

# DH-IPC-HFW4431T-S-S4

4MP WDR IR Mini Bullet Network Camera



- 1/3" 4Megapixel progressive scan CMOS
- H.265&H.264 triple-stream encoding
- 25/30fps@4Mp(2688×1520)
- Smart Detection supported
- WDR(120dB), Day/Night(ICR), 3DNR, AWB, AGC, BLC
- Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- 3.6mm fixed lens (6mm, 8mm, 12mm optional)
- Max. IR LEDs Length 80m
- Micro SD memory 256GB, IP67, IK10, PoE



## 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

### Wide Dynamic Range(WDR)

The camera achieves vivid images, even in the most intense contrast lighting conditions, using industry-leading wide dynamic range (WDR) technology. For applications with both bright and low lighting conditions that change quickly, true WDR (120 dB) 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.

### Environmental

Dahua cameras operate in extreme temperature environments, rated for use in temperatures from -40° C to +60° C (-40° F to +140° F) with 95% humidity, allowing the camera to operate in the harshest environments.

### Protection(IP67, wide voltage)

The camera allows for ±30% input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 2KV lightning rating provides effective protection for both the camera and its structure against lightning. Subjected and certified to rigorous dust and immersion tests (IP67), the camera is the choice for installation in even the most unforgiving environments.

### Smart H.265+

Smart H.265+ is the optimized implementation of the H.265 codec that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality video without straining the network. Smart H.265+ technology reduces bit rate and storage requirements by up to 70% when compared to standard H.265 video compression.

## Technical Specification

### Camera

Image Sensor	1/3" 4Megapixel progressive scan CMOS
Effective Pixels	2688(H)x1520(V)
RAM/ROM	512MB/32MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3~1/100000s
Minimum Illumination	0.03Lux/F2.0( Color,1/3s,30IRE) 0.3Lux/F2.0( Color,1/30s,30IRE) 0Lux/F2.0(IR on)
IR Distance	Distance up to 80m (197ft)
IR On/Off Control	Auto/ Manual
IR LEDs	4

### Lens

Lens Type	Fixed				
Mount Type	Board-in				
Focal Length	3.6mm (6mm, 8mm, 12mm optional)				
Max. Aperture	F2.0(F2.0, F1.9, F2.0)				
Angle of View	H: 81° (51°, 38°, 25°), V: 44° (29°, 21°, 14°)				
Optical Zoom	N/A				
Aperture Type	Fixed				
Close Focus Distance	1.4m (2.8m, 4.5m, 10.8m)				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	3.6 mm	80m(262ft)	32m(105ft)	16m(52ft)	8m(26ft)
	6.0 mm	120m(394ft)	48m(157ft)	24m(79ft)	12m(39ft)
	8.0 mm	160m(525ft)	64m(210ft)	32m(105ft)	16m(52ft)
	12 mm	250m(820ft)	100m(328ft)	50m(164ft)	25m(82ft)

### Pan/Tilt/Rotation

Pan/Tilt/Rotation Range	Pan:0°~360°; Tilt:0°~90°; Rotation:0°~360°
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### Intelligence

IVS	Tripwire, Intrusion, Object Abandoned/Missing
Advanced Intelligent Functions	Face Detection

### Video

Compression	H.265+/H.265/H.264+/H.264
Streaming Capability	3 Streams
Resolution	4M(2688x1520)/3M(2304x1296)/ 1080P(1920x1080)/1.3M(1280x960)/ 720P(1280x720)/D1(704x576/704x480)/ VGA(640x480)/CIF(352x288/352x240)
Frame Rate	Main Stream: 4M(1~25/30fps)
	Sub Stream: D1(1~25/30fps)
	Third Stream: 1080P(1~14/4fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 192K ~ 10240Kbps H.265: 80K ~ 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
Defog	N/A
Digital Zoom	16x
Flip	0°/90°/180°/270°
Mirror	Off / On
Privacy Masking	Off / On (4 Area, Rectangle)

### Audio

Compression	G.711a/ G.711Mu/ AAC/ G.726
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### 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; SNMP; SFTP; RTMP; NFS; SMB
Interoperability	ONVIF, CGI, Milstone, Genetec
Streaming Method	Unicast / Multicast
Max. User Access	10 Users /20 Users
Edge Storage	NAS Local PC for instant recording Mirco SD card 256GB
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
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### Interface

