

IPLPR-EL2IR12Z3X

2MP License Plate Camera



- Capture and recognize license plates traveling up to 25 mph
- H.265 and H.264 Dual Codec
- 1080p at 30 fps Maximum Resolution
- License plate recognition distance up to 26.25 ft
- IP67 Ingress Protection
- 1/2.8-in 2MP CMOS Sensor

System Overview

If you've owned a License Plate Detection camera in the past, no doubt you've probably spent more than your fair share of time reviewing footage trying to get that perfect shot of the plate you were looking for. Wouldn't it be great if your camera could do all that work for you, and even create a database for you to easily search and sort your plate records with snapshots and footage clips? The IPLPR-EL2IR12Z3X rounds out our new Automated License Plate Reader cameras designed specifically for the purpose of license plate recognition and traffic management. Featuring a 1/1.8-in Sony GS-CMOS sensor, this camera is tailor-made to accurately and consistently record license plates. With a 3.2-10.5mm lens, this is perfect for gate management and parking lots with a range of up to 26 feet at speeds of up to 25MPH.

Features

License Plate Recognition

License Plate Recognition cameras automatically capture vehicle license plate images and recognizes license plate numbers and letters. During playback you can perform a license plate search by time and date to view thumbnail images of all plates captured during the specified time period or you can enter a license plate number to search for vehicles recorded with that plate. License plate recognition technology offers effective entrance/exit management, traffic surveillance, and parking lot monitoring.

HEVC(H.265)

High Efficiency Video Coding (HEVC) is a video compression standard which offers double the data compression ratio at the same or higher level of video quality and the same bit rate as the AVC technique. High Efficiency Video Coding supports resolutions up to 8192x4320, which includes 8K ultra-high definition.

Environmental

This camera's outstanding reliability is unsurpassed due to its rugged design. The camera is protected against water and dust with an IP67 ranking, making it suitable for indoor or outdoor environments.

Technical Specification

Camera

Image Sensor	1/2.8-in. 2 MP CMOS
Effective Pixels	1920(H) x 1080(V)
Scanning System	Rolling Shutter
Electronic Shutter Speed	Auto, Manual, 1/50 s to 1/10000 s
IR Distance	Distance up to 12.0 m (39.37 ft)
IR On/Off Control	Auto, On, Off
IR LEDs	Six (6), adjustable brightness

Lens

Lens Type	ø14
Mount Type	ø14
Focal Length	3.2 mm to 10.5 mm
Angle of View	Horizontal: 108.1° to 30.3° Vertical: 56.3° to 17.1° Diagonal: 130.9° to 34.8°
Focus Control	Motorized, Automatic
Iris Control	Auto Iris (1.6 to 3.3)
Focus Width Range	3.50 m (11.48 ft), approximately one (1) lane

Video

Compression	H.265, H.264M, H.264H, H.264B, MJPEG
Picture Encoding Format	JPEG
Streaming Capability	One (1) Stream
Resolution	1080p (1920 x 1080), 720p (1280 x 720)
Frame Rate	1080p or 720p at 30 fps
Bit Rate Control	CBR, VBR
Bit Rate	H.264B: 32 Kbps to 32768 Kbps H.264M: 32 Kbps to 32768 Kbps H.264H: 32 Kbps to 32768 Kbps H.265: 32 Kbps to 32768 Kbps MJPEG: 512 Kbps to 65536 Kbps
Day/Night	Auto (ICR), Color, B/W
Wide Dynamic Range	96 dB
White Balance	Auto, Outdoor, Manual, Part White Balance, Natural, Street Lamp
Gain Control	Automatic
Noise Reduction	3DNR
Edge Enhancement	Support
Exposure Mode	Full Auto, Customized Auto, Customized

Network

Ethernet	RJ-45 (100/1000 Base-T)
Protocol	IPv4/IPv6, HTTP, TCP/IP, UDP, NTP, DHCP, DNS
Interoperability	ONVIF, CGI
Streaming Method	Unicast, Multicast
Maximum User Access	20 Users
Edge Storage	Micro SD Card Slot, 64 GB maximum
Web Viewer	IE
Management Software	DSS

