

# IR Megapixel Fixed MiniDome

## 4MP MiniDome Network Camera



- Max 20fps@4MP (2688×1520) and 25/30fps@3MP (2304×1296)
- True Day/Night, True WDR (120 dB)
- Fixed Lens Options: 2.8 mm, 3.6 mm, 6 mm
- Smart IR 20 m (66 ft)
- 1/1 Alarm in/out, 1/1 Audio in/out
- Outdoor Rated IP67, IK10
- Intelligent Video System (IVS)
- Onboard Storage
- Five-year Warranty



### System Overview

The IR Megapixel Fixed MiniDome camera delivers 4MP resolution with a choice of 2.8mm, 3.6mm, or 6mm fixed 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.

### 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

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 prevents IR LEDs from whitening out images as they come closer to the camera. The camera's integrated IR illumination provides high performance in extreme low-light environments up to 20 m (66 ft).

#### 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.

#### 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.

### Intelligent Video System (IVS)

IVS is a built-in video analytic algorithm that delivers intelligent functions to monitor a scene for Tripwire violations, intrusion detection, and abandoned or missing objects. A camera with IVS quickly and accurately responds to monitoring events in a specific area. In addition to scene analytics, the camera supports face detection to quickly capture a face and upload the image to a server. The camera also offers tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.

### Protection

The camera's outstanding reliability is unsurpassed due to its rugged design. The camera is protected against water and dust to IP67 standards, making it suitable for indoor or outdoor environments. With its IK10 rated impact resistant design, the camera provides maximum durability against vandals making it capable of withstanding the equivalent of 55 kg (120lbs) of force.

Supporting ±25% input voltage tolerance, this camera suits even the most unstable conditions for outdoor applications. Its 8KV lightning rating provides protection against the camera and its structure from the effects of lightning.

### Streaming

With a choice of unicast or multicast streaming, bandwidth-efficient viewing, recording and third-party video management can easily be achieved. Multiple streaming enables bandwidth-efficient viewing and recording. Depending on the resolution and frame rate selected on the first stream, the second and third stream provides a copy at a lower resolution.

### 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" CMOS
Effective Pixels	2688(H) x 1520(V)
ROM / RAM	16MB / 256MB
Scanning System	Progressive
Electronic Shutter Speed	1/3(4) ~ 1/100,000s
Minimum Illumination	Color: 0.01Lux@F2.0; B/W: 0.001Lux@F2.0; 0 Lux (IR On)
S/N Ratio	More than 50dB
IR Distance	Distance Up to 20m (66ft)
IR On/Off Control	Auto/ Manual
IR LEDs	12

### Lens

Lens Type	Fixed
Mount Type	Board-in
Focal Length	2.8mm/3.6mm/6mm
Max Aperture	F2.0/F2.0/F2.0
Angle of View	H: 106°/84°/56°
Focus Control	Fixed

### Pan / Tilt / Rotation

Pan/Tilt Range	Pan: 0° ~ 355°; Tilt: 0° ~ 65°, Rotation: 0° ~ 355°
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### Alarm and Audio

Alarm In/Out	1/1
Audio In/Out	1/1

### Video

Compression	Smart H.264+ / MJPEG
Streaming Capability	3 Streams
Resolution	4MP (2688x1520) / 3MP (2304x1296) / 1080p (1920x1080) / 720p (1280x720) / D1 (704x576 / 704x480) / CIF (352x288 / 352x240)
	Main Stream 4MP (1~20fps), 3MP (1 ~ 30fps)
	Sub Stream 1 D1/CIF (1 ~ 30fps)
	Sub Stream 2 720p (1 ~ 20fps)
Bit Rate Control	CBR / VBR
Bit Rate	H.264: 32K ~ 10Mbps
Day/Night	Auto (ICR) / Color / B/W
BLC Mode	BLC / HLC / WDR (120dB)
White Balance	Auto / Sunny / Night / Outdoor / Customized
Gain Control	Auto / Manual
Noise Reduction	3D DNR
Motion Detetion	Off / On (4 Zone, Rectangle)
Region of Interest	Off / On (4 Zone)
Smart IR	Support
Digital Zoom	16x
Flip	0°/90°/180°/270°
Mirror	Off / On
Privacy Masking	Off / On (4 Area, Rectangle)

