



MOTOROLA SOLUTIONS L5F Fixed License Plate Recognition System Instruction Manual

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MOTOROLA SOLUTIONS L5F Fixed License Plate Recognition System



Specifications

- Product: License Plate Recognition (LPR) System
- Deployment Options: Fixed, Quick-Deploy, Video-Based, Mobile, In-Car Integrated, App-Based
- Features: Real-time threat detection, automated operations, improved officer efficiency

Product Information

- An indispensable law enforcement tool, License Plate Recognition (LPR) systems assist agencies with realtime threat detection and mitigation while helping close criminal investigations faster.
- LPR solutions automate operations to increase officer efficiency and productivity, ensuring regulatory compliance and program success.

Product Usage Instructions

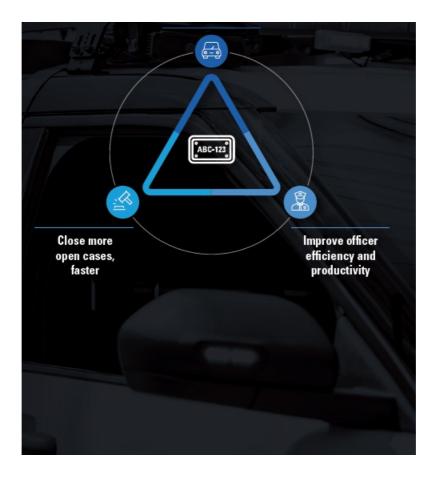
- Fixed LPR systems are permanently installed on poles or roadway infrastructure, providing high data capture per dollar spent. They continuously scan in all weather conditions, day or night, capturing vehicles moving at high speed.
- Your LPR program may consist of various camera types for different scenarios. Ensure cameras work together for accurate data collection leading to quicker case resolution.
- Back-end software is crucial for searching, analyzing data, managing hot lists, ensuring privacy and security, and providing policy support.
- Consider purchasing considerations such as system types, deployment scenarios, and software capabilities to support your agency's LPR program effectively.

FAQ

- Q: How can I select the right LPR solution for my agency?
- A: Partner with an experienced vendor with LPR product expertise to ensure regulatory compliance and program success.
- Q: What are the benefits of adopting License Plate Recognition?

A: Benefits include finding wanted vehicles faster, closing cases more efficiently, and improving officer
productivity.

WHY ADOPT LICENSE PLATE RECOGNITION?



• An indispensable law enforcement tool, License Plate Recognition (LPR) systems assist agencies with realtime threat detection and mitigation while helping close all manner of criminal investigations faster.

HOW LPR SYSTEMS WORK

- LPR solutions take photos of vehicles, then use Optical Character Recognition (OCR) algorithms to capture and parse license plate data, along with date, time and GPS coordinates. They can also integrate with other technologies to significantly expand their core functionality.
- For instance, LPR detections can trigger a real-time alert to improve situational awareness, be searched and analyzed for investigative insight, and be leveraged to automate processes such as traffic enforcement or access control.
- Using an LPR solution automates operations to increase officer efficiency and productivity, so officers spend less time on rote activities and more time in the community, keeping residents safe.

With a range of models from multiple vendors incorporating a variety of features, selecting the right solution for your agency can seem challenging. Partnering with an experienced vendor with LPR product expertise and law enforcement know-how will ensure regulatory compliance and program success, especially given the everchanging laws and regulations governing LPR.

AVAILABLE LPR DEPLOYMENT OPTIONS

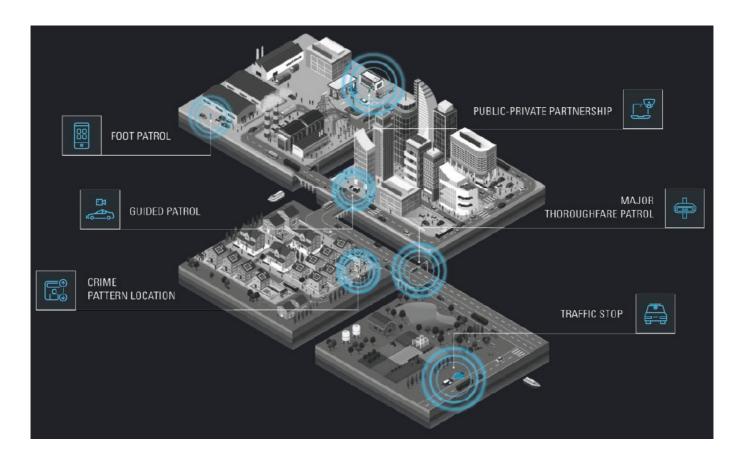
- This guide aims to serve as a starting point in helping you establish a successful LPR program.
- We've provided detailed descriptions and usage scenarios for each type of available camera system, along with guidance on supporting your system with back-end software.



