ANPR LUMO

Quick reference guide

2025-02-07 | v1.07 | Doc. no. 5286751

Safety Precautions

The following safety precautions must be observed during normal use, service and repair.

- The ANPR shall be connected to safety ground.
- Disconnect the power supply before removing any parts.
- The ANPR shall only be installed and serviced by qualified and trained personnel.
- To be sure of safety, do not modify or add anything other than mentioned in this manual or indicated by NEDAP N.V.
- CAUTION: for continued protection against risk of fire, replace fuses only with the same type and rating.
- The ANPR can be powered from a low power, Class 2 power supply, in compliance with local regulations or through PoE (802.3af) or PoE+ (802.3at).
- The product is to be connected only to PoE networks without routing to the outside plant.
- The ANPR is equipped with an InfraRed illuminator. The human eye will not or slightly see this light coming from the illuminator. Do not look into the ANPR lens directly from close range or for more than 100 seconds. Eyes can be damaged by not taking these precautions. During normal use of the ANPR at a vehicle gate, reading plates, there is no risk to the public.
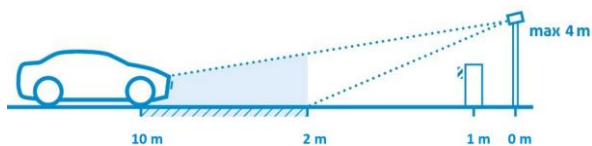
Mounting The ANPR

Determine how to mount the ANPR, onto a pole or behind the barrier. Mount behind the barrier to ensure recognition right in front of the barrier. Important mounting instructions are:

- **Best operating distance is between 2 to 10 meters.**
- **Angle between ANPR and number plate should be smaller than 25 degrees.**
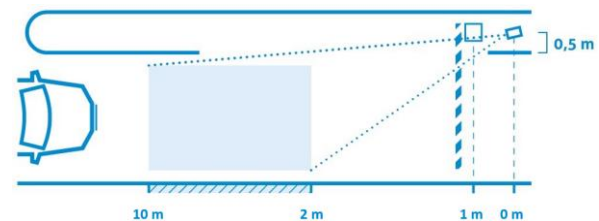
Pole mounting
The ANPR is positioned directly behind or in front of the actual barrier onto a pole. Recommended installation height is 2m50. In this position license plates directly in front of the barrier cannot be read. When overhead installation is an option, the ANPR can at best be installed in the center of the lane, above the lane.

Behind barrier mounting
The ANPR is positioned behind the barrier at bumper height.
If there is space behind the barrier and the sight is not blocked, then the best place for the ANPR is at bumper height (0.5m height) about 1 to 2 meters behind the barrier. A vehicle just in front of the barrier is still recognized in that case.

Dimensions

118

76.5

M6 (4x)

104

76.5

104

M4x12 (6x)

91

35

60° max

60° max

34

66

Ø7 (4x)

