BIOROLES®



ANPR Entrance & Exit

Parking Management

License Plate Recognition Camera-x-lV

B-LPR-4

Features

- · 2MP Star light
- · Offline working with parking barrier
- · Front end LPR algorithm
- · Images or video stored for security events
- · 6MM Prime Lens (Option 2.8-12mm,

- · 7-22mm,5-50mm zoom lens)
- · Wide Dynamic Range
- · White/Black list management
- · Vehicles running speed 0~60km/h
- · IP67, CE, RoHS, EMC +

ANPR Camera Overview

ANPR Camera (License Plate Recognition Camera), technology can detect and identify a vehicle's unique license plate numbe and Apply in parking management system, parking guidance system and on-street parking management.

Working Process









Detection

Recognition

Capture

Match Result

Recognition Algorithm

Capture rate	: ≥99.9%
Recognition rate	: ≥99.9%(typical scene + typical license plate)
Adapt to vehicle speed	: 0-50 km/h
License plate recognition type	: Ordinary blue license, single and double yellow license, new energy,
	single and double police car, new armed police, single and double military
	license, new embassy, coach car, license plate for Hong Kong and Macao to
	enter & leave the mainland, emergency license plate, civil aviation, special
	license plate, etc
License plate recognition features	: Number, color, type, width
License plate anti-counterfeiting	: Support abnormal license plate (mobile phone photo, print) alarm
Unlicensed car trigger	: Support video trigger of unlicensed car
Vehicle logo recognition	: Support mainstream logo recognition
Vehicle identification	: Support mainstream vehicle identification (more than 2100 models)
Body color recognition	: Support mainstream body color recognition
White list of license plate	: Support accurate and intelligent fuzzy matching of white list license plate rules
Intelligent calibration	: Support accurate or wildcard way to intelligently calibrate license plate number,
	license plate type and color



Imaging

Basic

Embedded VZ intelligent ISP algorithm, intelligent optimized dimming, intelligent adaptation to complex scenes Basic parameters (brightness/contrast/saturation/sharpness/image flip/ exposure time) can be set separately

Video & Audio

Video compression standard	H.264/H.265/MJPEG;
Video resolution	640 x 360, 704 x 576, 1280 x 720, 1920 x 1080
Compression output rate	512Kbps~5000Kbps
Frame rate	1-25 frames, default 25 frames (1920*1080)
Audio coding	G.711/AAC;
Voice intercom	Support cloud / local two-way voice intercom

Networking

Offline networking	No upper computer or server is needed, and the operation networking between Cameras is realized automatically
Offline charges	Charging rules can be set by model, time length, times, time period, ladder, etc
Parking lot management	Support the establishment of multiple parking lots and scene management
	of Multiple cameras
Black-and-white list	Cooperate with the strategy to meet the vehicle level management
Phase auxiliary camera	No more than 4 auxiliary cameras can be added at the same entrance / exit
Screen display protocol	Support the connection of LED screen display of mainstream brands, output
	Identification / billing results

Administration

Offline networking	Support external speaker broadcast recognition/billing results
Offline charges	PC mobile management, PC management tools, SDK development
	kit, Opendevsdk, HTTP push
Black-and-white	Remote management of single camera, centralized management of multiple
	Cameras through account, support for cloud SDK development and management
	Platform

Imaging

Sensor	200W 1/2.8CMOS
Resolution Power	1920(H) x 1080(V)
Low Illumination	0.01LUX(white light)
Electronic Shutter	0-1ms or customized
Standard Lens	6mm fixed focus lens
Matching Lens	2.8-12mm, 6-22mm,5-50mm
	Electric focusing lens
Port	CS\M14

Reliablity Index

Network Interface	1 path 10/100Mbps adaptive RJ45 port
10 output	2 paths
10 input	4 path(only switch value is supported)
Rs485	1 path
Rs232	1 input + 1 output (active speaker only)
AUDIO	1 USB Type-A port(not available when
USB	4G version is selected)
TF slot	1 of TF card slot, with a max capacity of 128G
reset	1 reset button
Power lamp	1 (green)



Image Index

Image Settings	Brightness, contrast, saturation, image flip, exposure time, etc
Noise Reduction Wide Dynamic	Support 2D/3D noise reduction support

Interface Key

Supplementary LED	Standard LED lamp board (4 LED lamp beads with Adjustable brightness, power consumption ≤ 6W)
GUN Machine 155" Shield	135mm(L) * 78mm(W) * 55mm(H) 452mm(L) * 130mm(W) * 104mm(H)

Strucural Parameters

Temperature	-20°C -70°C
Static Electricity	Contact 6kV, air SKv
Surge	10/70 common mode 4KV, Differential mode 2KV
Anti Vibration	National standard
Power Supply	220V AC (main board 12V DC)
Consumption	Mainboard power consumptions5W
Protection	IP66

Communication

Communication protocol	SDK ONVIF HTTP RTSP TCP/IP UDP RS485 10 NTP
FTP upload picture	Support, upload the captured pictures to the server through FTP
VPN virtual private network	Support the establishment of virtual private network through Open VPN
HTTP push	Support, upload identification results and offline retransmission
Dynamic domain name	Support the docking of 3322 dynamic domain name service
UPNP port mapping	Support, automatic mapping of HTTP / RSTP communication ports
4G extension	Support the expansion of 4G module (optional) and redundant link backup
WIFI extension	Extending WiFi RF card through USB

