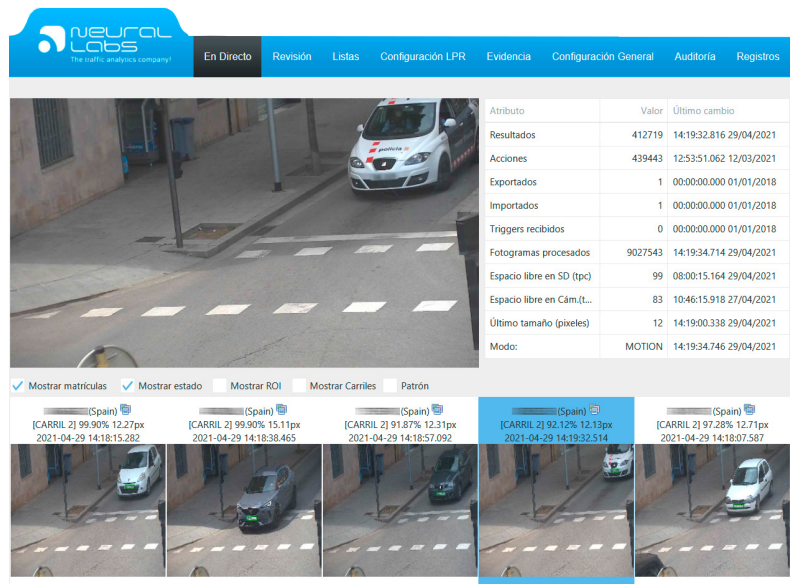# Full Neural Labs License Plate Recognition power embedded in one camera

HIGH PERFORMANCE LPR

NEURAL EDGE is the **Neural Labs'** embedded solution for License Plate Recognition (LPR/ ANPR) designed for **urban environments** and **vehicle access control**.

The LPR analysis is executed **inside the camera**, using its own processing resources, reducing the servers´ costs and offering a solution to installations with limited connectivity resources.

ACCESS CONTROL APPLICATION

With **NEURAL EDGE**, you can configure access control without servers (serverless), making the cameras interact with each other to provide access to vehicles according to their license plate, day of the week, schedule, etc.

This application can manage the parking lot access acting on the gate barriers, directly from the camera digital output and based on lists that can be set by the user, all through the Neural Edge web interface inside of the camera.

URBAN TRAFFIC

In free flow traffic, until 2 lanes and up to 120km/h, **NEURAL EDGE** is especially helpful for security, mobility, and traffic installations with network topologies where the links are limited or unstable. **NEURAL EDGE** is embedded in traffic cameras to offer an all-in-one solution that offers all the Neural Labs' LPR power.

neural Labs
The traffic analytics company!

Neural Labs S.L.
Altimira 48, 2nd Floor, 08290
Cerdanyola del Vallès, Barcelona
Spain

+34 93 820 56 94
info@neurallabs.net
www.neurallabs.net

EASY TO INTEGRATE

NEURAL EDGE offers several integration options designed to be user friendly and supplement any access control, security, mobility, traffic, or logistics system.

It includes the sendout of metadata (data and images) through:
- XML/JSON messaging by sockets.
- HTTP calls.
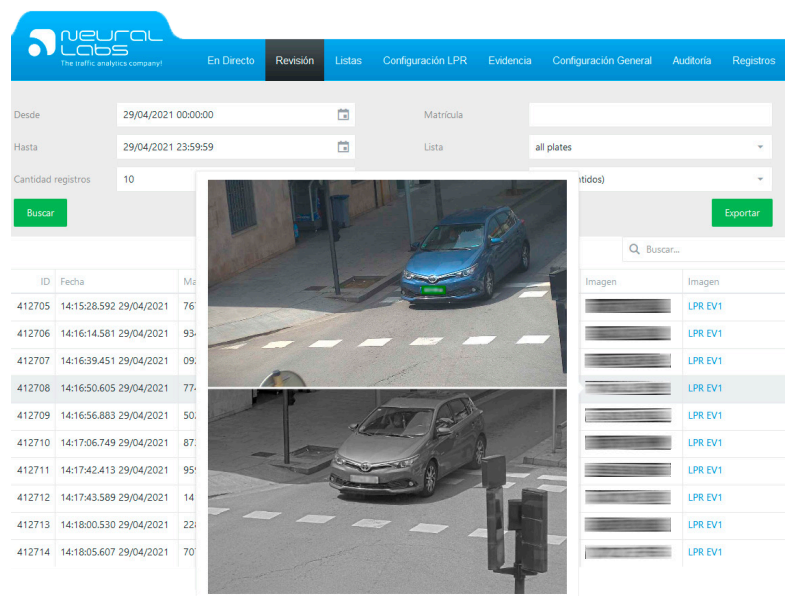- TELNET.
- Email.
- ONVIF events.
- And more.

