

# DH-IPC-HDBW5231R-Z

2MP WDR IR Dome Network Camera



#### **System Overview**

Eco-savvy products by upgrading H.265 encoding technology, bringing high efficient video compression. It saves bandwidth and storage , energy-saving design to enhance the monitoring system . Meanwhile, the series offers features such as starlight , Smart IR technology , intelligent image analysis techniques. It provides excellent image quality and intelligent and efficient event reminders . This series provides IP67 weatherproof and IK10 vandal-proof protection feature. Give customers more value

#### **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 (0.006 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 intelligence 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

- · 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
- · 2.7mm ~12mm motorized lens
- · 1/1 Alarm in/out, 1/1 audio in/out
- · Max. IR LEDs Length 50m
- · Micro SD memory, IP67, IK10, PoE















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 environments with rain, sleet, snow and fog, an integrated wiper provides users with clear visibility at all

#### 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 Sp	ecification					Day/Night	Auto(ICR) / Color / B/W
Camera						BLC Mode	BLC / HLC / WDR(120dB)
Image Sensor		1/2.8" 2Megapixel progressive scan CMOS				White Balance	Auto/Natural/Street Lamp/Outdoor/Ma
Effective Pixels		1920(H) x 1080(V)				Gain Control	Auto/Manual
RAM/ROM		256MB/32MB				Noise Reduction	3D DNR
Scanning System		Progressive				Motion Detetion	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 50m (164ft)				Defog	N/A
IR On/Off Contro	ıl	Auto/ Manual				Digital Zoom	16x
IR LEDs		2				Flip	0°/90°/180°/270°
Lens						Mirror	Off / On
Lens Type		Matarizad / Auto Iris (DC)				Privacy Masking	Off / On (4 Area, Rectangle)
		Motorized/ Auto Iris(DC)				Audio	
Mount Type  Focal Length		Board-in  2.7mm~12mm				Compression	G.711a/ G.711Mu/ AAC/ G.726
Max. Aperture		F1.4				Network	
Angle of View		H: 97°~34°, V: 52°~20°				Ethernet	RJ-45 (10/100Base-T)
Optical Zoom		4x				Protocol	HTTP; HTTPs; TCP; ARP; RTSP; RTP; UDI FTP; DHCP; DNS; DDNS; PPPOE; IPv4/v6 UPnP;NTP; Bonjour; 802.1x; Multicast;
Focus Control		Motorized					IGMP; SNMP
Close Focus Dista	ance	0.3m				Interoperability	ONVIF, PSIA, CGI
	Lens	Detect	Observe	Recognize	Identify	Streaming Method	Unicast / Multicast
DORI Distance	W	48m(157ft)	19m(62ft)	10m(33ft)	5m(16ft)	Max. User Access	10 Users /20 Users
Pan/Tilt/Rota	T ation	133m(436ft)	53m(174ft)	27m(89ft)	13m(46ft)	Edge Storage	NAS Local PC for instant recording Mirco SD card 128GB
Pan/Tilt/Rotation		Pan:0°~355°;	Tilt:0°~75°: Ro	tation:0°~355	ō	Web Viewer	IE, Chrome, Firefox, Safari
Intelligence	. 0-		, , , , , ,	555		Management Software	Smart PSS, DSS, Easy4ip
IVS (optional)		Tripwire, Intrusion, Object Abandoned/Missing				Smart Phone	IOS, Android
Advanced Intellig	gent Functions	Face Detectio		22.100/11	J	Certifications	
/ideo	,	. add Detection				Certifications	CE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart B
Compression		H.265+/H.265	5/H.264+/H.26	54		Interface	r cc. r cc r art 15 Suppart B
Streaming Capab	ility	3 Streams				Video Interface	N/A
Resolution		1080P(1920x1080)/1.3M(1280x960)/ 720P(1280x720)/D1(704x576/704x480)/ VGA(640x480)/CIF(352x288/352x240)				Audio Interface	1/1 channel In/Out
		Main Stream: 1080P(1~50/60fps)				RS485	N/A
Frame Rate		Sub Stream: D1(1~50/60fps)				Alarm	1 channel In: 5mA 5VDC 1 channel Out: 300mA 12VDC
		Third Stream: 1080P(1~25/30fps)				Electrical	
Bit Rate Control		CBR/VBR				Power Supply	DC12V, PoE(802.3af)(Class 0)
Bit Rate		H.264: 24~9472Kbps H.265: 14~5632Kbps				Power Consumption	<8.5W

#### 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	Ф122mm×88.9mm (4.8"×3.5")
Net Weight	0.5kg (1.1lb)
Gross Weight	0.58kg (1.29lb)

Ordering I	nformation	
Туре	Part Number	Description
	DH-IPC- HDBW5231RP-Z	2MP IR Dome Network Camera,WDR, PAL
2MD comorp	DH-IPC- HDBW5231RN-Z	2MP IR Dome Network Camera WDR,NTSC
2MP camera	IPC-HDBW5231RP-Z	2MP IR Dome Network Camera,WDR, PAL
	IPC-HDBW5231RN-Z	2MP IR Dome Network Camera WDR,NTSC
	PFB203W	Wall mount
Accessories	PFA137	Junction box
(optional)	PFB200C	In-ceiling mount
	PFA152	Pole Mount

### **Accessories**

### Optional:









PFA152 Pole Mount

PFB203W Wall Mount

PFA137 Junction Box

In-ceiling Mount

Junction Mount	Inceiling Mount
PFA137	PFB200C
Wall Mount	Pole Mount
PFB203W	PFB203W + PFA152
	FFB2U3W + FFA13Z

# Dimensions (mm/inch)



