

# ANPR Lumo

license plate camera for vehicle access control

## Key features:

- ✓ all-in-one license plate camera
- ✓ barrier-controlled and free-flow applications
- ✓ captures number plates from 2 - 10 meters (6.5 to 33 feet)
- ✓ object speeds (freerun) up to 130 km/h\*
- ✓ no additional software required
- ✓ classifiers from countries worldwide available
- ✓ supports industry-standard communication interfaces
- ✓ REST API for seamless third party integration
- ✓ built-in vehicle access control features
- ✓ OSDP v2, including secure channel communication

The ANPR Lumo is an all-in-one license plate camera, including embedded software, analyzer and IR illuminator. With a range of action of 2 to 10 meters (6.5 to 33 feet), the advanced camera ensures a smooth recognition of vehicles.

Typical applications include vehicle access control, automatic toll collection, free flow applications at parking facilities or other situations in which it not desirable to issue RFID tags. If vehicles need to be granted access temporarily or incidentally, the license plate camera is the perfect solution.

## High accuracy

Deep learning algorithms enable a high accuracy in both regions with common license plate formats, like Europe, and regions with non-standardized license plate formats, such as the USA and Pacific. In addition, the ANPR Lumo is able to recognize ADR Hazard Identification Numbers (HIN), also known as Kemler Codes, that are used for road transport of dangerous goods.

## Stand-alone solution

The ANPR Lumo offers built-in vehicle access control features. The option to configure time-based access control lists (white list, black list, ignore list, etc.) in the web based software enables the camera to be used as a stand-alone solution. An acceslist can contain up to 100.000 license plates.

## User-friendly configuration

The web based software enables easy configuration of the ANPR Lumo. It allows for configuration of the output messages for RS485, Wiegand or Ethernet. In addition, digital I/O, region of interest, network settings, etc. can be defined.



## Worldwide license plate coverage

The ANPR Lumo covers a broad list of world-wide countries supporting a large range of IR-reflective license plates. The camera comes pre-loaded with 5 classifiers covering plates from 28 countries. Other classifiers can be easily downloaded and installed.

## Third party integrations

The ANPR Lumo is equipped with a REST API that allows third parties to easily integrate the camera. The REST interface enables third party systems to request the last read license plate, add license plates to the white list, etc.

## Easy installation

A mounting bracket is standard included with the ANPR Lumo to ensure easy installation. With this bracket, the license plate camera can be mounted onto a wall or pole. It also enables adjusting of the camera at the desired angle to ensure reliable reading.

## Communication interfaces

The ANPR Lumo supports the industry-standard communication interfaces: RS485, Wiegand and Ethernet. This enables seamless integration into any existing or new access control or parking system.

## Supporting security protocols

As most access control panels support Wiegand. The ANPR Lumo converts license plate numbers into Wiegand ID strings. The builtin Wiegand option ensures easy and seamless integration into any new or existing access control panel.

The ANPR Lumo supports the Open Supervised Device Protocol (OSDP v2) for automatic vehicle identification application. OSDP enables advanced and secure communication between the ANPR Lumo and the controller.



Technical information	ANPR Lumo
Part number	9986138 ANPR Lumo
Dimensions	221 x 131 x 126 mm (8.7 x 5.2 x 5 in)
Color	RAL9006 chassis and RAL5011 cover
Weight	2.5 kg (5.5 lbs)
Protection class	IP65 (approx. NEMA4x)
Material	Cover HIBS, Housing Die-casting Silafont 3
Operating temperature	-20 ... +55°C (-4... +131°F)
Storage temperature	-30... +55°C (-22... +131°F)
Relative humidity	10% ... 93% relative humidity, non-condensing
Power supply	24 VDC +10% linear supply recommended or POE PoE (802.3af) or PoE+ (802.3at)
Power consumption	8 Watt
Read range	Distance: 2 to 10 meters (6.5 to 33 feet) Width: Up to 3,5 meters (11.5 feet)
Object speed	Freerun: Up to 130 km/h* Triggered: Up to 250 km/h
Supported license plates	IR reflective number plates, (non)standardized license plates, ADR HIN
Camera optics	12 mm (½ inch)
Image sensing resolution	1/1.8" CMOS sensor, 1280 x 1024 pixel, SXGA
Camera illuminator	IR (850 nm)
Communication interfaces	1 line half duplex selectable baud rate, cable distance 1200 meter (3937 feet) 10/100 Mbps, TCP, UDP, FTP, HTTP, DHCP Wiegand 26 SHA1, Wiegand 64, Custom Wiegand, OSDP v2, including secure channel communication
Relay output	2 relay outputs
Input	2 digital inputs (opto-isolated)
Output	Read results from number plates and/or images taken by the camera
Cable specifications	Network (CAT5E) Power + IO: (LiCY) 8 x 2 x 0.14 mm <sup>2</sup>
Cable length	Network: 5 meters (16.4 feet) Power + IO: 5 meters (16.4 feet)
Data message customization	RESTful interface (API) and String syntax fully configurable for integration with access control systems and third party software
Storage	10 GB
Standards	CE, FCC, UL Listed, UKCA Consult your Nedap representative for country specific standards
Included accessories	Pole/wall mounting kit included
Document version number	2.0

\* Depending on reader installation, software settings and external conditions.