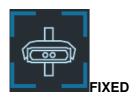
LPR CAMERAS

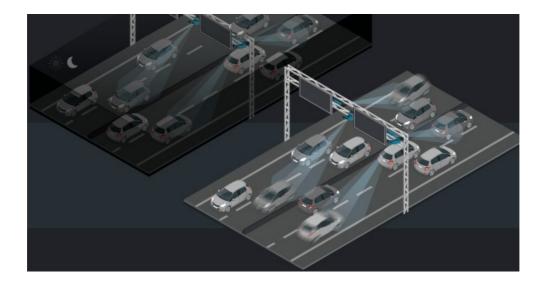
SYSTEM TYPES, DEPLOYMENT SCENARIOS, AND PURCHASING CONSIDERATIONS

- Different situations require different types of LPR.
- Depending on your agency and community's needs, your LPR program will likely consist of several types of LPR cameras installed for capturing plates in various scenarios. These cameras should work together to provide you with accurate and actionable data, so that you can go from case to closure more quickly.
- In addition to this guide, our <u>LPR-equipped virtual city</u> allows you to see how LPR can work together in a comprehensive video program.



• VISIT THE LPR-EQUIPPED CITY: namrinfo.motorolasolutions.com/lpr-solutions





DEPLOYMENT OVERVIEW

Fixed LPR systems are one of the most adopted types of deployments today. These cameras are permanently installed, typically on poles or other roadway infrastructure, and can provide the most data capture per dollar spent. Fixed cameras are high-performing, continuously scanning in all weather conditions – day or night – as well as reading vehicles moving at high speed.

DEPLOYMENT SCENARIOS

HIGHWAYS AND INTERSTATES

- Owing to the high traffic volume, high-performance fixed LPR is often in place on highways, interstates and other major thoroughfares.
- These roads require a high rate of capture, as well as high-quality bright and low-light performance in place at all times of the day.
- With vehicles moving at high speeds, a global shutter sensor will also ensure accurate data capture.

JURISDICTION ENTRY POINTS

• While not all entry points will have significant traffic, a reliable plate capture capability will ensure information is captured from vehicles moving at high speed at all times of the day, so you can proactively respond to threats and mitigate incidents.

KEY CONSIDERATIONS

CAPTURE RATE

This determines how many plates the system can successfully detect; a quality camera should be able to

continuously scan a high volume of cars in a short period.

READ ACCURACY

• This measures the accuracy of a camera's recognition; a high-performing system will read in dark environments, as well as read plates on vehicles moving at high speeds.

LENS DESIGN

Having a variety of focal lengths to choose from means cameras can be deployed as per the needs of the area. A wide field of view also helps ensure you can scan errant vehicles.

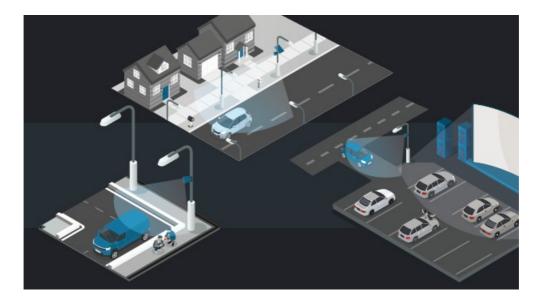
RUGGEDNESS

• Ruggedness metrics determine how capable a system is of withstanding wear and tear before being replaced, as well as indicating how well it can perform in inclement weather.

