

# DH-IPC-HFW8232E-Z12-IRA

## 2MP Starlight IR Bullet Network Camera



- 1/1.9" 2Megapixel progressive scan CMOS
- H.265&H.264 triple-stream encoding
- 50/60fps@1080P(1920×1080)
- WDR(120dB), Day/Night(ICR), 3DNR, AWB, AGC, BLC
- Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- 7mm~84mm 12x zoom lens
- Max. IR LEDs Length 150m
- Micro SD memory, IP67, PoE+



### System Overview

Ultra series adopts high performance DSP and Sony advanced image sensor technology, which can provide excellent image effects for users. With Dahua advanced software algorithm, the series is able to support people counting and heat map which brings extra business analysis value for customers.

### Functions

#### Starlight Technology

For challenging low-light applications, Dahua's Starlight Ultra-low Light Technology offers best-in-class light sensitivity, capturing color details in low light down to 0.002lux. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

#### 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.

#### Business intelligent analysis (People counting, Heatmap)

Dahua Camera also supports more advanced intelligent features such as people counting and heat map besides basic IVS functions. These two functions can be applied to business intelligence and bring extra values to customers. It is available to acquire daily, weekly, monthly and yearly people flow via people counting and output data report. Heat map can be based on a moving object in time of space movement for analysis, find the most active area and output the report, which is to provide valuable data support for commercial applications.

#### Smart Scene Adaptive (SSA)

Smart Scene Adaptive (SSA) is an intelligent image technology, developed by Dahua that automatically evaluates and compensates for changes in the luminance of a scene. SSA automatically regulates the exposure

parameters to improve image quality in a backlit scene, especially in scenes with traffic lights or headlights.

#### 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.

### Technical Specification

#### Camera

Image Sensor	1/1.9" 2Megapixel progressive scan CMOS
Effective Pixels	1920(H)x1080(V)
RAM/ROM	1024MB/128MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3~1/100000s
Minimum Illumination	0.002Lux/F1.5 (Color,1/3s,30IRE) 0.01Lux/F1.5 (Color,1/30s,30IRE) 0Lux/F1.5(IR on)
S/N Ratio	More than 50dB
IR Distance	Distance up to 150m (492ft)
IR On/Off Control	Auto/ Manual
IR LEDs	6

#### Lens

Lens Type	Motorized /Auto Iris(HALL)
Mount Type	Board-in
Focal Length	7mm ~ 84mm
Max. Aperture	F1.5
Angle of View	H: 55°~6°, V:32°~3°
Optical Zoom	12x
Focus Control	Motorized
Close Focus Distance	1m (3.28ft)

DORI Distance	Lens	Detect	Observe	Recognize	Identify
	W	75m(246ft)	30m(98ft)	15m(49ft)	7m(23ft)
	T	896m (2938ft)	358m (1174ft)	179m (587ft)	90m (295ft)

#### Pan/Tilt/Rotation

Pan/Tilt/Rotation Range	Pan:0°~360°; Tilt:0°~90°; Rotation:0°~360°
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#### 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, People Counting, Heat Map

#### Video

Compression	H.265/H.264/H.264B/H.264H/MJPEG(Sub Stream)
Smart Codec	Support H.265+/H.264+
Streaming Capability	3 Streams
Resolution	1080P(1920x1080)/ 1.3M(1280x960)/ 720P(1280x720)/ D1(704x576/704x480) / VGA(640x480)/ CIF(352x288/342x240)
Frame Rate	Main Stream: 1080P(1~50/60fps)
	Sub Stream 1: D1 (1 ~ 25/30fps)
	Sub Stream 2: 1080P(1~25fps)

Bit Rate Control	CBR/VBR
Bit Rate	H.264: 16 ~ 10240Kbps H.265: 8 ~ 5120Kbps
Day/Night	Auto(ICR) / Color / B/W
BLC Mode	BLC / HLC / WDR(120dB)/ SSA
White Balance	Auto/Natural/Street Lamp/Outdoor/Manual
Gain Control	Auto/Manual
Noise Reduction	3D DNR
Motion Detection	Off / On (4 Zone, Rectangle)
Region of Interest	Off / On (4 Zone)
Electronic Image Stabilization (EIS)	Support
Smart IR	Support
Defog	Support
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 (100/1000Base-T)
Protocol	HTTP;HTTPS;TCP;ARP;RTSP;RTP;UDP;RTCP;SMTP; FTP;DHCP;DNS;DDNS;PPPOE;IPv4/v6;QoS;UPnP; NTP;Bonjour;IEEE 802.1x;Multicast;IGMP;S NMP;TLS
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
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#### Interface

Video Interface	1 Port (BNC,1Vp-p,75Ω)
Audio Interface	1/1 channel In/Out
RS485	1 Port
Alarm	2 channel In: 5mA 5VDC 1 channel Out: 1A 30VDC / 0.5A 50VAC

Electrical

Power Supply	DC12V, PoE+(IEEE 802.3at)(Class 4)
Power Consumption	< 15.5W

Environmental

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

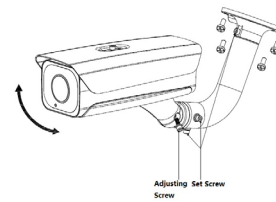
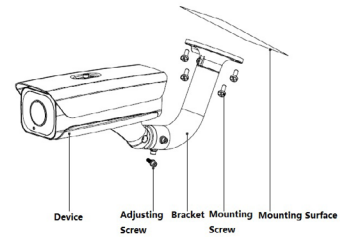
Construction

Casing	Metal
Dimensions	436.5mm×124.3mm×238.3mm(17.19"×4.89"×9.36")
Net Weight	1.84Kg (2.29lb)
Gross Weight	3.10Kg (6.82lb)

Ordering Information

Type	Part Number	Description
2MP camera	DH-IPC-HFW8232EP-Z12-IRA	2MP Starlight IR Bullet Network Camera,PAL
	DH-IPC-HFW8232EN-Z12-IRA	2MP Starlight IR Bullet Network Camera,NTSC
	IPC-HFW8232EP-Z12-IRA	2MP Starlight IR Bullet Network Camera,PAL
	IPC-HFW8232EN-Z12-IRA	2MP Starlight IR Bullet Network Camera,NTSC

Installation



Dimensions (mm/inch)

