

IPLP-ELS5IRZA-AI-EP

5MP AI Starlight License Plate Camera



System Overview

This license plate camera is capable of 5MP (2592 x 1944) video output at 20fps. Built to be used in a variety of environments, thanks to its' IK10 impact rating and IP67 weather rating, you can trust that it will hold up indoors or out. With the latest Starlight™ technology, this camera requires a measly .003 Lux@F1.3 that stays constant throughout its' entire zoom range. The IR (infrared) provides you with lighting up to 98 feet away. To add to its capabilities in areas with little or no light, this camera uses WDR (Wide Dynamic Range) to enhance the dark and bright portions of an image to properly balance the illumination. With a variety of deep-learning based AI functions, this camera makes sure that the video being captured is exactly what you are looking for and easy to find on playback.

Features

Face Detection

Face Detection is a software application that automatically captures faces from within a digital image or a video frame from a video source. Cameras can use advanced deep learning algorithms and are trained by a large number of face data sources, enabling the camera to locate faces quickly and accurately from the video source and capture facial images.

Facial Attributes

Through the use of deep learning algorithms to analyze facial images, this camera can extract six facial attributes from each frame, including Age, Gender, Expression, Glasses, Facial Masks and Facial Hair. Customers can acquire data of interest via face attribute statistics.

Perimeter Protection

Perimeter Protection functions significantly improve accuracy. Perimeter Protection reduces false alarms and decreases pixel count requirements for object detection. Perimeter Protection features custom tripwires based on object type for automation in limited access areas such as pedestrian or vehicle-only zones. This combination of advanced AI analytics and real-time alerts to a desktop or a mobile client reduces system requirements as well as resources, resulting in greater surveillance system efficiency.

Starlight™ Technology

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 monochrome/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.

- 1/2.7" 5Megapixel progressive scan CMOS
- H.265 & H.264 triple-stream encoding
- 20 fps@2592 x 1944, 50/60 fps@1080P(1920 x 1080)
- WDR (120 dB), Day/Night (ICR), 3D DNR, AWB, AGC, BLC
- Multiple network monitoring: Web viewer, CMS (DSS/PSS) & DMSS
- 7 mm-35 mm motorized lens
- 2/1 Alarm in/out, 1/1 audio in/out
- Max. IR LEDs Length 120 m
- Micro SD memory, IP67, IK10



People Counting

This feature counts the number of people that go in a specified region and the number of people that come out. This is perfect for businesses, banks and anybody who wants to monitor the amount of people coming and going.

ePoE Technology

The ePoE technology adopts advanced 2D-PAM3 coding modulation from physical layer, and realizes full duplex transmission over 800 meters at the speed of 10Mbps, or 300 meters at the speed of 100Mbps via Cat 5 or coaxial cable media. It supports PoE and PoC power supply technology which has greatly simplified construction and wiring. ePoE technology offers a new way to accomplish long distance transmission between IP camera and network switch. It allows more flexible surveillance system design, improves reliability and saves construction and wiring cost.

Video Metadata

Metadata is a feature that extracts attribute information from a target object which then can be used for data retrieval. Facial detection cameras can extract six facial attributes and output the metadata for analysis.

Protection

This camera allows for ±30% input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 6KV lightning rating provides effective protection for both the camera and its structure against lightning. Subjected and certified to rigorous dust and immersion tests (IP67) and impact tests (IK10), the camera is the choice for installation in even the most unforgiving environments.

Technical Specification

Camera	
Image Sensor	1/2.7" 5Megapixel progressive scan CMOS
Effective Pixels	2592 (H) × 1944 (V)
RAM/ROM	1 GB/128 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3 s–1/100000 s
S/N Ratio	> 56 dB
Minimum Illumination	0.003 Lux@F1.3
IR Distance	Distance up to 120 m (394 ft)
IR On/Off Control	Auto/Manual
IR LEDs	4

Lens					
Lens Type		Motorized vari-focal			
Mount Type		Board-in			
Focal Length		7 mm–35 mm			
Max. Aperture		F1.3			
Angle of View		H: 31°–9°, V: 23°–7° (2592 × 1944) H: 32°–9°, V: 18°–5° (2688 × 1520)			
Aperture Type		Auto (HALL)			
Close Focus Distance		0.4 m–2.0 m (1.31 ft–6.56 ft)			
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	W	190m(623ft)	76m(249ft)	38m(125ft)	19m(62ft)
	T	620m(2034ft)	248m(814ft)	124m(407ft)	62m(203ft)

Pan/Tilt/Rotation	
Pan/Tilt/Rotation Range	Pan: 0°–360°; Tilt: 0°–90°; Rotation: 0°–360°