65

80

83

104
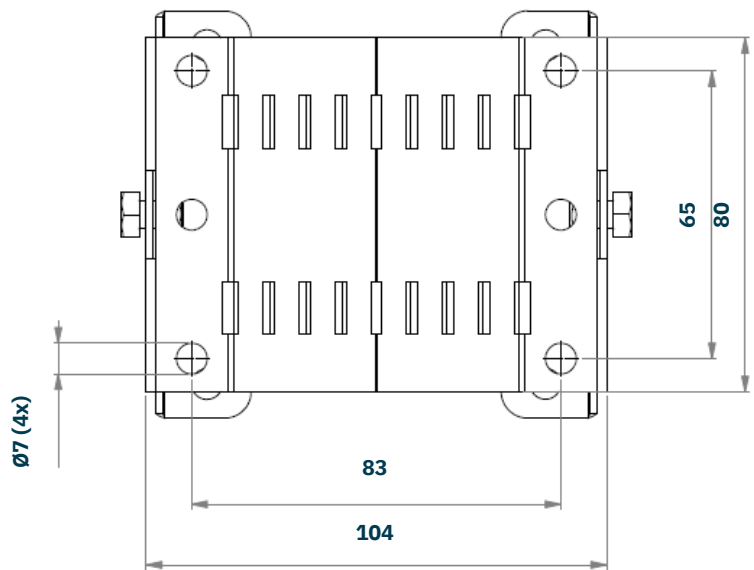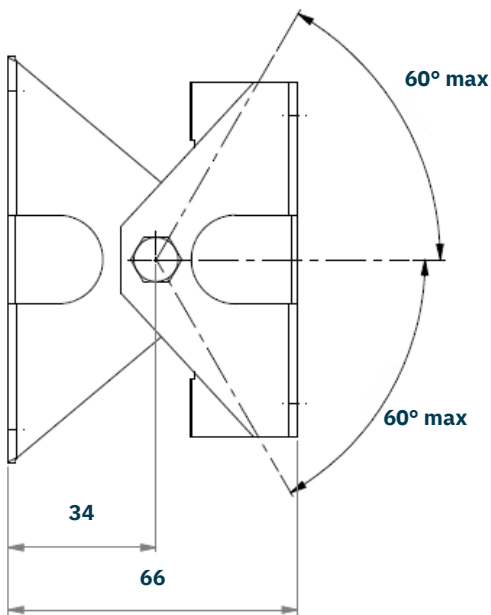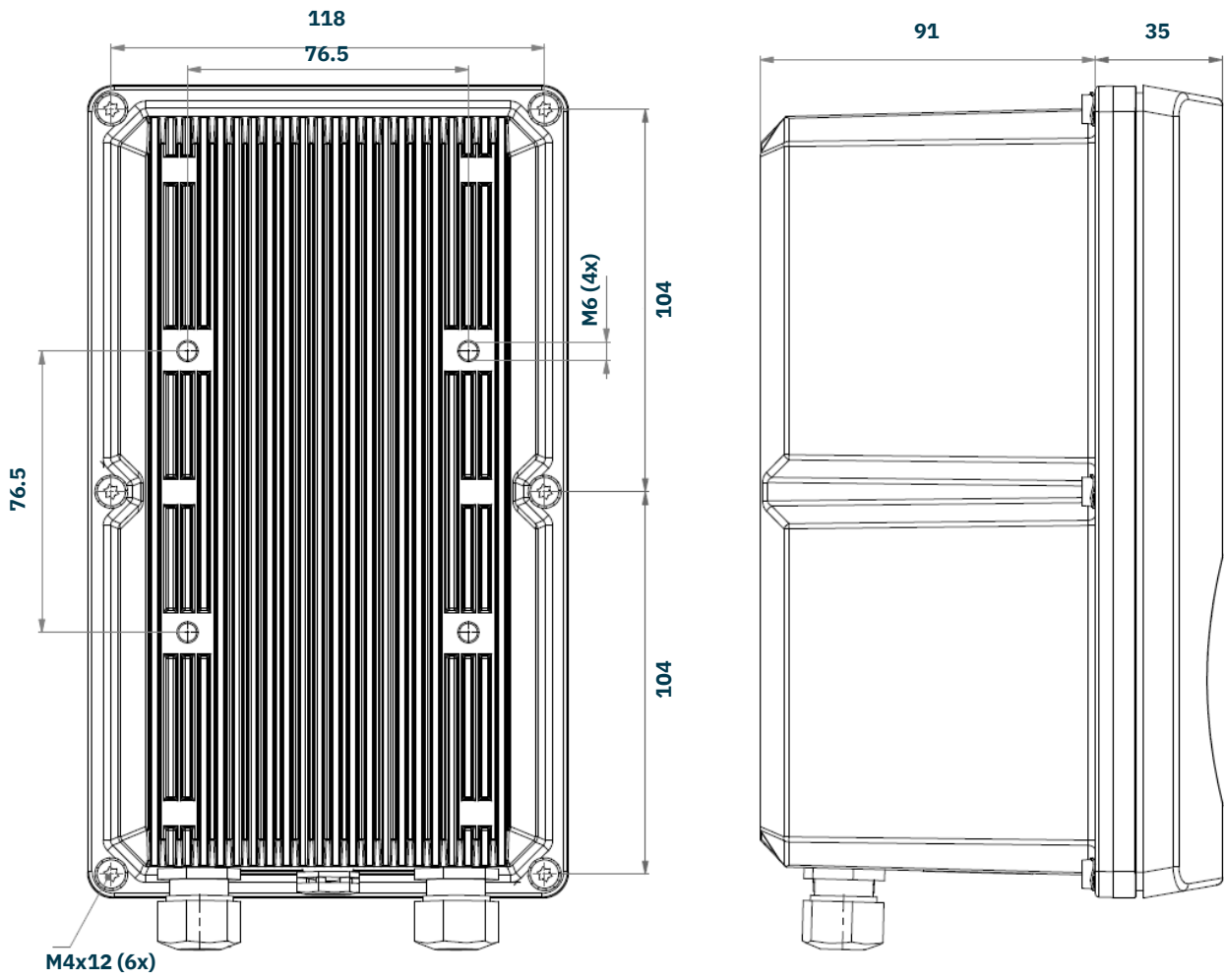
Connections

