS	2MP WDR IR Dome Network Camera, NTSC		
	IPC-HDBW2231RP- VFS	2MP WDR IR Dome Network Camera, PAL		
	IPC-HDBD2231RN- VFS	2MP WDR IR Dome Network Camera, NTSC		
Accessories (optional)	PFA137	Junction box		
	PFB203W	Wall mount		
	PFA152-E	Pole mount		
	PFB200C	In-celling Mount		
	PFA200W	Rain shade		

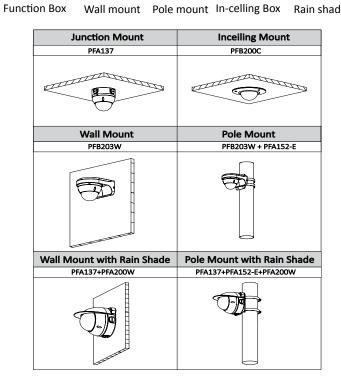
Accessories

Optional:

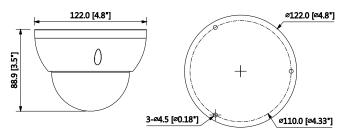


PFA152-E PFB200C

PFA200W Rain shade



Dimensions (mm/inch)





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