

NEURAL SERVER APPLICATIONS FOR PORTS & LOGISTICS:

PORT

- License plate and container recognition in access control connection to the TOS.
- Container code recognition on cranes for tracking, etc.
- Average speed radar (within the port installations).
- Access control of restricted zones

MOVEMENT CONTROL WITHIN CUSTOMS AREAS

- Automation of the customs control process, minimizing lead-times.

LOGISTICS

- Automation of the access controls connected to the ERP systems.

LEARN MORE ABOUT
NEURAL LABS HERE



NEURAL SERVER

PORTS AND LOGISTICS



- **NEURAL SERVER®**, is designed to be located in an access control, in loading and unloading cranes, etc. It recognizes the license plates of the trucks and the ID of the containers from several cameras grouping them in a logical fashion to process several sides of the container thus obtaining a much more precise result in the recognition.
- **NEURAL SERVER®** works in an autonomous way, storing the results in its database and can verify license plate or ID lists of the containers in real time.

NEURAL SERVER® can also detect speed, direction, lane, color of the truck and the type of vehicle.

NEURAL SERVER® uses various grouped cameras per lane for container code recognition. The strength of the system is the ability to manage several lanes from one recognition post.

MINIMUM REQUIREMENTS

CPU

- i5, i7 or superior processors.

MEMORY

- 2 GB RAM

OPERATING SYSTEM

- Windows Server 2012 R2, Windows 8, Windows 7, Windows 10

COMPATIBILITY

SUPPORTED PROTOCOLS

- RTSP
- H264
- Motion JPEG
- JPEG
- Gige Vision
- IDS-IMAGING
- AVI
- IDS-IMAGING
- POINT GREY

SUPPORTED VMS

- MILESTONE
- NETWORK OPTIX WITNESS
- WISENET WAVE
- DW SPECTRUM
- AVIGILON CONTROL CENTER
- DIGIFORT
- HUAWEI
- INDIGOVISION
- BOSCH BVMS
- MIRASYS
- TYCO (Exacq)
- PELCO (VideoExpert)
- 3xLOGIC
- OnSSI
- NUUO
- VAST

NEURAL SERVER

PORTS AND LOGISTICS

MAIN FEATURES

- **High recognition rate**
- Recognises containers from **40 and 20 feet (ISO 6346 Standard)**
- Recognises containers without control digit
- Uses several cameras to **obtain the best result.**
- Recognises **license plates from more than 70 countries.**
- Admits **evidence cameras.**
- **Multi list management**, generating actions in function of these (alerts, opening barriers, etc.).
- For each container we store:
 - Container image
 - Container ID.
- Extra information if available (dimensions, country, etc.)
- Date & time, GPS position, etc.
- Evidence images associated.
- **Easy to integrate**, Neural Server stores the results in an open database (SQL Server) and launches, if desired, XML/JSON messages to another application.



A.I. FOR SMART CITIES AND LOGISTICS

We advise you on the
best practices for your
specific project.

We recommend you
the proper hardware
to guarantee the best
results.

Contact us to receive
personalised attention.

LEARN MORE IN

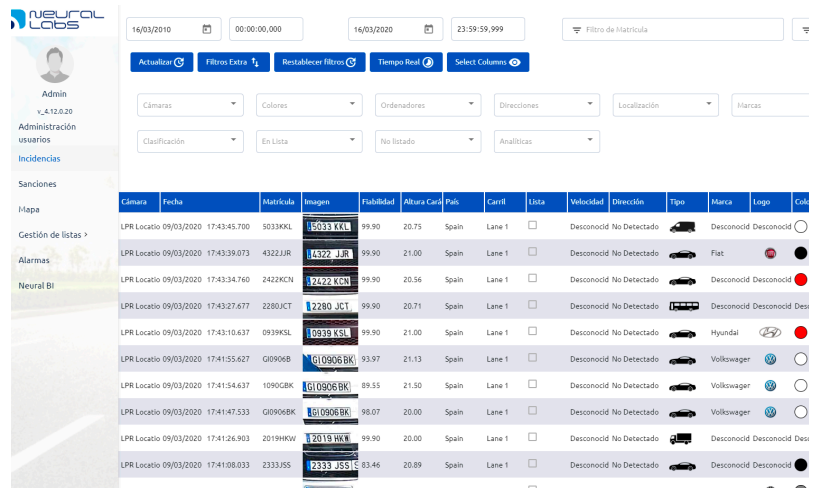


NEURAL SERVER

PORTS AND LOGISTICS

Includes operator software Neural Viewer

- Search the historical by detections for:
 - Container or license plate, type, make, speed,color, lane, etc.
- Multiple user management.
- Visualise in real time.
- Multi list. List management & associated actions.
- Operator alerts
- Pre & post events recording.
- Fine management
- Import / export to Excel.
- Automatic reporting.