Ethernet connection

The Ethernet communication cable (Cat5e, 5 meter) is already fitted to the RJ-45 network connector. You can also power the camera using PoE (802.3af) or PoE+ (802.3at).

Multi-wire cable

Power supply	Red	Power supply +24VDC ~ 1A
	Blue	Ground 0V
	Black	Ground 0V
Rs485 connection	Yellow	RS-485 A
	Green	RS-485 B
	Purple	RS-485/Wiegand GND
Wiegand	White	Wiegand Data-0
	Brown	Wiegand Data-1
Relay output 1	White/Green	Relay output 0 (normally open contact, U_{max} = 24VDC, I_{max} = 2A)
	Brown/Green	Relay output 0 (common contact)
Relay output 2	White/Yellow	Relay output 1 (normally open contact, U_{max} = 24VDC, I_{max} = 2A)
	Brown/Yellow	Relay output 1 (common contact)
Trigger input 1	Pink	Digital input IN+ (optocoupler positive contact, U = 5 - 24VDC)
	Gray	Digital input IN− (optocoupler negative contact)
Trigger input 2	Gray/Pink	Digital input IN+ (optocoupler positive contact, U = 5 - 24VDC)
	Red/Blue	Digital input IN− (optocoupler negative contact)

The network cable and the multi-wire cable should be placed parallel to each other.

Assign An IP-Address

Enter the default IP-address in the address bar of your web browser.

Default IP address: **192.168.3.15**

The login window appears where the user is asked to type the username and password.

Username: **admin**
Password: **secret**

Note: We strongly advise against exposing the camera's web interface directly to the internet. However, if this is necessary, we recommend implementing the following security measures at a minimum:

- Change the default passwords.
- Enable SSL interface using official certificates.
- Use firewall with proper security and IP Accesslists.

Go to the system configuration and setup the network configuration as desired. If required, now also other configuration settings may be changed.

Configure The ANPR

By default the camera's exposure settings are pre-configured to suit most situations, The following items needs to be configured after installation.

- Region of interest
- Output messages (actions)

