

# DH-IPC-HDBW1420E

4MP IR Mini-Dome Network Camera



- 1/3" 3Megapixel progressive CMOS
- H.264+ & H.264 dual-stream encoding
- 20fps@4M(2688×1520) & 25/30fps@3M(2304×1296)
- DWDR, Day/Night(ICR), 3DNR, AWB, AGC, BLC
- Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- 2.8 mm fixed lens (3.6 mm optional)
- Max IR LEDs Length 30m
- IP67, IK10, PoE



## System Overview

The IR Megapixel Fixed MiniDome camera delivers 4MP resolution with a choice of 2.8mm or 3.6mm wide angle lens options. 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 30m (98ft).

### 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.

## Environmental

With a temperature range of -30 °C to +60 °C (-22°F to +140 °F), the 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 times.

## Protection

Supporting ±10% input voltage tolerance, this camera suits even the most unstable conditions for outdoor applications. Its 6KV lightning rating provides protection 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” 3Megapixel progressive CMOS				
Effective Pixels	2688(H)x1520(V)				
RAM/ROM	256MB/16MB				
Scanning System	Progressive				
Electronic Shutter Speed	Auto/Manual, 1/3(4)~1/100000s				
Minimum Illumination	0.31Lux/F2.2(Color), 0Lux/F2.2(IR on)				
S/N Ratio	More than 56dB				
IR Distance	Distance up to 30m(98ft)				
IR On/Off Control	Auto/ Manual				
IR LEDs	12				

Lens					
Lens Type	Fixed				
Mount Type	Board-in				
Focal Length	2.8 mm (3.6 mm optional)				
Max. Aperture	F2.0/F2.2				
Angle of View	H:106°/83°, V:56°/44°				
Focus Control	Fixed				
Close Focus Distance	N/A				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8 mm	63m(207ft)	25m(82ft)	13m(43ft)	6m(20ft)
	3.6 mm	80m(262ft)	32m(105ft)	16m(52ft)	8m(26ft)

PTZ					
Pan/Tilt Range	Pan:0° ~355° ;Tilt:0° ~65° ;Rotation:0° ~355°				

Video					
Compression	H.264+/H.264				
Streaming Capability	2 Streams				
Resolution	4M(2688x1520/2560x1440)/3M(2304x1296)/1080P(1920x1080)/720P(1280x720)/D1(704x576/704x480)/ CIF(352x288/352x240)				
Frame Rate	4M(1 ~ 20fps)/3M (1 ~ 25/30fps)/2M (1 ~ 25/30fps)				
	D1/CIF(1 ~ 25/30fps)				
Bit Rate Control	CBR/VBR				
Bit Rate	H264H:80K ~ 10240Kbps				
Day/Night	Auto(ICR) / Color / B/W				
BLC Mode	BLC / HLC / DWDR				

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	Support
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
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	Smart PSS, DSS,Easy4ip
Smart Phone	iPhone, iPad, Android Phone

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	<4.3W

## 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	Φ109.9mm × 81mm (4.33" x 3.19")
Net Weight	0.34Kg (0.75lb)
Gross Weight	0.47Kg (1.04lb)

## Ordering Information

Type	Part Number	Description
3MP camera	DH-IPC-HDBW1420EP-0280B	4MP IR Mini-Dome Network Camera, 2.8mm,DWDR, PAL
	DH-IPC-HDBW1420EN-0280B	4MP IR Mini-Dome Network Camera, 2.8mm,NTSC
	IPC-HDBW1420EP-0280B	4MP IR Mini-Dome Network Camera, 2.8mm,PAL
	IPC-HDBW1420EN-0280B	4MP IR Mini-Dome Network Camera, 2.8mm,NTSC
	DH-IPC-HDBW1420EP-0360B	4MP R Mini-Dome Network Camera, 3.6mm,PAL
	DH-IPC-HDBW1420EN-0360B	4MP IR Mini-Dome Network Camera, 3.6mm,NTSC
	IPC-HDBW1420EP-0360B	4MP IR Mini-Dome Network Camera, 3.6mm,PAL
	IPC-HDBW1420EN-0360B	4MP IR Mini-Dome Network Camera, 3.6mm,NTSC
Accessories (optional)	PFA136	Junction box
	PFB203W	Wall mount
	PFA152	Pole mount

## Accessories

### Optional:



PFA136  
Junction Box



PFB203W  
Wall Mount



PFA152  
Pole Mount

Junction Mount	Pole Mount
PFA136	PFB203W + PFA152
Wall Mount	
PFB203W	

## Dimensions (mm/inch)