### Network

Ethernet	RJ-45 (10/100Base-T)
Protocol	IPv4/ IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP, IP Filter, QoS, Bonjour, 802.1x
Interoperability	ONVIF, PSIA, CGI
Streaming Method	Unicast / Multicast
Max. User Access	20
Edge Storage	NAS (Network Attached Storage), Local PC for instant recording, 128GB
Web Viewer	IE 10, Firefox, Safari
Management Software	Smart PSS, DSS
Smart Phone	Android, IOS

## Certifications

<b>Certifications</b>	FCC (SEFV1506088-A) UL (E234884-A77-UL)
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## Electrical

<b>Power Supply</b>	12V DC ±25%, PoE (af Class 0)
<b>Power Consumption</b>	Max. 5W (12V DC, IR On)

## Environmental

<b>Operating Conditions</b>	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH
<b>Storage Conditions</b>	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH
<b>Ingress Protection &amp; Vandal Resistance</b>	IP67, IK10

## Construction

<b>Casing</b>	Metal
<b>Dimensions</b>	Φ 106mm × 50.3mm (4.17" x 1.98")
<b>Net Weight</b>	0.34 kg (0.75lb)
<b>Gross Weight</b>	0.47 kg (1.04lb)

## Intelligence

IVS triggers an alarm and takes a defined action for the following events:

<b>Standard Features</b>	Tampering with the camera. Error writing to an onboard Micro SD card. Error sending or receiving data over the network. Unauthorized access to the camera.
<b>Premium Features</b>	
<b>Motion</b>	An object moves through any part of the scene.
<b>Tripwire</b>	A target crosses a user-defined line.
<b>Intrusion</b>	A target enters or exits a defined perimeter.
<b>Scene Change</b>	A person or object moves the camera to change the scene or covers the camera to obscure the scene.
<b>Abandoned/Missing Object</b>	A target leaves an object in designated area, or a target removes an object from the same designated area.
<b>Advanced Features</b>	
<b>Facial Detection</b>	Detects and captures a snapshot of a human face in a defined area within a scene.

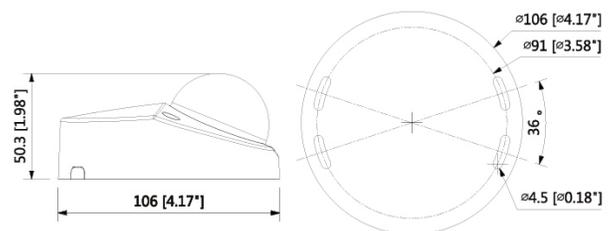
## Accessories

Optional:



Junction Mount	Pole Mount
<b>PFA139</b>	<b>PFB204W+PFA152</b>
<b>Wall Mount</b>	
<b>PFB204W</b>	

## Dimensions (mm/inch)



## Ordering Information

Type	Part Number	Description
4MP Camera	DH-IPC-HDBW44A1FN-AS 2.8mm	4MP, 2.8mm, True D/N, True WDR, IP67, IK10, IR: up to 20m (66ft), PoE, IVS
	DH-IPC-HDBW44A1FN-AS 3.6mm	4MP, 3.6mm, True D/N, True WDR, IP67, IK10, IR: up to 20m (66ft), PoE, IVS
	DH-IPC-HDBW44A1FN-AS 6mm	4MP, 6mm, True D/N, True WDR, IP67, IK10, IR: up to 20m (66ft), PoE, IVS
Accessories	PFA139	Junction Box
	PFB204W	Wall Mount Bracket
	PFA152	Pole Mount Bracket