DH-IPC-HFW3241T-ZS

2MP Lite AI IR Vari-focal Bullet Network Camera

- 2MP, 1/2.8" CMOS image sensor, low illuminance, high image definition
- Outputs max. 2MP (1920 × 1080)@30 fps
- H.265 codec, high compression rate, low bit rate
- Built-in IR LED, max. IR distance: 60 m
- ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments
- Rotation mode, WDR, 3D DNR, HLC, BLC, digital watermarking, applicable to various monitoring scenes
- Intelligent detection: Intrusion, tripwire
- Abnormality detection: Motion detection, video tampering, scene changing, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, voltage detection
- Supports max. 256 G Micro SD card
- 12V DC/POE power support
- IP67, IK10(optional) protection
- SMD

2Mp	H.265+	Starlight	Perimeter	SMD	IP67

System Overview

With advanced deep learning algorithm, Dahua Lite AI series network camera supports some intelligent functions, such as perimeter protection and smart motion detection. It adopts starlight solution, which makes a better image effect in low illuminance.

Functions

Smart (H.265+ & H.264+)

Adopting advanced algorithm of auto stream control according to the environment, Dahua smart encoding technology realizes the higher efficiency than (H.265 & H.264), providing high-quality video, and reducing the cost of storage and transmission.

Wide dynamic range (WDR)

Dahua adopts advanced Wide Dynamic Range (WDR) technology. You can get clear details in the environment of strong brightness contrast. In high brightness and back-light environment, bright region and dark region with strong light source, you can also get clear images.

Starlight

Dahua Starlight technology mainly applies to the environment of low illumination, and it can provide clear colorful video. Even in the environment of min. illumination, the technology can guarantee the good image effect.

Intelligent Video Analysis (IVS)

With advanced video algorithm, Dahua camera supports intelligent detection, such as tripwire and intrusion and so on.

Smart Motion Detection (SMD)

With intelligent algorithm, Dahua Smart Motion Detection technology can effectively recognize the target types, flitting the motion detection alarm triggered by non-concerned target types. It can realize effective and accurate alarm.

Protection (IP67, wide voltage)

IP67: The camera passes a series of strict test on dust and soak. It has dust-proof function, and the enclosure can works normal after soaking in 1 m deep water for 30 minutes.
Wide voltage: The camera allows ±30% input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

ONVIF

Technical Specification

Camera

Image Sensor	1/2.8"2Megapixel progressive CMOS
Effective Pixels	1920 (H) ×1080 (V)
ROM	128 MB
RAM	256 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100000 s
Min. Illumination	0.002 Lux@F1.5
IR Distance	60 m (197 ft)
IR On/Off Control	Auto/Manual
IR LEDs Number	4 (IR LEDs)

Lens

Lens Type	Motorized vari-focal
Mount Type	φ14
Focal Length	2.7 mm–13.5 mm
Max. Aperture	F1.5
Field of View	Horizontal: 108°–28° Vertical: 57° –16° Diagonal: 130° –33°
Iris Type	Fixed aperture
Close Focus Distance	0.8 m (2.6 ft)

DORI Distance	Lens	Detect	Observe	Recognize	Identify
	W	44.1 m (144.7 ft)	17.6 m (57.7 ft)	8.8 m (28.9 ft)	4.4 m (14.4 ft)
	T	153.1 m (502.3 ft)	61.2 m (200.8 ft)	30.6 m (82.9 ft)	15.3 m (50.2 ft)

Professional, Intelligent

Perimeter Protection	Tripwire; intrusion (Recognition of human and vehicle)
Intelligent Search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos

Video

Video Compression	H.265; H.264; H.264H; H.264B; MJPEG
Smart Codec	H.264: Yes H.265: Yes
Video Frame Rate	Main stream (1920 × 1080@1–25/30 fps) sub stream(704 × 576@1–25/30 fps) third stream(1280 × 720@1–25/30 fps)
Stream Capability	3 streams
Resolution	1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)
Bit Rate Control	CBR; VBR
Video Bit Rate	H.264: 3 Kbps–8192 Kbps H.265: 3 Kbps–8192 Kbps
Day/Night	ICR auto switch
BLC	Yes

