

Automated Number Plate Recognition System

Intelligent Vehicle Identification. Real-Time Monitoring. Actionable Intelligence.

ANPR

AUTOMATED NUMBER PLATE RECOGNITION

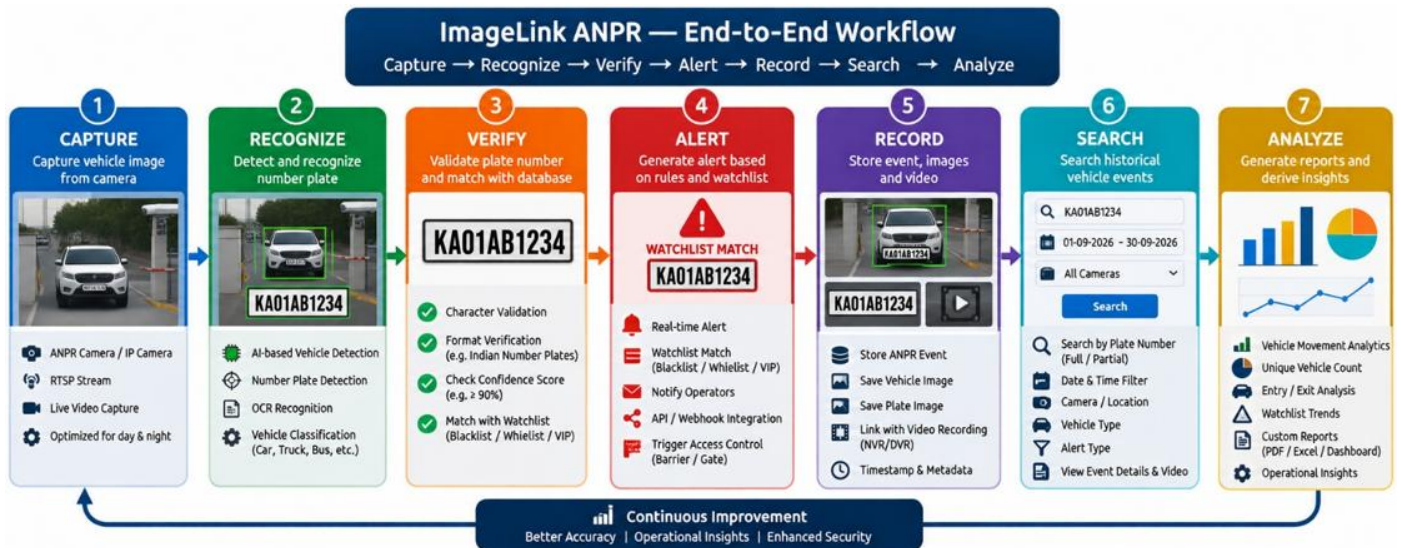
IDENTIFY | MONITOR | ANALYZE | SECURE

Accurate, real-time vehicle identification
for smarter and safer operations.



AI-Powered Vehicle Identification & Intelligence Platform

ImageLink ANPR converts IP-camera video into structured, searchable vehicle intelligence by combining AI-based vehicle detection, number-plate recognition, OCR, verification, alerts, evidence recording, historical search and analytics.



1. End-to-End ANPR Workflow

CAPTURE	RECOGNIZE	VERIFY	ALERT	RECORD	SEARCH	ANALYZE
Capture vehicle image from IP/ANPR camera.	Detect vehicle and plate; perform OCR recognition.	Validate characters, format, confidence and watchlist.	Generate real-time alerts and optional gate/barrier actions.	Store event, vehicle/plate images and video reference.	Search by plate, time, camera, location, type and alert.	Generate reports, trends and vehicle movement insights.

