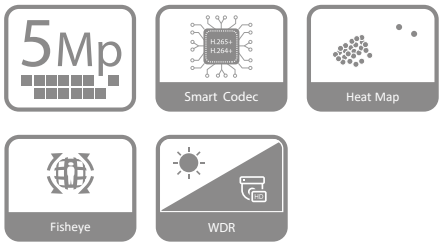
IPVD-EL5IRF-AI

5MP AI Starlight Fisheye Camera

- 1/2.7”CMOS image sensor
- H.265 & H.264 dual-stream encoding
- IR illumination 32 FT
- 1.4 mm Fixed Lens
- Built In Mic
- Supports Micro SD Card up to 256GB

System Overview

The IPVD-EL5IRF-AI is our first and only AI-powered IP Fisheye Panoramic camera, ready to analyze a full 360° spectrum of your choosing. The 1/2.7” 5MP Progressive Scan CMOS and 1.4mm fixed grant both a 180° horizontal view and a 180° vertical view, making a 360° camera with the fisheye effect. Utilize the deep-learning AI engine to automatically target humans and provide up to 4 zones of accurate people counting in real time. Heat map technology provides a visual representation of crowd density and can also extrapolate appearance probabilities which can be exported at your convenience. The built-in mic along with audio-in and -out provides both ease of use in basic setups and flexibility for complex audio solutions.



Features

SMART H.265+

Smart H.265+ technology is a collection of intelligent encoding algorithms based on H.265. To meet the characteristics of video surveillance, Smart H.265+ adopts some key video encoding techniques can be flexibly added/deleted or combined according to different applications and products. Smart H.265+ codec can effectively enhance video encoding efficiency according to the characteristics of different surveillance environments; furthermore, it can greatly reduce transmission bit rate, storage capacity to improve the overall system.

Heat Map

Heat map technology is used to display the crowd density and people appearance probability.You can display the crowd status by different colors.

In Area Number

With advanced stereo image technology and deep leaning algorithm, In Area No. technology recognizes human targets accurately to count people in an area in real-time. You can set people quantity threshold, when the number larger or smaller than the threshold, it triggers an alert.

IVS

IVS system provides advanced, accurate video analytic for both IP and analog cameras. The IVS engine can track, classify and analyze the behavior of individual or group of objects over long distance to greatly improve parameter security and monitoring efficiency.

True WDR

When part of an image is extremely dark but another part is so bright you can’t see any details, that’s dynamic range—the difference in lighting. Cameras with wide dynamic range (WDR) have special software that allows them to balance that lighting for one clear image. This makes them ideal for recording areas like store entrances where the contrast between the sunshine outside and the dim lighting inside can be extremely difficult to record.

Starlight

The starlight standard sensor is just like the retina of your eyes which is sensitive to its ambient light, and the image quality is determined by how much light the sensor could use, together with the camera lens.The starlight camera technology uses larger and highly sensitive sensors, wider aperture and reduces the shutter speed to collect enough light for sharp m onochrome/color images, even when human eyes couldn’t identify a thing. So the starlight camera can see right through the darkness, even when it is challenging for your eyes.

Technical Specification

Camera

Image Sensor	1/2.7”5Megapixel progressive CMOS
Max. Resolution	2592 (H) × 1944 (V)
ROM	128 MB
RAM	512 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.006 Lux @F2.0
S/N Ratio	＞56 dB
Illumination Distance	10 m (32.8 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	3 (IR LED)

Lens

Lens Type	Fixed-focal			
Mount Type	M12			
Focal Length	1.4 mm			
Max. Aperture	F2.0			
Field of View	Horizontal: 180° Vertical: 180° Diagonal: 180°			
Iris Type	Fixed			
Close Focus Distance	0.2 m (0.7 ft)			
DORI Distance	Detect	Observe	Recognize	Identify
	28 m (91.9 ft)	11.2 m (36.7 ft)	5.6 m (18.4 ft)	2.8 m (9.2 ft)