Video Interface	N/A
Audio Interface	NA
RS485	N/A
Alarm	N/A

### Electrical

Power Supply	DC12V, PoE (802.3af)(Class 0)
Power Consumption	<12W

Environmental

Operating Conditions	-40° C ~ +60° C (-40° F ~ +140° F) / Less than 95% RH
Storage Conditions	-40° C ~ +60° C (-40° F ~ +140° F) / Less than 95% RH
Ingress Protection	IP67
Vandal Resistance	IK10

Construction

Casing	Metal
Dimensions	244.1mm×79mm×75.9mm (9.61"×3.11"×2.99")
Net Weight	0.84kg (1.85lb)
Gross Weight	1.08kg (2.38lb)

Ordering Information

Type	Part Number	Description	
4MP camera	DH-IPC-HFW4431TP-S-0360B-S4	4MP IR Mini Bullet Network Camera, WDR, PAL	
	DH-IPC-HFW4431TN-S-0360B-S4	4MP IR Mini Bullet Network Camera, WDR, NTSC	
	IPC-HFW4431TP-S-0360B-S4	4MP IR Mini Bullet Network Camera, WDR, PAL	
	IPC-HFW4431TN-S-0360B-S4	4MP IR Mini Bullet Network Camera, WDR, NTSC	
	DH-IPC-HFW4431TP-S-0600B-S4	4MP IR Mini Bullet Network Camera, WDR, PAL	
	DH-IPC-HFW4431TN-S-0600B-S4	4MP IR Mini Bullet Network Camera, WDR, NTSC	
	IPC-HFW4431TP-S-0600B-S4	4MP IR Mini Bullet Network Camera, WDR, PAL	
	IPC-HFW4431TN-S-0600B-S4	4MP IR Mini Bullet Network Camera, WDR, NTSC	
	DH-IPC-HFW4431TP-S-0800B-S4	4MP IR Mini Bullet Network Camera, WDR, PAL	
	DH-IPC-HFW4431TN-S-0800B-S4	4MP IR Mini Bullet Network Camera, WDR, NTSC	
	IPC-HFW4431TP-S-0800B-S4	4MP IR Mini Bullet Network Camera, WDR, PAL	
	IPC-HFW4431TN-S-0800B-S4	4MP IR Mini Bullet Network Camera, WDR, NTSC	
	DH-IPC-HFW4431TP-S-1200B-S4	4MP IR Mini Bullet Network Camera, WDR, PAL	
	DH-IPC-HFW4431TN-S-1200B-S4	4MP IR Mini Bullet Network Camera, WDR, NTSC	
	IP-HFW4431TP-S-1200B-S4	4MP IR Mini Bullet Network Camera, WDR, PAL	
	IPC-HFW4431TN-S-1200B-S4	4MP IR Mini Bullet Network Camera, WDR, NTSC	
	Accessories (optional)	PFA135	Junction box
		PFA152-E	Pole Mount
LR1002		ePoE Over Coax Converter	

Accessories

Optional:



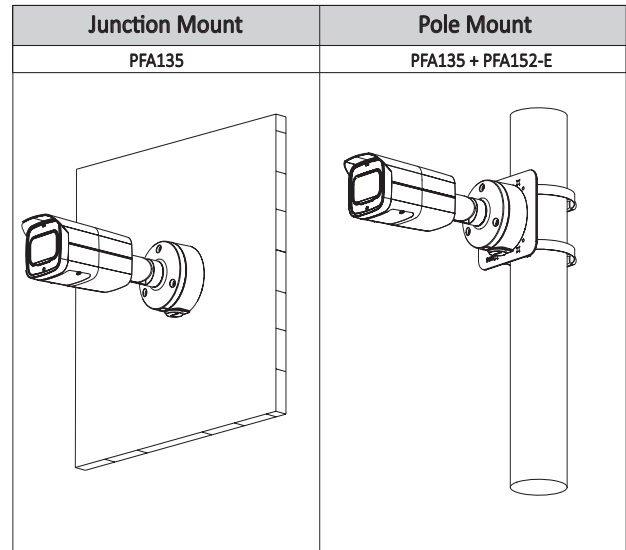
PFA135 Junction Box



PFA152-E Pole Mount



LR1002 ePoE Over Coax Converter



Dimensions (mm[inch])