2. Core Functional Capabilities

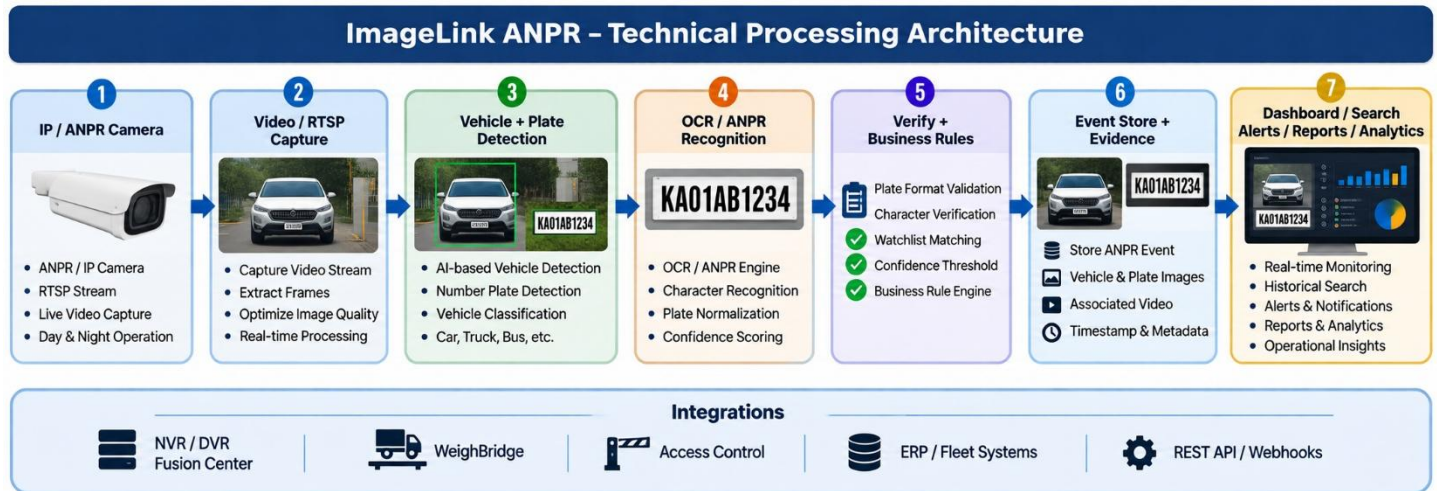
CAPABILITY	DESCRIPTION
ANPR / OCR	Automatic plate detection and recognition with confidence scoring.
Vehicle Classification	Classifies common vehicle types such as cars, truck, bus and 2 wheelers.
Verification	Character, format, confidence and watchlist validation.
Watchlists & Alerts	Blacklist, Whitelist and VIP matching with real-time alerts.
Evidence & Video	Vehicle image, plate crops, driver, timestamp and associated video reference.
Search & Analytics	Historical search, movement analysis, unique vehicle counts and reports.

3. Deployment Models

Standalone ANPR application for a single site or individual user. Integrated ANPR module within ImageLink NVR/DVR Fusion Center. Enterprise multi-site vehicle monitoring and analytics.

Multi-camera ANPR platform for centralized vehicle monitoring. ANPR automation for industrial vehicle transactions.

4. Technical Processing Architecture



Recommended ANPR Event Data Model

Each recognition event should maintain the recognition result, evidence, source-camera information and operational metadata required for investigation, reporting and integration.

FIELD	DESCRIPTION	FIELD	DESCRIPTION
Event ID	Unique event identifier	Event Time	Recognition timestamp
Plate Number	Recognized registration number	Vehicle Image	Full-vehicle snapshot
Plate Confidence	Recognition confidence score	Plate Image	Cropped plate image
Driver Face	Captures driver face	Driver Face image	Cropped driver image
Vehicle Type	Classified vehicle	Video Reference	Associated recording
Camera ID	Source camera identifier	Watchlist Status	Match information
Camera Name	Camera display name	Alert Status	Event alert state
Location	Physical location	Metadata	Additional event information
Direction	IN / OUT / UNKNOWN	Recognition Result	ANPR/OCR result

ANPR Server / Processing Workstation Requirements

COMPONENT	MINIMUM	RECOMMENDED
Processor (CPU)	Intel® Core™ i7	Intel® Core™ i9
Memory (RAM)	32 GB	64 GB
Storage	512 GB SSD	1 TB SSD
GPU	NVIDIA® GeForce RTX 4060 – 8 GB	NVIDIA® GeForce RTX 4060 – 8 GB
ANPR Processing Capacity	Up to 2 ANPR cameras	Up to 6 ANPR cameras

Capacity note: actual camera capacity depends on resolution, frame rate, simultaneous streams, ANPR engine configuration, traffic volume, lighting, recording load and additional AI/video analytics. Larger deployments can use additional processing nodes.

Interfaces, Integration & Deployment

AREA	SUPPORTED / APPLICABLE	PURPOSE
Video	IP Camera, RTSP, ONVIF	Live capture, camera connectivity and event evidence
Integration	REST API, Webhooks	External applications and event exchange
Security	Access Control, Barrier/Gate	Vehicle-based access actions
Operations	NVR/DVR Fusion Center	Linked video, playback and centralized monitoring
Industrial	NVR/DVR Fusion Center	Vehicle identification, gross/tare/net transactions
Deployment	Standalone / Centralized / Multi-Site	Scalable site and enterprise deployment

8. Key Technical Benefits

Searchable event-based vehicle intelligence.
Image and associated-video evidence.
API and webhook integration for enterprise workflows.

Real-time watchlist and security alerts.
Configurable direction and camera/location metadata.
Scalable from standalone ANPR to multi-site deployments.