WDR	120 dB
White Balance	Auto/natural/street lamp/outdoor/manual/regional custom
Gain Control	Auto/Manual
Noise Reduction	3D DNR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest(RoI)	Yes (4 areas)
Smart IR	Yes
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 1920 × 1080 resolution.)
Mirror	Yes
Privacy Masking	4 areas

Network

Network	RJ-45 (10/100 Base-T)
Protocol	HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPoE; IPv4/v6; SNMP; QoS; UPnP; NTP
Interoperability	ONVIF (Profile S/Profile G); CGI; P2P
Scene Self-adaptation	Yes
User/Host	20 (Total bandwidth: 64 M)
Edge Storage	FTP; Micro SD Card (support max. 256 G); Dahua Cloud; NAS
Browser	IE IE8, IE9, IE11 Google Firefox
Management Software	NVR; DSS; DMSS; IVSS
Mobile Phone	IOS; Android

Certification

Certifications	CE-LVD: EN60950-1 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B UL/CUL: UL60950-1 CAN/CSA C22.2 No.60950-1-07

Power

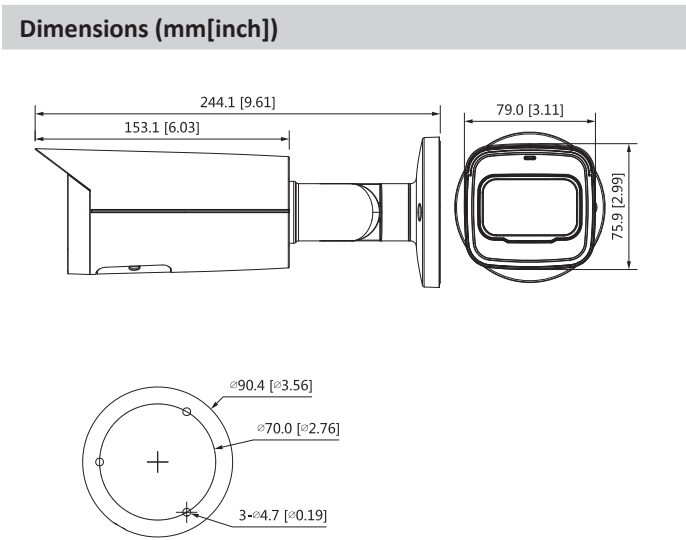|	
Power Supply	12V DC/POE
Power Consumption	< 9.4W

Environment

Operating Conditions	-30°C to +60°C (-22°F to +140°F)/less than≤95%
Strorage Conditions	-40°C to +60°C (-40°F to +140°F)
Ingress Protection	IP67

Structure

Casing	Metal
Dimensions	81 mm × Φ109.9 mm (3.2" × Φ4.3")
Net Weight	378 g (0.8 lb)
Gross Weight	523 g (1.2 lb)

Ordering Information

Type	Part Number	Description
2MP Camera	DH-IPC-HFW3241TP-ZS	2MP Lite AI IR Vari-focal Bullet Network Camera,PAL
	DH-IPC-HFW3241TN-ZS	2MP Lite AI IR Vari-focal Bullet Network Camera,NTSC
Accessories (optional)	PFA130-E	Junction Box
	PFA152-E	Pole Mount
	PFM321D	DC12V1A Power Adapter
	LR1002-1ET/1EC	Single-port Long Reach Ethernet Over Coax Extender
	PFM900-E	Integrated Mount Tester
	PFM114	TLC SD Card

Dimensions (mm[inch])

244.1 [9.61]
153.1 [6.03]
79.0 [3.11]
75.9 [2.99]

⌀90.4 [⌀3.56]
⌀70.0 [⌀2.76]
3-⌀4.7 [⌀0.19]

Accessories

Optional:

PFA130-E
Junction Box

PFA152-E
Pole Mount

PFM321D
DC12V1A Power Adapter

LR1002-1ET/1EC
Single-port long reach ethernet over coax extender

PFM900-E
Integrated Mount tester

PFM114
TLC SD card

Pole Mount	Junction Box
PFA130+PFA152-E	PFB130-E

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TECHNOLOGY