Cámara	Fecha	Matrícula	Imagen	Fiabilidad	Altura Car	País	Carril	Lista	Velocidad	Dirección	Tipo	Marca	Logo	Col
LPR Locato	09/03/2020	17:43:45.700	5033KXL	99.90	20.75	Spain	Lane 1	<input type="checkbox"/>	Desconocid	No Detectado		Desconocid	Desconocid	
LPR Locato	09/03/2020	17:43:39.073	4322JLR	99.90	21.00	Spain	Lane 1	<input type="checkbox"/>	Desconocid	No Detectado		Fiat		
LPR Locato	09/03/2020	17:43:34.760	2422KCN	99.90	20.56	Spain	Lane 1	<input type="checkbox"/>	Desconocid	No Detectado		Desconocid	Desconocid	
LPR Locato	09/03/2020	17:43:27.677	2280JCT	99.90	20.71	Spain	Lane 1	<input type="checkbox"/>	Desconocid	No Detectado		Desconocid	Desconocid	
LPR Locato	09/03/2020	17:43:10.637	0939KSL	99.90	21.00	Spain	Lane 1	<input type="checkbox"/>	Desconocid	No Detectado		Hyundai		
LPR Locato	09/03/2020	17:41:55.627	G10906BK	93.97	21.13	Spain	Lane 1	<input type="checkbox"/>	Desconocid	No Detectado		Volkswagen		
LPR Locato	09/03/2020	17:41:54.637	G10906BK	89.55	21.50	Spain	Lane 1	<input type="checkbox"/>	Desconocid	No Detectado		Volkswagen		
LPR Locato	09/03/2020	17:41:47.533	G10906BK	98.07	20.00	Spain	Lane 1	<input type="checkbox"/>	Desconocid	No Detectado		Volkswagen		
LPR Locato	09/03/2020	17:41:26.903	2019HGW	99.90	20.00	Spain	Lane 1	<input type="checkbox"/>	Desconocid	No Detectado		Desconocid	Desconocid	
LPR Locato	09/03/2020	17:41:08.033	2333JSS	83.46	20.89	Spain	Lane 1	<input type="checkbox"/>	Desconocid	No Detectado		Desconocid	Desconocid	

NEURAL SERVER PORTS & LOGISTICS TECHNICAL SPECIFICATIONS SHEET

Processing time	20 to 600 ms	
Recognition rate	95%* (depending on the acquisition quality and country of the plate).	<i>This is the minimum value. The system can perform higher when using the adequate hardware and configuration</i>
Images per second/camera	5 to 20	5 (depending on the PC or server)
	Free Flow version	10 to 20 (depending on the PC or sever)
Maximum number of cameras	Unlimited, depending on the PC or Server	
Supported Protocols	MJPEG	JPEG
	H264	AVI
	RTSP	Gige Vision
	IDS Imaging	DirectShow
Supported cameras	Point Grey	
	AVT, Axis, Vivotek, IndigoVision, Bosch, Avigilon, HikVision, Huawei, Dahua, Messoa, IDS-IMAGING, PointGrey, Basler, JAI, JVC	Mobotix, Pelco, Sony, etc. (specific models of each brand).
Other video sources	Avi Files	
	Jpeg, Bmp Files	
Integrated Video Recording Systems	Milestone (Express version, minimum)	Pelco
	Network Optix Witness	Digifort
	Wisenet Wave	DW Spectrum
	Axxon Soft, Indigo Vision	Avigilon Control Center
	Bosch BVMS, Nuuo	3xLOGIC, Huawei
	Exacq (Tyco), Mirasys	OnSSI
Vertical codes	Yes	
Codes of 2, 3 and 4 lines	Yes	
Codes without control digit	Yes	
Operative System	Windows 7, Windows Server 2012 R2, Windows 8, Windows 10, all 64 bits	
Database	MS SQL Server Express	Standard and Enterprise versions supported, but not included
Included Analytics (NO extra cost)	Container recognition Lane detection	Detection of the direction of the vehicle
Detected fines	Wrong turn Red light control Pedestrian zone management	Wrong way Average speed radar (section control)
Optional Analytics (charged separately)	Make Detection Color Detection	Instant speed calculation Vehicle classification
Function modes (per camera)	Free Flow By external trigger By motion detection	
Third party integration	XML / JSON messages via socket SQL Server database access	
Supported Countries	More than 70 countries	Ask your sales agent