

DH-IPC-HDW2221R-ZS

2MP IR Eyeball Network Camera



System Overview

The IR Megapixel Vari-focal Eyeball camera delivers 2MP resolution with a motorized 2.7 mm - 12 mm 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**
- True Day/Night

A day/night mechanical IR cut filter makes this camera ideal for applications with fluctuating lighting conditions, delivering color images during the day and automatically switching to monochrome as the scene darkens

Regions of interest

Regions of Interest (ROI) is a user defined feature that allows the operator to monitor specific areas of a scene while still maintaining overall situational awareness of less important areas

Smart IR

With IR illumination, detailed images can be captured in low light or total darkness. The camera's Smart IR technology adjusts to the intensity of camera's infrared LEDs to compensate for the distance of an object. Smart IR technology prevents IR LEDS from whiting 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 60m (197ft).

Wide Dynamic Range

Embedded with industry leading wide dynamic range (WDR) technology, vivid pictures 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.

- · 1/3" 2Megapixel progressive CMOS
- · H.264+ & H.264 dual-stream encoding
- · 25/30fps@2M (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
- · 2.7~12mm varifocal lens
- · Max IR LEDs Length 60m
- · IP67, PoE











Image flip

Capturing unnecessary data such as surrounding hallway walls can increase storage requirements without any added value. The image flip feature allows the camera's image to be rotated in 90° increments for better video optimization.

Protection

Supporting $\pm 10\%$ input voltage tolerance, this camera suits even the most unstable conditions for outdoor applications. Its 6KV lightning rating provides protectection against the camera and its structure from the effects of lightning.

Interoperability

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

Smart H.264+

Delivering high quality video without straining the network, Smart H.264+ is the optimized implementation of H.264. The Smart H.264+ encoding platform includes a scene adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction, providing a savings of up to 70% of bandwidth and storage when compared with standard H.264.



Technical Specification		
Camera		
Image Sensor	1/3" 2Megapixel progressive CMOS	
Effective Pixels	1920(H) x1080(V)	
RAM/ROM	256MB/16MB	
Scanning System	Progressive	
Minimum Illumination	0.1Lux/F1.4(Color), 0Lux/F1.4(IR on)	
S/N Ratio	More than 50dB	
IR Distance	Distance up to 60m(197ft)	
IR On/Off Control	Auto/ Manual	
IR LEDs	2	
Lens		
Lens Type	Motorized	
Mount Type	Board-in	
Focal Length	2.7mm~12mm	
Max. Aperture	F1.4	
Angle of View	H:99°~37°, V:52°~21°	
Focus Control	Motorized	
Close Focus Distance	0.3m	
PTZ		
Pan/Tilt Range	Pan:0° ~360 ° ;Tilt:0° ~78° ;Rotation:0° ~360°	
Video		
Compression	H.264+/H.264	
Streaming Capability	2 Streams	
Resolution	1080P(1920x1080)/1.3M(1280x960)/ 720P(1280x720)/D1(704x576/704x480)/ CIF(352x288/352x240)	
5. 0.	2M(1~25/30fps)	
Frame Rate	D1/CIF(1 ~ 25/30fps)	
Bit Rate Control	CBR/VBR	
Bit Rate	H264:24K ~ 8192Kbps	
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	
Noise Reduction	3D DNR	
Motion Detetion	Off / On (4 Zone, Rectangle)	
Region of Interest	Off / On (4 Zone)	
Electronic Image Stabilization(EIS)	N/A	
Smart IR	Support	
Digital Zoom	16x	
Flip	0°/90°/180°/270°	
Mirror	Off/On	
Privacy Masking	Off / On (4 Area, Rectangle)	
Audio		
Compression	N/A	
Network		
Ethernet	RJ-45 (10/100Base-T)	
Protocol	HTTP;HTTPs;TCP;ARP;RTSP;RTP;UDP;SMTP;FTP; DHCP;DNS;DDNS;PPPOE;IPv4/v6;QoS;UPnP;NTP; Bonjour;802.1x;Multicast;ICMP;IGMP;	
Interoperability	ONVIF, PSIA, CGI	
Streaming Method	Unicast / Multicast	
Max. User Access	10 Users/20 Users	
Edge Storage	NAS(Network Attached Storage) Local PC for instant recording Micro SD Card 128GB	
Web Viewer	IE, Chrome, Firefox, Safari	
Management Software	Smart PSS, DSS, Easy4ip	
Smart Phone	IOS, Android	
Certifications		
Certifications	CE (EN 60950:2000) 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	<9.87W	

Environmental

Operating Conditions	-30° C ~ +60° C (-22° F ~ +140° F) / Less than 95% RH
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Ingress Protection	IP67
Vandal Resistance	N/A

Construction

Casing	Metal	
Dimensions	Ф122mm x 104.9mm(4.8" x4.1")	
Net Weight	0.59Kg(1.30lb)	
Gross Weight	0.71Kg(1.57lb)	

Ordering Information				
Туре	Part Number	Description		
Z ZMP Camera	DH-IPC-HDW2221RP- ZS	2MP WDR IR Eyeball Network Camera, PAL		
	DH-IPC-HDW2221RN- ZS	2MP WDR IR Eyeball Network Camera, NTSC		
	IPC-HDW2221RP-ZS	2MP WDR IR Eyeball Network Camera, PAL		
	IPC-HDW2221RN-ZS	2MP WDR IR Eyeball Network Camera, NTSC		
Accessories (optional)	PFA137	Junction box		
	PFB203W	Wall mount		
	PFA152	Pole mount		

Accessories

Optional:



Junction Mount	Pole Mount
PFA137	PFB203W + PFA152
Wall Mount	
PFB203W	

Dimensions (mm/inch)