Artificial Intelligence	
Face Detection	Support face image capture
Face Attributes	Support 6 kinds of face attributes extraction: Age, Gender,Expression (Jolly, Surprise, Normal, Rage, Sad, Disgusted, Confused, Frightened), Glasses, Mouth Mask, Moustache & Beard
Perimeter Protection	Tripwire, intrusion (Recognition of vehicle and people), fast moving, loitering detection, parking detection and people gathering
People Counting	Support Line crossing/Region/Queueing people counting; Support 4 accesses independent detection, 4 areas independent detection

General Intelligence	
Event Trigger	Motion detection, Video tampering , Scene changing, Network disconnection , IP address conflict, Illegal Access,Storage anomaly
General Intelligence	Object Abandoned/Missing
Heat Map	Yes

Video	
Compression	H.265,H.264,H.264B,H.264H, MJPEG (sub stream)

Smart Codec	Yes
Streaming Capability	3 Streams
Resolution	2592 × 1944/2688 × 1520/2560 × 1440/2304 × 1296/1080P (1920 × 1080)/1.3M (1280 × 960)/720P (1280 × 720)/D1 (704 × 576/704 × 480)/VGA (640 × 480)/CIF (352 × 288/352 × 240)
Frame Rate	Main Stream: 2592 × 1944 (1 fps–20 fps) 2560 × 1440 (1 fps–25/30 fps) 1920 × 1080 (1 fps–50/60 fps) Sub Stream: D1 (1 fps–20/30 fps) D1 (1 fps–50 fps) Third Stream: 1080P (1 fps–17 fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 32 Kbps–8192 Kbps H.265: 19 Kbps–8192 Kbps
Day/Night	Auto (ICR)/Color/B/W
BLC Mode	BLC/HLC/WDR (120 dB)
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)	Yes
Smart IR	Yes
Defog	Yes
Flip	0°/90°/180°/270°
Mirror	Off/On
Privacy Masking	Off/On (4 Area, Rectangle)

Audio	
Compression	G.711a, G.711Mu, AAC, G.726, G.723

Network	
Ethernet	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;SNMP
Interoperability	ONVIF(Profile S/Profile G/Profile T), CGI, Milstone, Genetec, P2P
Streaming Method	Unicast/Multicast
Max. User Access	20 Users
Edge Storage	NAS;FTP;SFTP Micro SD card 256 GB
Web Viewer	IE (versions newer than IE8), Chrome, Firefox, Safari (versions newer than Safari 12)
Management Software	Smart PSS, DSS, DMSS
Smart Phone	iOS, Android

Certifications

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
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Interface

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

Electrical

Power Supply	DC 12V (±30%), PoE (802.3af) (Class 0)
Power Consumption	<10.9W

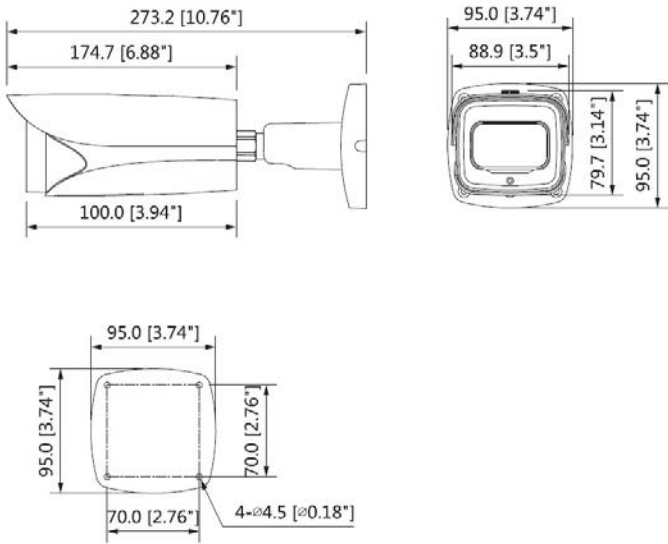
Environmental

Operating Conditions	-30° C to +60° C (-22° F to +140° F)/Less than 95% RH
Storage Conditions	-30° C to +60° C (-22° F to +140° F)
Ingress Protection	IP67
Vandal Resistance	IK10

Construction

Casing	Metal, plastic
Dimensions	273.2 mm × 95.0 mm × 95.0 mm (10.76" × 3.74" × 3.74")
Net Weight	1.11 kg (2.44 lb)
Gross Weight	1.51 kg (3.33 lb)

Dimensions (mm/inch)



Accessories

Ceiling Mount	Wall Mount	Pole Mount
		PM-EL152-E