DH-IPC-HDBW2230E-S-S2

2MP IR Mini Dome Network Camera

- 2MP, 1/2.7" CMOS image sensor, low illuminance, high image definition
- Outputs 2MP (1920 × 1080)@25/30 fps
- H.265 codec, high compression rate, ultra-low bit rate
- Built-in IR LED, max IR distance: 30 m
- ROI, SMART H.264/H.265, flexible coding, applicable to various bandwidth and storage environments
- Rotation mode, DWDR, 3D DNR, HLC, BLC, digital watermarking, applicable to various monitoring scenes
- Intelligent detection: Intrusion, tripwire
- Abnormality detection: Motion detection, video tampering, no SD card, SD card full, SD card error, network disconnected, IP conflict, illegal access, voltage detection
- Supports max. 256 GB Micro SD card
- 12V DC/PoE power support
- IP67, IK10 protection grade

System Overview

With updraded H.265 encoding technology, Dahua Lite series camera has efficient video encoding capacity, which saves bandwidth and storage space. This camera adopts the latest starlight technology and displays better colorful image in the environment of low illumination. It supports SD card storage, waterproof function, dust-proof function and tamper-proof function, complying to the standards of IP67 and IK10.

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.

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.

Protection (IP67, IK10, 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.

IK10: The enclosure can stand the punch more than 5 times from a 5 kg hammer falling from a height of 40 m (Impact energy is 20J).

Wide voltage: The camera allows ±30% input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

Technical Specification

Camera

Image Sensor	1/2.7" 2Megapixel progressive CMOS
Effective Pixels	1920 (H) × 1080 (V)
ROM	128 MB
RAM	128 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100000 s
Min. Illumination	0.005 Lux @ F1.6
IR Distance	30 m (98.43 ft)
IR On/Off Control	Auto/Manual
IR LEDs Number	3
Pan/Tilt/Rotation Range	Pan: 0°–355° Tilt: 0°–65° Rotation: 0°–355°

Lens

Lens Type	Fixed-focal
Mount Type	M12
Focal Length	2.8 mm 3.6 mm
Max. Aperture	F1.6
Field of View	2.8 mm: Pan: 110.0° Tilt: 59.0° Diagonal: 132.0° 3.6 mm: Pan: 91.0° Tilt: 48.0° Diagonal: 109.0°
Iris Type	Fixed aperture
Close Focus Distance	2.8 mm: 0.6 m (1.97 ft) 3.6 mm: 1.1 m (3.61 ft)

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	2.8 mm	37.3 m (122.38 ft)	14.9 m (48.88 ft)	7.5 m (24.61 ft)	3.7 m (12.14 ft)
	3.6 mm	53.3 m (174.87 ft)	21.3 m (69.88 ft)	10.7 m (35.10 ft)	5.3 m (17.39 ft)

Smart Event

General IVS Analytics	Tripwire; intrusion

Video

Video Compression	H.265; H.264; H.264B; MJPEG
Smart Codec	Yes
Video Frame Rate	Main stream: 1920 × 1080 (1 fps-25/30 fps) Sub stream: 704 × 576 (1 fps-25fps) 704 × 480 (1 fps-30fps)
Stream Capability	2 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: 32 kbps–6144 kbps H.265: 12 kbps–6144 kbps
Day/Night	Auto(ICR)/Color/B/W
BLC	Yes
HLC	Yes
WDR	DWDR
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° (Supports 90°/270° with 1080p resolution and lower.)
Mirror	Yes
Privacy Masking	4 areas

Network

Network	RJ-45 (10/100 Base-T)
Protocol	IPv4; IPv6; HTTP; HTTPS; TCP; UDP; ARP; RTP ; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE; 802.1x; Bonjour
Interoperability	ONVIF(Profile S/Profile G/Profile T);CGI; P2P; Milestone; Genetec
User/Host	20
Edge Storage	Dahua Cloud; FTP; SFTP; Micro SD Card (support max. 256 GB); NAS
Browser	IE Chrome Firefox
Management Software	Smart PSS; DSS; DMSS
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 (802.3af)
Power Consumption	< 5W

Environment

Operating Conditions	-40°C to +60°C (-40°F to +140°F)/less than ≤ 95% RH

Strorage Conditions	-40°C to +60°C (-40°F to +140°F)
Protection Grade	IP67, IK10

Structure

Casing	Metal
Dimensions	81 mm × Φ109.9 mm (3.19" × Φ4.33")
Net Weight	0.350 kg (0.77 lb)
Gross Weight	0.481 kg (1.06 lb)

Ordering Information

Type	Part Number	Description
2MP Camera	DH-IPC-HDBW2230EP-S-S2	2MP IR Mini Dome Network Camera,PAL
	DH-IPC-HDBW2230EN-S-S2	2MP IR Mini Dome Network Camera,NTSC
Accessories (optional)	PFA136	Junction Box
	PFA200W	Rain Shade
	PFB203W	Wall Mount
	PFA152-E	Pole Mount
	PFA106	Mount Adapter
	PFB220C	Celling 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

Accessories

Optional:

PFA136
Junction Box

PFA200W
Rain Shade

PFB203W
Wall Mount

PFA152-E
Pole Mount

PFA106
Mount Adapter

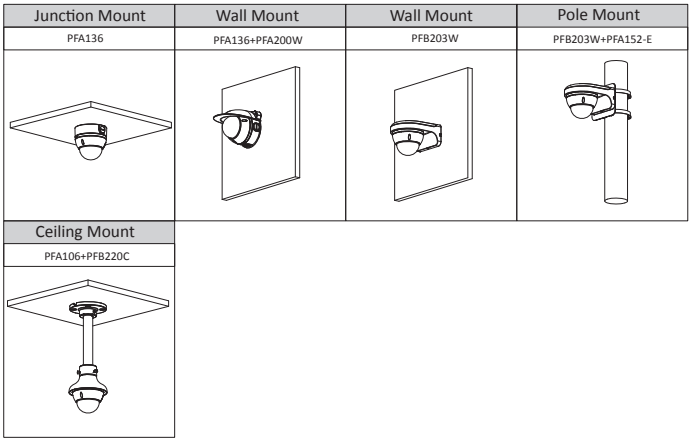
PFB220C
Celling Mount

PFM321D
DC12V1A Power Adapter

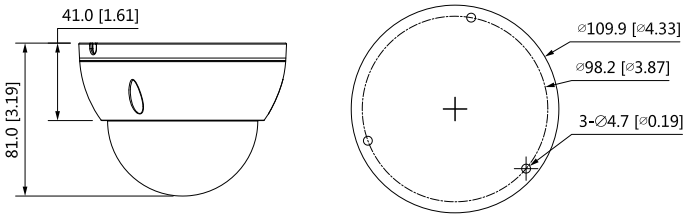
LR1002-1ET/1EC
Single-port Long Reach Ethernet over Coax Extender

PFM900-E
Integrated Mount Tester

PFM114
TLC SD Card



Dimensions (mm[inch])



Rev 001.001 © 2019 Dahua . All rights reserved. Design and specifications are subject to change without notice.
Pictures in the document are for reference only, and the actual product shall prevail.