Portable LPR System (PLPR) for Stolen Vehicles Recovery and Repossession

Over a million vehicles are stolen every year in the US which translates to 100+ vehicles stolen every hour. When a vehicle is reported stolen, its details are entered into National Crime Information Center (NCIC) which is shared with various law enforcement agencies (LEAs) nationwide. NCIC database also called as hotlist is uploaded to a dedicated patrol car equipped with a License Plate Recognition (LPR) system. A patrol car with LPR module has multiple high resolutions cameras mounted on the light bars facing back, front and sides. It reads the vehicle plates as it passes through a locality and compares it with NCIC database in real time. Upon a match, officer is alerted about the hit and a recovery process begins. Other institutions like banks, insurance companies and local agencies maintain a database with vehicles of interest. Patrol car with LPR module are few in numbers when compared with regular patrol cars which makes it harder and take longer to sweep a large area which delays the recovery process. Consequently, only 20% of the wanted vehicles are recovered nationwide.

Streaming Networks addresses this problem by providing a portable LPR system (PLPR) which can be easily moved from vehicle to vehicle effortlessly. A PLPR system consists of LPR appliance which uses advanced neural network based optical character recognition (OCR) for accurately reading a vehicle plate and 4 HD IP cameras with small form factor and multiple focal lengths to capture near and far plates. Cameras can be mounted on the vehicle's rooftop using mag mount or inside the vehicle's dash using Velcro, looking front and on the sides. Hotlist can be upload to a PLPR system through a USB, internet or entered interactively.

System Features:

AI-Powered License Plate and Vehicle Recognition
PLPR uses AI-based technology to accurately read license plates in real time, identifies US state logos on the plate and recognizes the vehicle make.

Multi-Camera Support
Supports up to 4 HD IP cameras (provided). 2 cameras with 3.6 mm lens for short capture and 2 cameras with 12 mm lens for long capture.

Qualified Plate Search and Tracking
Reads plate issuing state and vehicle make to assist in verifying vehicle matches thus reducing false positives.

Real-Time Hotlist Matching
Matches read plate against multiple hotlists. A hotlist can have upto 800,000 entries. A hotlist can be uploaded via internet, USB drive, or interactively on the fly.

Fast Review Mode
Photo player to review captured plates automatically.

Robust Hardware
Designed using a low power embedded processor with built-in 1TB SSD and a multi-standard LTE modem(optional) in a portable form factor. PLPR is field upgradable over the air.

Report Generation
For team operation and offline review of the read plates, a report can be automatically generated and stored on a USB drive or emailed to multiple recipients at a specified time.

Captured Data
Plate reads include timestamp, camera and system name, location, plate and overview images. Optionally make and type of the vehicle can also be recorded as part of the data.

Video Evidence Recording
For every plate captured, system records a 6 seconds HD video clip for evidence.

System Interface
PLPR system can be accessed via Wi-Fi using a commercial browser.

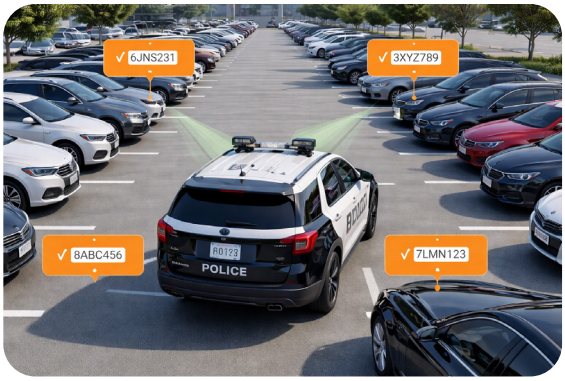
www.streaming-networks.com
www.iRecord.com

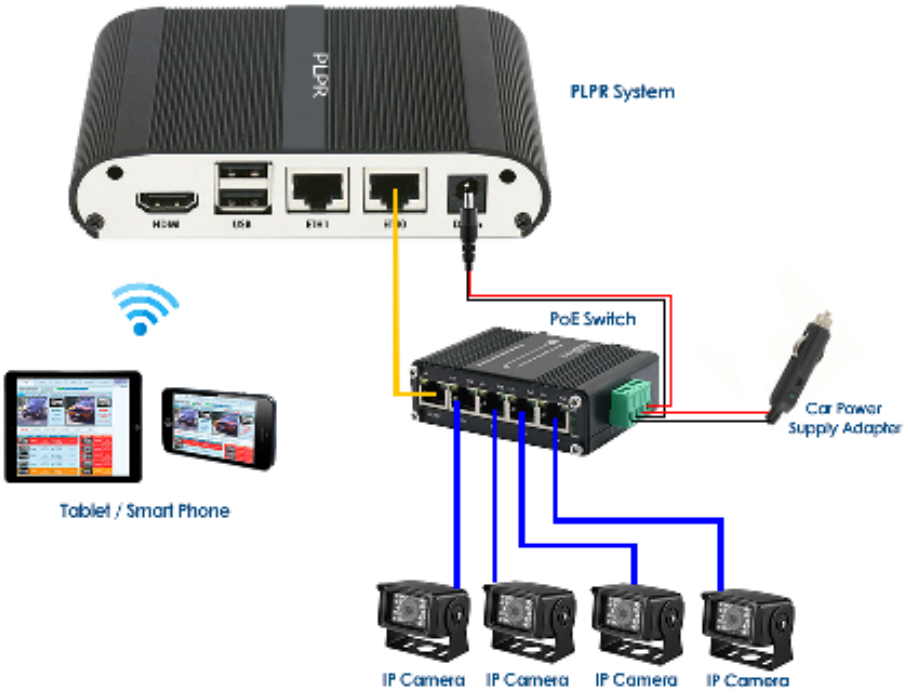
streamingnetworks
digital video delivered

sales@iRecord.com

Target Markets:

- Vehicle recovery operators
- Auto repossession agencies
- Skip-tracing teams
- Asset recovery companies
- Law enforcement units and private security firms





SPECIFICATIONS

No. of LPR channels	Upto 4 channels
No. of supported LPR cameras	Upto 4 IP cameras
Supported license plates	Retro-reflective and non-reflective license plates
Maximum plate reading rate	One plate per second per channel
Video recording	Continuous and event-based video recording per channel in H.264 format
Hot list support	Real-time searching of up to 800,000 hotlist plates
Database query	Database query through Web browser interface: number based, time based and location-based search options of partial or exact matches
Email notification	Email notification of hot plate alerts with snapshots of plate and vehicle
Supported LPR camera type	Progressive scan IP cameras
Camera sensor	Color/monochromatic or infra-red 850nm
Camera lens	3.6mm, 12mm fixed focal length
Data storage	Built-in SSD, locally connected USB drive, remote storage server
Dimensions & Weight	4.92" x 3.14" x 1.14" and 0.6 lbs
System power input	12 V DC (2mm Barrel connector), Active PoE (Power over Ethernet)
Max. power consumption	5 Watt (excluding cameras)