

IPOB-ELF4LED28A-AI

4MP AI IP Bullet W/ Audio



System Overview

This is a 4MP bullet style camera, which has advanced Artificial Technology (AI). This allows for several impressive features like People Counting, Metadata, traffic data statistics, Face Capture, Face Recognition, ANPR (Automatic number-plate recognition) and Perimeter Protection. As the camera sees more faces, the AI will be able to locate faces faster and with more certainty. It has a Full-color Starlight feature, that uses advanced picture processing as well as has the ability to absorb large amounts of light to deliver impressive performance.

- 1/1.8" 4Megapixel progressive scan CMOS
- H.265 & H.264 triple-stream encoding
- 25/30 fps@2688 × 1520, 50/60 fps@1080 (1920 × 1080)
- WDR (140 dB), Day/Night (Electronic), 3D DNR,
- AWB, AGC, BLC
- Multiple network monitoring: Web viewer,
- CMS (DSS/PSS) & DMSS
- 2.8 mm fixed lens
- 1/1 Alarm in/out, 1/1 audio in/out
- Max. LEDs Length 20 m
- Micro SD memory, IP67



Features

Face Capture

Face capture is a software application that automatically captures faces from within a digital image or a video frame from a video source. This camera uses advanced deep learning algorithms and is 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.

Perimeter Protection

The Perimeter Protection function significantly improves accuracy by reducing false alarms and decreases pixel count requirements for object detection. 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 to a mobile client reduces system requirements and resources resulting in greater surveillance system efficiency.

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.

Full-color Starlight

This camera adopts an F1.6 large aperture lens and an 1/1.8" high performance sensor. With higher amount of absorbed light and advanced image processing algorithm, the camera presents an impressive lowlight performance with an exceptional balance between noise reduction and the blur of moving object.

Warm Supplemental lights

With two warm supplemental LED lights, the camera is able to provide a colorful and vivid image even in total darkness. By default, the camera is set to smart light mode, in which the camera can automatically adjust the exposure time and light sensitivity simultaneously to avoid overexposing of the objects in the image center. Also, the sensitivity and intensity of the LED lights can be remotely controlled by the OSD menu.

Protection (IP67, wide voltage)

The camera allows for $\pm 30\%$ 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), the camera is the choice for installation in even the most unforgiving environments.

Technical Specifications

Camera	
Image Sensor	1/1.8" 4Megapixel progressive scan CMOS
Effective Pixels	2688 (H) × 1520 (V)
RAM/ROM	512 MB/128 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3 s–1/100000 s
Minimum Illumination	0.001 Lux@F1.6
LED Distance	Distance up to 20 m (66 ft)
LED On/Off Control	Auto/Manual
LEDs	2

Lens					
Lens Type		Fixed			
Mount Type		Board-in			
Focal Length		2.8 mm			
Max. Aperture		F1.6			
Angle of View		H: 113°, V: 60°/H: 89°, V: 48°/H: 56°, V: 31°			
Optical Zoom		N/A			
Aperture Type		Fixed			
Close Focus Distance		1.3 m (4.27 ft)/1.9 m (6.23 ft)/3.8 m (12.47 ft)			
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8mm	58m(190ft)	23m(75ft)	12m(39ft)	6m(20ft)

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

Artificial Intelligence	
Face Capture	Support face image capture
Perimeter Protection	Tripwire, Intrusion (Human & Vehicle classification)
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

Video	
Compression	H.265+, H.265, H.264+, H.264, H.264B, H.264H, MJPEG (sub stream)
Streaming Capability	3 Streams

Frame Rate	Main Stream: 2688 x 1520 (1 fps-25/30 fps) 2560 x 1440 (1 fps-25/30 fps) 1920 x 1080 (1 fps-50/60 fps)
	Sub Stream: D1 (1 fps–25/30 fps) D1 (1 fps–50/60 fps)
	Third Stream: 1080P (1 fps–16 fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 32 Kbps–8192 Kbps H.265: 19 Kbps–8192 Kbps
Day/Night	Day/Night: Electronic Auto/Color/B/W
BLC Mode	BLC/HLC/WDR (140 dB)
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	Support
Digital Zoom	N/A
Flip	0°/90°/180°/270°
Mirror	Off/On
Privacy Masking	Off/On (4 Area, Rectangle)

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

Network	
Ethernet	RJ-45 (10/100 Base-T)
Protocol	HTTP, TCP, ARP, RTSP, RTP, UDP, RTCP, SMTP, FTP, DHCP, DNS, DDNS, PPPoE, IPv4/v6, SNMP, QoS, UPnP, NTP, ICMP, HTTPs, IGMP, 802.1x
Interoperability	ONVIF (Profile S/Profile G), CGI, Milstone, Genetec, P2P
Streaming Method	Unicast/Multicast
Max. User Access	20 Users
Edge Storage	NAS FTP 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, P2P
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

Interface

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

Electrical

Power Supply	DC 12V (±30%), PoE (802.3af) (Class 0)
Power Consumption	<7.4W

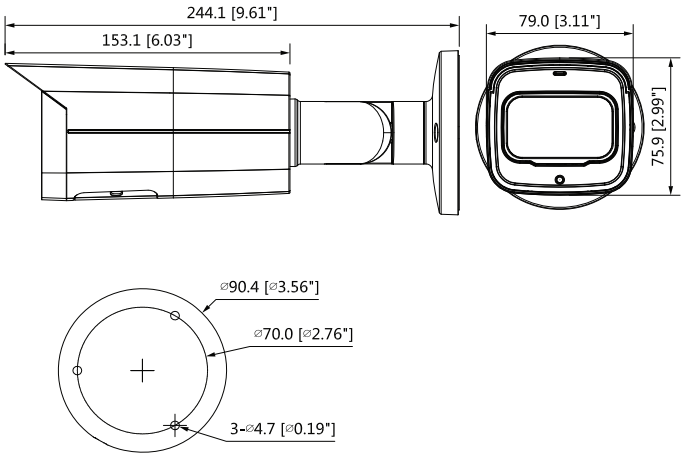
Environmental

Operating Conditions	-30° C to +60° C (-22° F to +140° F)/10%RH–95%RH
Storage Conditions	-30° C to +60° C (-22° F to +140° F)
Ingress Protection	IP67
Vandal Resistance	N/A

Construction

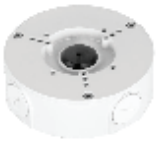
Casing	Metal
Dimensions	244.1 mm × 79.0 mm × 75.9 mm (9.61" × 3.11" × 2.99")
Net Weight	0.815 kg (1.80 lb)
Gross Weight	1.08 kg (2.38 lb)

Dimensions (mm/inch)



Accessories

Optional:



JB-EL130-E
Junction box



PM-EL152-E
Pole Mount



CM-EL151
Corner Mount

Junction Mount	Pole Mount	Corner Mount
JB-EL130-E	JB-EL130-E + PM-EL152-E	JB-EL130-E + CM-EL151