

Neural Edge is a **camera-embedded license plate recognition (LPR) solution** designed to operate in both vehicle access control (**Stop & Go**) environments and high-traffic urban settings (**Free-Flow**).

All analytics are performed directly on the camera, **reducing the need for external servers and allowing for installation even in environments with limited connectivity.**

Advanced Security

- Detection of cloned license plates
- Identification of vehicles without license plates or with unreadable plates
- Reliable event logging for auditing and investigation
- Integration with evidence cameras for visual backup



Intelligent Vehicle Recognition

- Recognition of valid and compliant license plates from more than 110 countries including ADR Hazard ID and IMO Diamond plates
- Simultaneous detection of multiple license plates across up to two lanes
- Vehicle attribute recognition:
 - Make
 - Model/series¹
 - Color
 - Vehicle classification (car, motorcycle, bus, truck, van)



Real-Time Traffic and Behavior Analysis

- Vehicle counting
- Traffic statistics, including:
 - Vehicle types
 - Average speeds
- Instant speed measurement
- Direction-of-travel detection
- Free-flow detection up to 120 km/h²



Management and visualization results

- Real-time viewer for system monitoring
- Advanced search filters
- Export results
- Automatic snapshot for each license plate detected



Open and flexible integration and connectivity

- Image transfer via FTP
- Metadata transfer via:
 - TCP/IP (sockets)
 - HTTP
- Metadata insertion in the main VMS on the market
- Transfer of:
 - Emails
 - Message notifications
- Communication between cameras to share authorized user lists



Event-Based Automation and Actions

- List and rule management based on:
 - License plate
 - Date
 - Time schedule
- Automatic action triggering, such as:
 - Barrier opening
 - Activation of sirens or alarms
- License plate detection triggered by:
 - Vehicle movement
 - External trigger (inductive loop)



Key Benefits

- Lower total cost of operation
 - Without dedicated servers
 - Lower infrastructure
- High precision
 - 95%–99% depending on country and conditions
- Scalability
 - Perfect for small projects or complete cities
- Flexibility
 - Multiple detection modes
 - Simple integration
- Efficient connectivity
- Perfect for environments with limited resources





Compatible cameras

Brand	Model	Stop & Go	Urban	Lanes	Full Analytics
AXIS	P1467-LE (2.8-8mm)	✓		1	✓
AXIS	P3277-LVE (3-8.5mm)	✓		1	✓
AXIS	Q1686-DLE (9-50mm)		✓	2	✓
AXIS	P1465-LE (3-9mm)	✓		1	
AXIS	P3275-LVE (3.4-9.8mm) (10.8-28.2mm)	✓		1	
AXIS	P1465-LE (10.9-29mm)		✓	2	
AXIS	P1455-LE (10.9-29mm)		✓	2	
AXIS	Q1800-LE (7-138mm)		✓	2	✓
AXIS	Q1805-LE (4.3-138mm)		✓	2	✓
HANWHA	PNO-A931IR (6.91-214.7mm)		✓	2	✓
HIKVISION	iDS-2CD7A46G0/H-IZHSY (2.8-12mm)	✓		1	✓
HIKVISION	iDS-2CD7A86G0/H-IZHSY (2.8-12mm)	✓		1	✓
HIKVISION	iDS-2CD7A46G0/H-IZHSY (8-32mm)		✓	2	✓
HIKVISION	iDS-2CD7A86G0/H-IZHSY (8-32mm)		✓	2	✓
HIKVISION	iDS-2CD7A45G2/H-IZHSY (4.7-118mm)		✓	2	✓
VIVOTEK	IP9165-LPC-V2 Kit (9-50mm)		✓	2	✓
VIVOTEK	IB9365-EHTV-V2 (4-9mm)	✓		1	✓
VIVOTEK	IB9387-EHTV-V3 (2.7-13.5mm)	✓		1	✓
VIVOTEK	IB9387-EHTV-V3 (12-40mm)		✓	2	✓
VIVOTEK	IB9367-EHTV-V2 (2.7-13.5mm)	✓		1	

Neural Edge is fully integrated into **AXIS** cameras with **ARTPEC-7**, **ARTPEC-8** and **ARTPEC-9** SoCs.

The cameras marked as **Full analytics** in the table above are those that, with Neural Edge support, in addition to license plate recognition, **the detection of vehicles without a license plate or with an invalid license plate**, and the following attributes: **speed, make, color, model or line¹ and vehicle classification**. (car, motorcycle, bus, truck and van).

Neural Edge Camera Kits

There are kits available that include both the camera and Neural Edge license to provide a complete, ready-to-install solution, without relying on other suppliers and with the Neural Labs seal of quality.

Urban Edge Kit options are available for scenarios where vehicles travel at speeds of **up to 120 km/h**, or **Stop & Go Edge Kits** for access control. Consult your Neural Labs agent to find out which Kit or compatible camera best suits your project.

¹ Available in select countries. Consult your agent

² Depending on camera model