MORE THAN AN LPR

NEURAL EDGE is designed to meet the needs of the most demanding clients. It's easy to configure and includes all the tools needed to diagnose a proper function and to keep a healthy system.

Amongst its most demanding functions, it includes a results viewer with many selection filters and exportation possibilities. It also offers a logs and actions audit registry that the software creates according to the lists and rules configured. Furthermore, it includes an automatic purge logic relying on the memory availability.

SCALABILITY

NEURAL EDGE is integrated with Neural Server Suite for more complex scenarios where additional video analytics are required (color, make or classification), or applications like capacity control or sanctions (red light crossing, wrong turn, wrong way etc.) are needed.

FUNCTIONALITIES

- Recognition rate between 95% and 99% (depending on country and installation conditions).
- It recognizes license plates from 70 countries. Ask your sales agent to check your country availability.
- Multicountry. Recognizes several countries simultaneously.
- Recognition of all the legal and current license plates of each country, including, diplomatic ones, motorcycles, etc.
- Direction detection.
- Up to 2 lanes definition capability.
- Area of interest definition capability.
- Complete lists and rules management based on license plate, schedule and day that allow actions like:
  - Activate the digital output of the camera to open or close a barrier gate or activate an alarm siren.
  - Send an email.
  - Send notifications by WhatsApp.
  - Send metadata to third party systems through protocols TCP/IP (sockets), HTTP and TELNET.
  - Insert metadata in several VMS (ask your agent about VMS integrations).
  - Transfer the images by FTP.
  - And much more.
- Response time between 100 and 1000 ms (depending on scenario, camera model and country).
- License plate recognition by movement detection or by external trigger (inductive loop).
- Filters by angles, reliabilities, characters amount, license plate size. And non- repeating result control.
- Supported explorers: IE, Edge, Chrome, Firefox.
- Multilanguage.
- Capability to integrate evidence cameras to get a snapshot of each license plate detected. Useful to relate the context of the recognized vehicle.
- Real time viewer for operation checkout.
- Historical results and actions queries with many filters and exportation possibility.

Neural Labs S.L.
Altimira 48, 2nd Floor, 08290
Cerdanyola del Vallès, Barcelona
Spain

+34 93 820 56 94
info@neurallabs.net
www.neurallabs.net

NEURAL EDGE

LPR SOLUTION EMBEDDED IN CAMERA

COMPATIBLE CAMERAS*

BRAND	MODEL	SCENARIOS		LANES
		STOP&GO	URBAN	
AXIS	P1455-LE / lens 9 mm	✓		1
AXIS	P1455-LE / lens 29 mm		✓	2
AXIS	Q1700-LE		✓	2
VIVOTEK	IB9365-HT-A c/ lens 4-9 mm	✓		1
VIVOTEK	IB9365-HT-A c/ lens 12-40 mm		✓	1
VIVOTEK	IP9165-LPC-v2 Kit (Highway)		✓	2
VIVOTEK	IB9387-HT	✓		1
VIVOTEK	IB9387-HT-A	✓		1
VIVOTEK	FD9387-HTV-A	✓		1
VIVOTEK	IB9367-EHT-v2	✓		1

*Ask Neural Labs for advice about the most adequate model for your project and/or to discover more available cameras.

All the previous cameras with **NEURAL EDGE** recognize vehicles' license plates at up to 90 km/h, except the IP9165-LPC-v2 Kit (Highway) that also recognizes vehicles at up to 120 km/h and offers the aditional data of vehicle's color and classification (car, motorcycle, van, bus or truck).

WARRANTY

NEURAL EDGE includes a 12 months warranty starting from the license activation moment. Meaning that the final user has the right to request the new available versions of the product during the warranty period. The client also has the right of requesting any software flaws correction.

The warranty is extendible. If the license is still active, the extension can be prepaid with 10% of the current license cost for a year. In case the warranty has already expired, the cost is 18% of the value of the last years license.

ORDER INFORMATION

CODE	DESCRIPTION
NL EDGE URBAN AXIS	Neural Edge Urban with Axis camera
NL EDGE URBAN VIVOTEK	Neural Edge Urban with Vivotek camera
NL EDGE URBAN + CLA	Neural Edge Urban with Vitotek camera for 120 km/h + vehicle color and classification
NL EDGE S&G VIVOTEK	Neural Edge Stop&Go with Vivotek camera
NL EDGE S&G AXIS	Neural Edge Stop&Go with Axis camera