Smart Event

Heat Map	Yes

Professional, intelligent

IVS (Perimeter Protection)	Tripwire; intrusion
People Counting	Support people counting in area, and displaying and outputting yearly/monthly/daily reports (matching devices are needed); support people counting in 4 areas
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 (only supported by the sub stream)
Smart Codec	Smart H.265+/ Smart H.264+
Video Frame Rate	Main stream (2592 × 1944 @1–25/30 fps) sub stream (704 × 576 @1–25 fps/704 × 480 @1–30 fps) third stream (1280 × 720 @1–25/30 fps)
Stream Capability	3 streams
Resolution	5M (2592 × 1944); 3M (2048 × 1536); UXGA (1600 × 1200); 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	Auto (ICR)/Color/B/W
BLC	Yes
HLC	Yes
WDR	120 dB
Scene Self-adaptation	Yes
White Balance	Auto/natural/street lamp/outdoor/manual/regional custom
Gain Control	Auto/Manual
Noise Reduction	3D DNR
Motion Detection	OFF/ON (4 areas)
Region of Interest (RoI)	Yes (4 areas)
Smart Illumination	Yes
Privacy Masking	4 areas

Audio

Built-in MIC	Yes
Audio Compression	PCM; G.711a; G.711Mu; G726; AAC

Alarm

Alarm Event	No SD card; SD card full; SD card error; service life warning ; Network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; scene changing; audio detection; voltage detection; external alarm; people counting in area; stay alarm; people counting; people No. exception detection; safety exception

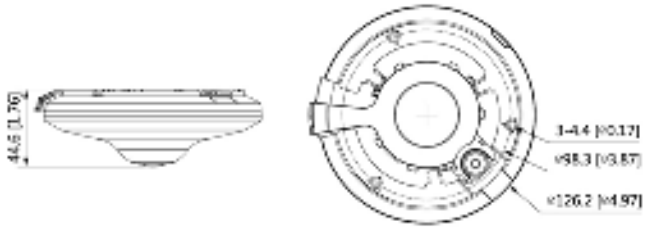
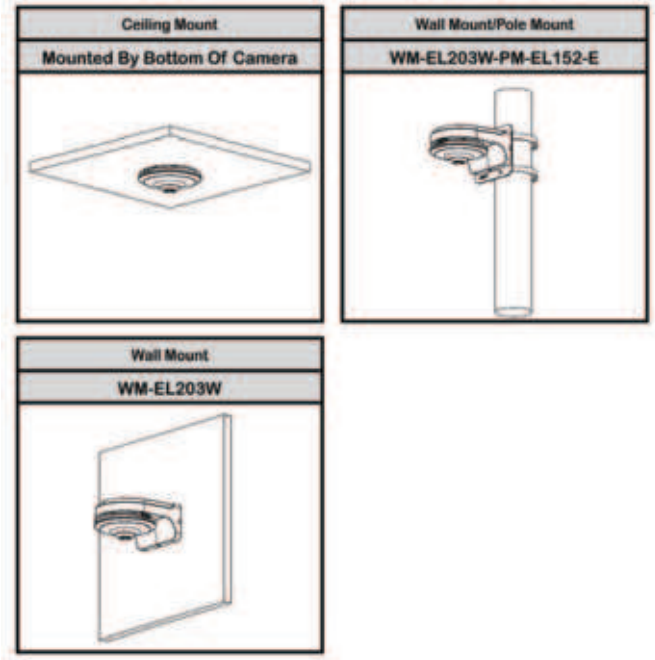
Network

Network	RJ-45 (10/100 Base-T)
SDK and API	Yes
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; SNMP
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; Genetec; P2P
User/Host	20 (Total bandwidth: 64 M)
Storage	Dahua Cloud; FTP; SFTP; Micro SD card (support max. 256 G); NAS
Browser	IE: IE8, IE9 and IE11 Chrome Firefox
Management Software	Smart PSS; DSS; DMSS
Mobile Phone	IOS; Android

Certification

Certification	CE-LVD: EN62368-1 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

Dimensions (mm/inch)



Accessories