

# IR Megapixel Fixed Bullet

2MP Bullet Network Camera



- Max 30 fps at 2 MP (1920×1080)
- True WDR (120 dB)
- True Day/Night
- Fixed Lens Options: 3.6 mm, 6 mm
- Smart IR 30 m (98 ft)
- Outdoor Rated IP67
- Intelligent Video System (IVS)
- Five-year Warranty









# **System Overview**

The IR Megapixel Fixed Bullet camera delivers 2MP resolution with a choice of 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 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.

# **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)

With built-in intelligent video analytics, the camera has the ability to detect and analyze moving objects for improved video surveillance. The camera provides 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, and Facial Detection, for searching or identification of individuals.

#### 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.

Supporting  $\pm 25\%$  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.



# Pro Series | DH-IPC-HFW42A1SN

# **Technical Specification**

# Camera

Image Sensor	1/2.7" CMOS	
Effective Pixels	1920(H) x 1080(V) 16MB / 256MB	
ROM / RAM		
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 30m (98ft)	
IR On/Off Control	Auto / Manual	
IR LEDs	24	

# Lens

Lens Type	Fixed
Mount Type	Board-in
Focal Length	3.6mm/6mm
Max Aperture	F2.0/F2.0
Angle of View	H: 93°/63°
Focus Control	Fixed

# PTZ

Pan/Tilt Range	Pan: 0° ~ 360°; Tilt: 0° ~ 78°, Rotation:	0° ~
Pan/ IIIt Kange	360°	

# Video

Video		
Compression	Smart H.264+ / MJPEG	
Streaming Capability	3 Streams	
Resolution	1080p (1920×1080) / 720p (1280×720) / D1 (704×576/704×480) / CIF (352×288/352×240)	
	Main Stream 2MP (1 ~ 30fps)	
Frame Rate	Sub Stream 1 D1/CIF (1 ~ 30fps)	
	Sub Stream 2 720p (1 ~ 20fps)	
Bit Rate Control	CBR / VBR	
Bit Rate	H.264: 4K ~ 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	
<b>Motion Detetion</b>	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	
Web Viewer	IE 10, Firefox, Safari	
Management Software	Smart PSS, DSS	
Smart Phone	Android, los	

# Pro Series | DH-IPC-HFW42A1SN

# Certifications

Certifications	FCC (SEFD1504139-A )
Certifications	UL (E234884-A64-UL)

# **Electrical**

Power Supply	12V DC ±25%, PoE (af Class 0)
Power Consumption	Max. 4.9W (12V DC, IR On)

# **Environmental**

Operating Conditions	-30°C $^{\sim}$ +60°C (-22°F $^{\sim}$ +140°F) / Less than 90% RH
Storage Conditions	-30°C $^{\sim}$ +60°C (-22°F $^{\sim}$ +140°F) / Less than 90% RH
Ingress Protection	IP67

#### Construction

Casing	Metal + Plastic	
Dimensions	Φ 70mm× 165mm (2.76" x 6.50")	
Net Weight	0.38 kg (0.84 lb)	
Gross Weight	0.44 kg (0.97 lb)	

# Intelligence

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

#### **Ordering Information** Type Part Number Description 2MP Camera DH-IPC-HFW42A1SN 2MP, 3.6mm, True D/N, True WDR, IP67, IR: up to 30m (98ft), PoE, IVS 3.6mm DH-IPC-HFW42A1SN 2MP, 6mm, True D/N, True WDR, 6mm IP67, IR: up to 30m (98ft), PoE, IVS Accessories PFA134 Junction Box PFA150 Pole Mount Bracket(for use with FFA134) PFA151 Corner Mount Bracket(for use with FFA134)

# Accessories

# Optional:







PFA134 Junction Box

PFA150 Pole Mount

PFA151 Corner Mount

Corner Mount	Pole Mount
PFA134 + PFA151	PFA134 + PFA150
	(C)
Junction Mount	
PFA134	
<b>6</b> 53)	

# Dimensions (mm/inch)