Certifications

Safety	IEC 62368-1:2014 (Second Edition)
Electromagnetic Compatibility (EMC)	47 CFR FCC Part 15 Subpart B, Class B EN 55032:2015, Class B EN61000-3-2:2014 EN 61000-3-3:2013 EN 55024:2010+A1:2015 EN55035:2017 EN 50130-4:2011+A1:2014

Interface

Alarm	Input	Three (3) Channels, Optocoupler
	Output	Three (3) Relay Channels • Two (2) Channels, Optocoupler Output • One (1) Channel, Relay Output
RS485		Two (2) Ports
RS232		One (1) Port

Electrical

Power Supply	12 VDC, 24 VAC, or PoE (IEEE802.3af Class 0)
Power Consumption	< 20 W

Environmental

Operating Temperature	−30° C to +65° C (−22° F to +149° F)
Operating Humidity	10% to 90% Relative, non-condensing
Storage Temperature	−30° C to +65° C (−22° F to +149° F)
Ingress Protection	IP67

Construction

Casing		Metal and Plastic
Dimensions	Camera	296.50 mm x 124.30 mm x 107.70 mm (11.67 in. x 4.89 in. x 4.24 in.)
	Camera with Bracket	486.70 mm x 124.30 mm x 185.50 mm (19.16 in. x 4.89 in. x 7.30 in.)
Net Weight		1.90 kg (4.19 lb)
Gross Weight		3.30 kg (7.28 lb)
Installation		Wall or Ceiling with Included Bracket

Technical Specification

Performance

Trigger Mode	Video Detection I/O Coil Video Detection and I/O Coil
Shutter	Single
Image Tampering	Video/Picture Watermark
Alarm Event	No Storage Card Inadequate Storage Space Storage Card Error Network Disconnect IP Conflict Illegal Access
Security Mode	Authorized Username and Password MAC Address Binding HTTPS Encryption IEEE 802.1x Network Access Control
On-screen Display Overlay	Time Plate (number and color)

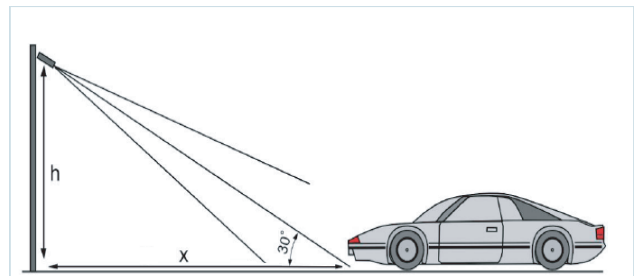
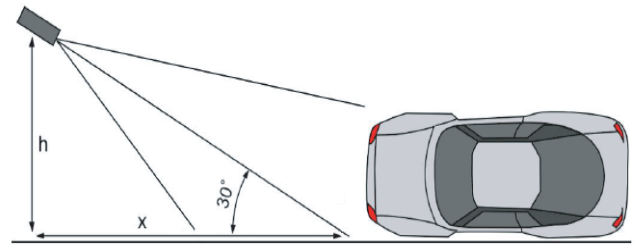
Intelligence

Vehicle Registration	Captures license plate images and extracts the numbers and letters
Intelligent Tracking	Displays vehicle plate and vehicle path

Installation Distances

Camera Height (h)	Snapshot Distance (x)	Lane Width	Vehicle Speed, max
Side Installation			
1.2 m (6.56 ft)	4 m to 6 m (13.12 ft ± 19.69 ft)	3.5 m (11.48 ft)	40 kph (25 mph)
Distance to License Plate	Minimum/Maximum: 3 m to 8 m (9.84 ft to 26.25 ft) Optimal: 4 m to 6 m (13.12 ft to 19.69 ft)		
Horizontal/Vertical Angles	< 30°		
Inclination Angle	< 5°		

Camera Placement



In both the vertical and the horizontal placement, the angle between the camera lens and the farther lane border must be less than 30°. Ensure the snapshot distance (x) of the camera is greater than 1.7 times the height (h) of the camera ($x > 1.7 \times h$) for optimal license plate images.

Dimensions