SOLUTION RECOMMENDATIONS

- Frame rate should be 60 frames per second (FPS) or greater
- The camera should scan continuously
- There should be no daily capture limits
- Simultaneous color and IR image capture
- · Zero degradation at 150 MPH or greater
- · Camera should employ a global shutter
- Lenses should span at least 6mm 25mm
- 20-foot field of view for multi-lane capture
- Camera system should be IP68 or higher
- · Should be rated ISO 16750-3 or better
- Operate at temperatures of -40°F to 140°F





DEPLOYMENT OVERVIEW

Quick-deploy LPR cameras are one of the newest LPR technologies on the market. With flexibility and data connectivity, the cameras can be easily moved according to the needs of the area, or they can be installed permanently. Quick-deploy LPRs can include their own stand or be mounted to common infrastructure, making them ideal for low-volume, low-speed vehicle scanning in controlled environments.

DEPLOYMENT SCENARIOS

NARCOTICS INTERDICTION

By helping gather more data and evidence, quick-deploy cameras can be instrumental in shortening drug interdiction timelines. As you uncover distribution details and primary players, you can easily expand investigations, utilizing analytics to expose operational patterns – and make arrests more quickly.

NEIGHBORHOOD COMPLAINTS

Deployed easily and often covertly, these cameras are perfect for improving the response to community concerns as they can be quickly activated in areas experiencing an uptick in disturbances such as suspicious vehicles or parties.

PATTERN CRIME LOCATIONS

Upon determining a recurring crime series and MO, quickdeploy cameras can be placed at probable future targets, in order to identify vehicles and people of interest.

PUBLIC-PRIVATE PARTNERSHIPS

Affordable quick-deploy LPR cameras can be owned and operated by businesses that see the value in police partnerships, who then seamlessly share images with your agency.

KEY CONSIDERATIONS



 This measures how long it takes to install and activate a camera, and whether it requires specialized tools or significant technical expertise to do so.\



• Varying mounting options means you can place the camera in convenient locations accordingly.

POWER OPTIONS

• Various power options ensure you can move your camera's location whilst maintaining a power source.

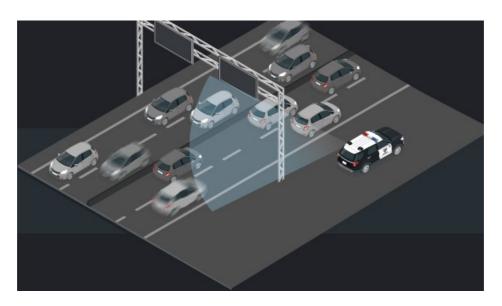


 Various network options, including one that can connect to an existing wireless subscription, mean it can be installed wherever necessary.

SOLUTION RECOMMENDATIONS

- Single, self-contained camera unit design
- Hand-holdable size no bigger than 6 inches
- · Quick-connecting Android or iOS setup app
- Pole-mount or equivalent universal straps
- · Camera maneuvering via easy-lock ball joint
- Optional security enclosure available
- Solar power with at least 10-watt panel
- AC or DC direct power connection
- · Battery power with 100-watt hours or more
- Major cellular carrier support
- Bring-your-own-SIM cellular flexibility
- · Wi-Fi connectivity option





DEPLOYMENT OVERVIEW

A highly adopted system, mobile LPR involves between one and four cameras continuously scanning around the vehicle they're mounted on. Drivers can receive real-time alerts from within the car, typically through a software interface on a mobile computer or tablet device. These cameras are ideal for helping to keep officers safe and aware of threats, as well as guiding patrol efforts based on hot plate hits.

DEPLOYMENT SCENARIOS

TRAFFIC STOPS

- Mobile LPR can be the first line of defense for officers during a traffic stop.
- With high-performance detection and immediate recognition, officers are alerted to any outstanding wants or warrants associated with a vehicle they've pulled over, allowing them to manage the incident appropriately.

GUIDED PATROL

- Turn passive patrolling into active law enforcement with mobile LPR.
- High-volume scanning and accurate detection of hot-listed vehicles can provide officers with automated direction on BOLOs and vehicles with warrants, bringing more criminals to justice, more efficiently.

INVESTIGATIONS

- While at the scene of a crime, canvassing nearby vehicles is essential in helping to locate potential witnesses who can help solve a case.
- Mobile LPR speeds up this process, eliminating manual, time-consuming processes.

KEY CONSIDERATIONS

Documents / Resources



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L5F Fixed License Plate Recognition System, L5F, Fixed License Plate Recognition System, Plate Recognition System, Recognition System, System

References

- Description LPR Grant Assistance Program
- User Manual

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