DH-IPC-HFW3231H-AS-I2

2MP WDR IR Mini Bullet Network Camera

- 1/2.7" 2Megapixel progressive scan STARVIS™ CMOS
- H. 265+&H.264+ triple-stream encoding
- 25/30fps@1080P(1920×1080)
- Smart Detection supported
- WDR(120dB), Day/Night(ICR), 3DNR, AWB, AGC, BLC
- Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- Micro SD card slot, up to 128GB
- 3.6mm fixed lens (6mm, 8mm, 12mm optional)
- Max. IR LEDs Length 80m
- IP67, PoE

System Overview

3 Series 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

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

Smart Codec is the optimized implementation of standard video compression (H.265 & H.264) 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 Codec technology reduces bit rate and storage requirements by up to 70% when compared to the standard video compression.

Starlight Technology

Featuring Dahua's Starlight Technology, this camera is ideal for applications with challenging lighting conditions. Its low-light performance delivers usable video with minimal ambient light. Even in extreme low-light conditions, Starlight Technology is capable of delivering color images in near complete darkness (0.008 lux).

Intelligent Video Analysis (IVS)

Dahua camera is equipped with a built-in intelligent analytic algorithm based on video, which can realize intelligent functions like Tripwire and Intrusion, to quickly and accurately respond to monitoring events in specific area, It can enhance monitoring efficiency. In addition, the camera supports intelligent tamper detection, which is to generate warning message via detecting dramatic scene change and to guarantee effective video surveillance.

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.

Smart IR Technology

With IR illumination, detailed images can be captured in low light or total darkness. The camera's Smart IR technology adjusts the intensity of camera's infrared LEDs to compensate the distance of an object. Smart IR technology prevents IR LEDs from whitening 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 80m (262.5ft).

Protection (IP67, wide voltage)

The camera allows for ±30% input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 4KV 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.

Environmental

Dahua cameras operate in extreme temperature environments, rated for use in temperatures from-30° C to +60° C (-22° F to +140° F) with 95% humidity.

Interoperability

The camera conforms to the ONVIF (Open Network Video Interface Forum) specifications, ensuring interoperability between network video products regardless of manufacturer.

Technical Specification

Camera

Image Sensor	1/2.7" 2Megapixel progressive scan CMOS
Effective Pixels	1920(H) x 1080(V)
RAM/ROM	256MB/128MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3~1/100000s
Minimum Illumination	0.008Lux/F2.0(Color,1/3s,30IRE) 0.04Lux/F2.0 Color,1/30s,30IRE) 0Lux/F2.0(IR on)
S/N Ratio	More than 50dB
IR Distance	Distance up to 80m (262.5ft)
IR On/Off Control	Auto/ Manual
IR LEDs	2

Lens

Lens Type	Fixed
Mount Type	Board-in
Focal Length	3.6mm (6mm, 8mm, 12mm optional)
Max. Aperture	F2.0
Angle of View	H: 88°/55°/41°/27°, V: 47°/31°/23°/15°
Focus Control	Fixed
Close Focus Distance	0.9m (2.95t)

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	3.6mm	53m(274ft)	21m(69ft)	11m(36.1ft)	5m(16ft)
	6mm	80m(262.5ft)	32m(105ft)	16m(52.5ft)	8m(26.3ft)
	8mm	107m(351ft)	43m(141ft)	21m(69ft)	11m(36.1ft)
	12mm	167m(548ft)	67m(220ft)	33m(108ft)	17m(56ft)

Intelligence

Event Trigger	Motion detection, Video tampering, Scene changing, Network disconnection, IP address conflict, Illegal access, Storage anomaly
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	1080P(1920x1080)/1.3M(1280x960)/ 720P(1280×720)/D1(704×576/704×480)/ VGA(640×480)/CIF(352×288/352×240)
Frame Rate	Main Stream: 1080P (1~25/30fps)
	Sub Stream: D1(1~25/30fps)
	Third Stream: 1080P(1~14/9fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.264:16Kbps~8192Kbps H.265: 6Kbps~6554Kbps
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

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; RTCP; SSH
Interoperability	ONVIF Profile S&G, API
Streaming Method	Unicast / Multicast
Max. User Access	10 Users /20 Users
Edge Storage	NAS Local PC for instant recording Mirco SD card 128GB
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	Smart PSS, DSS, DMSS
Smart Phone	IOS, Android

Certifications

Certifications	CE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart B

Interface

Video Interface	N/A
Audio Interface	1/1 channel In/Out
RS485	N/A
Alarm	2 channel In: 5mA 5VDC 2 channel Out: 300mA 12VDC

Electrical

Power Supply	DC12V PoE (802.3af)(Class 0)
Power Consumption	DC12V: 1.6W, 8.9W(IR On) PoE: 2.1W, 10.8W(IR On)
Power Out	Max. 165mA 12VDC

Environmental

Operating Conditions	-30° C ~ +60° C (-22° F ~ +140° F) / Less than 95% RH
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Ingress Protection	IP67
Vandal Resistance	N/A

Construction

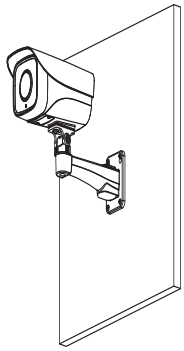
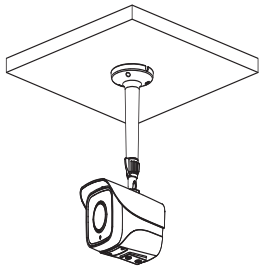
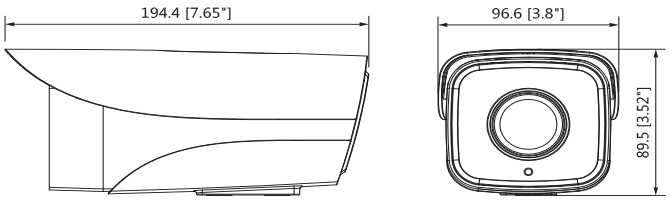
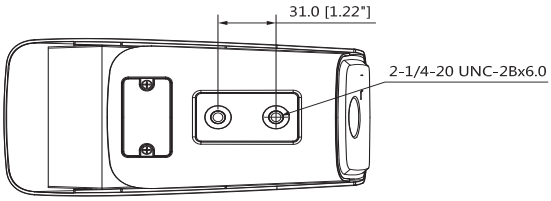
Casing	Metal+Plastic
Dimensions	194mm×96mm×89mm (7.64"×3.78"×3.50")
Net Weight	0.71kg (1.57lb)
Gross Weight	0.79 kg (1.74lb)

Accessories

Optional:

PFB121W
Wall Mount

PFB110W
Ceiling Mount

Wall Mount	Ceiling Mount
PFB121W	PFB110W
	

Dimensions (mm/inch)