

DH-IPC-HDBW2231R-ZS/VFS

2MP WDR IR Dome Network Camera

www.PadVokam.by



- 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
- 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



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.

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.



Technical Specification						Day/Night		Auto(ICR) / Color / B/W	
Camera						BLC Mode		BLC / HLC / WDR(120dB)	
Image Sensor		1/2.8" 2Megapixel progressive CMOS				White Balance		Auto/Natural/Street Lamp/Outdoor/Manual	
Effective Pixels		1920(H) x1080(V)				Gain Control		Auto/Manual	
RAM/ROM		256MB/32MB				Noise Reduction		3D DNR	
Scanning System		Progressive				Motion Detection		Off / On (4 Zone, Rectangle)	
Electronic Shutter Speed		Auto/Manual, 1/3~1/100000s				Region of Interest		Off / On (4 Zone)	
Minimum Illumination		0.006Lux/F1.4(Color,1/3s,30IRE) 0.05Lux/F1.4(Color,1/30s,30IRE) 0Lux/F1.4(IR on)				Electronic Image Stabilization(EIS)		N/A	
S/N Ratio		More than 50dB				Smart IR		Support	
IR Distance		Distance up to 30m(98ft)				Digital Zoom		16x	
IR On/Off Control		Auto/ Manual				Flip		0°/90°/180°/270°	
IR LEDs		2				Mirror		Off / On	
						Privacy Masking		Off / On (4 Area, Rectangle)	
Lens						Audio			
Lens Type		Motorized(-ZS),Manual(-VFS)				Compression		N/A	
Mount Type		Board-in				Network			
Focal Length		2.7mm~13.5mm				Ethernet		RJ-45 (10/100Base-T)	
Max. Aperture		F1.4				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;IGMP;TLS	
Angle of View		H:106°~29°, V:57°~17°				Interoperability		ONVIF Profile S&G, API	
Focus Control		Motorized(-ZS),Manual(-VFS)				Streaming Method		Unicast / Multicast	
Close Focus Distance		0.2m				Max. User Access		10 Users / 20 Users	
DORI Distance	Lens	Detect	Observe	Recognize	Identify	Edge Storage		NAS Local PC for instant recording Micro SD Card 128GB	
	W	46m(151ft)	18m(59ft)	9m(30ft)	5m(16ft)	Web Viewer		IE, Chrome, Firefox, Safari	
	T	153m(502ft)	61m(200ft)	30m(98ft)	15m(49ft)	Management Software		Smart PSS, DSS, DMSS	
PTZ						Smart Phone		IOS, Android	
Pan/Tilt Range		Pan:0° ~355° ;Tilt:0° ~75° ;Rotation:0° ~355°				Certifications			
Intelligence						Certifications		CE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart B	
Event Trigger		Motion detection, Video tampering,Scene changing,Network disconnection,IP address conflict,Illegal access,Storage anomaly				Interface			
IVS		Tripwire, Intrusion				Video Interface		N/A	
Video						Audio Interface		N/A	
Compression		H.265/H.264H/MJPEG(Sub Stream)				RS485		N/A	
Smart Codec		Support H.265+/H.264+				Alarm		N/A	
Streaming Capability		2 Streams				Electrical			
Resolution		1080P(1920×1080)/1.3M(1280×960)/720P(1280×720)/D1(704×576/704×480)/VGA(640×480)/CIF(352×288/352×240)				Power Supply		DC12V, PoE (802.3af)(Class 0)	
Frame Rate		Main Stream: 1080P(1 ~ 25/30fps)				Power Consumption		<9W(-ZS), <7W(-VFS)	
		Sub Stream: D1(1 ~ 25/30fps)							
Bit Rate Control		CBR/VBR							
Bit Rate		H.265: 12K ~ 6400Kbps H.264: 32K ~ 10240Kbps							

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	φ122mm×88.9mm(4.80"×3.50")
Net Weight	0.4Kg (0.88lb)
Gross Weight	0.54Kg(1.19lb)

Ordering Information

Type	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-HDBW2231RN-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:



Junction Mount	Incelling Mount
PFA137	PFB200C
Wall Mount	Pole Mount
PFB203W	PFB203W + PFA152-E
Wall Mount with Rain Shade	Pole Mount with Rain Shade
PFA137+PFA200W	PFA137+PFA152-E+PFA200W

Dimensions (mm/inch)