Drive the vehicle into the position where it should be possible to read it's license plate. Connect to the ANPR using your web browser and login. After a successful login you will see the live video in the menu item "HOME". On the right side of the page 'live' text results are shown. It might be necessary to adjust the ANPR alignment.
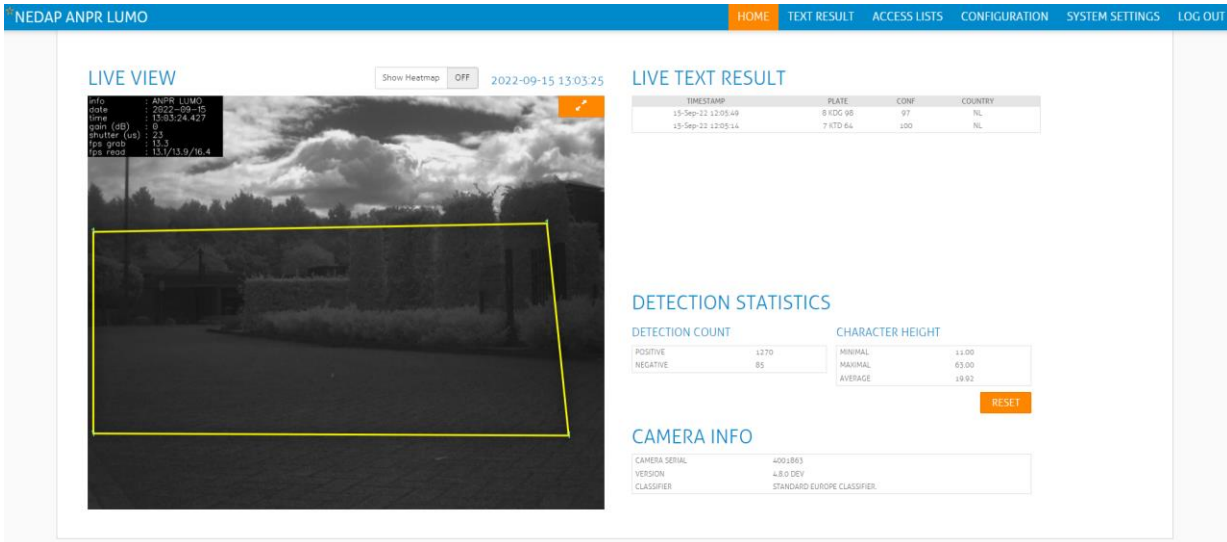
The Yellow box within the LIVE VIEW represents the region of interest, this region of interest can be changed in the configuration menu.

Region of interest

After correct installation of the camera, it is recommended to change the region of interest. This can be done by moving the green points to the desired position. Press the "Apply" button next to the corresponding item to permanently store the region of interest.
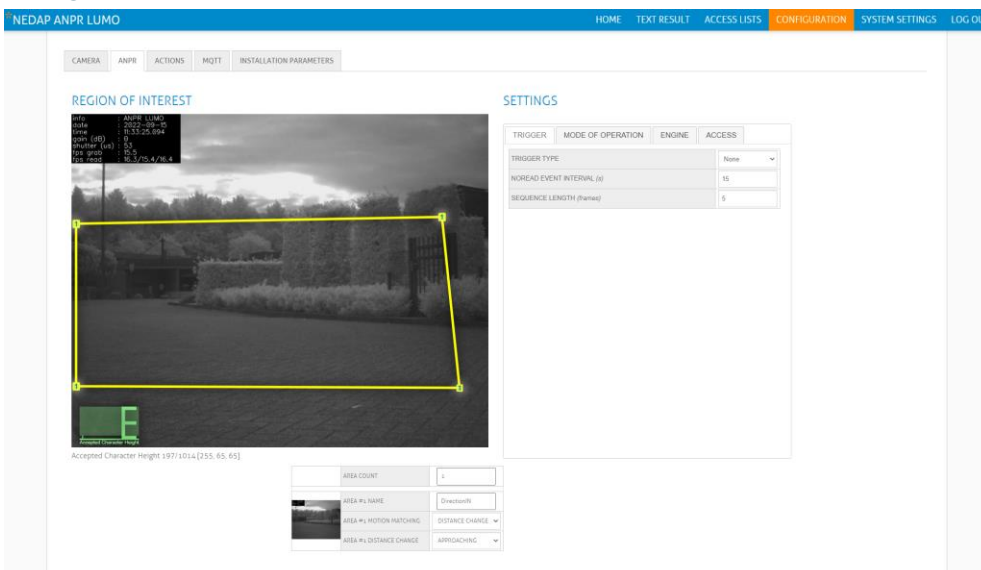
For more details about the menu items, see the installation guide on https://portal.nedapidentification.com
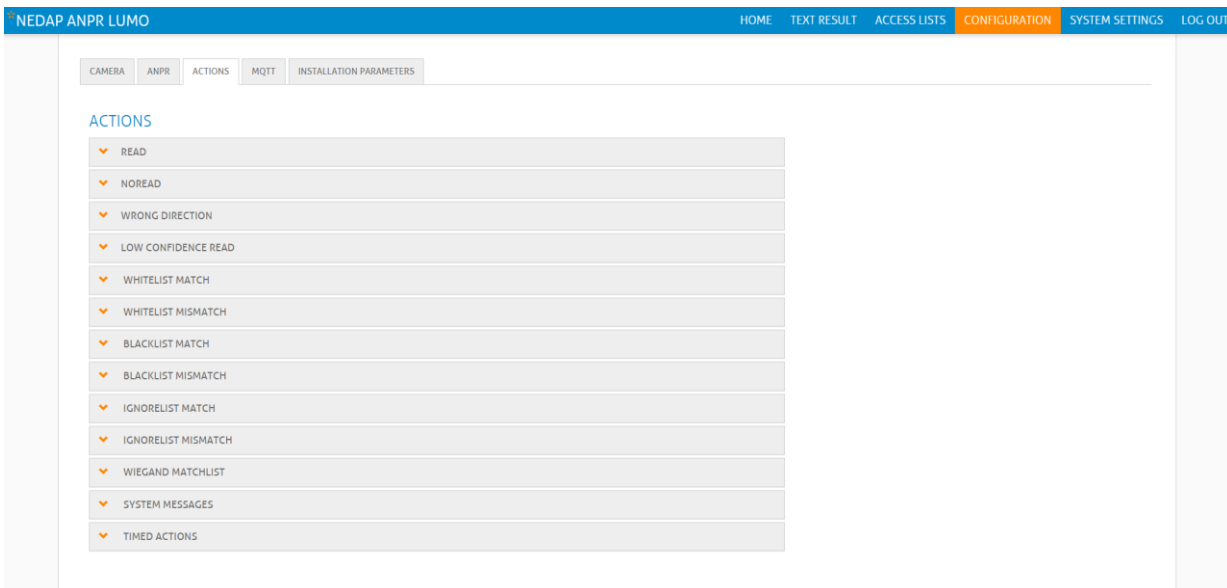
ACTIONS

In the actions menu, you can define what actions the camera should perform on certain events.

READ   When ANPR recognizes a plate

NOREAD   When there are no plates recognized between given limitations set under ALPR Configuration-Trigger (i.e. Start and Stop trigger, or Start trigger and Trigger timeout).

WRONG DIR.   Wrong Direction occur when a new license plate is detected, but it moves in a direction which is not within the allowed direction range defined for the area in which this plate is located.

LCR   Low confidence read event is created when a plate is read but the confidence level is lower than set in parameter "LIMIT OF LOW CONF (%)"

LIST MATCH   The action that should be performed when the plate is found on one of the Match lists.

LIST MISMATCH The action that should be performed when the plate is not found on one of the lists.

TIMED ACTIONS Are triggered by a timer in regular intervals. For example, the Lumo can send a live image every hour to a server.

The following actions can be added to any of the events, you can also make combination of actions.
Ftp Upload, Ftp Database, Store, Digital out, Serial, TCP, HTTP, HMAC_HTTP, WIEGAND26, WIEGAND64

For all actions you can define for which Area of interest the action should be performed. E.g. ALL AREAS or just one selected AREA.

An example message for a serial action is: %LP%%CR%%LF%. This will output the number plate with a CRLF.
All available patterns can be found in the installation guide.

More detailed information can be found or our knowledge center, please visit:
https://support.nedapidentification.com

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B   Document revision

Version	Date	Comment
1.07	2025-02-07	Added knowledge center, and small text improvements
1.06	2022-10-18	Created in new style