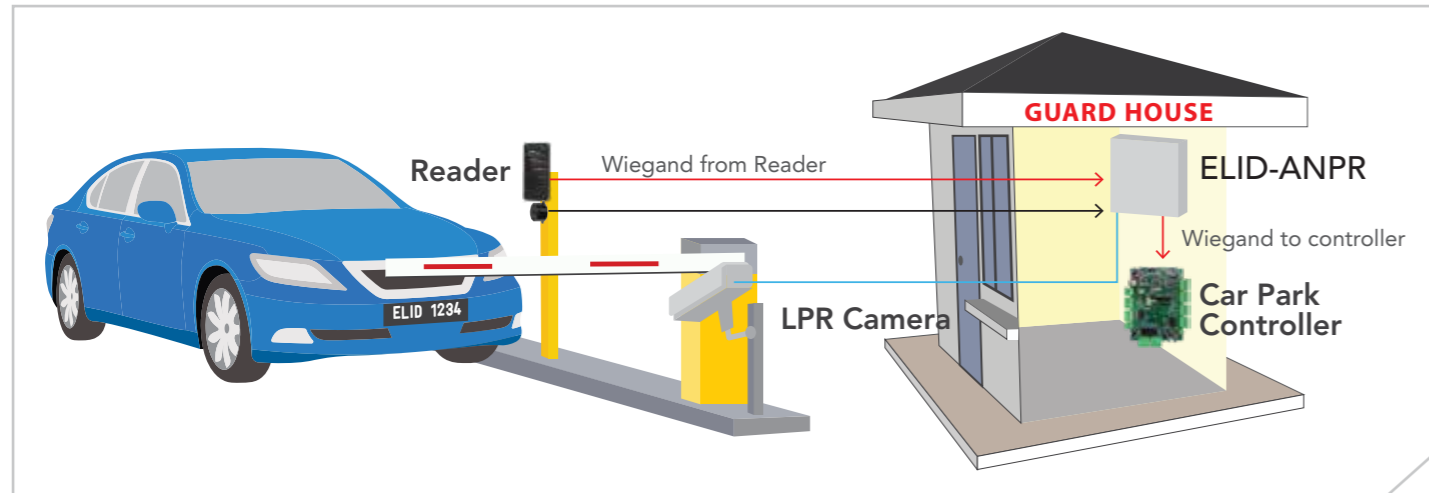


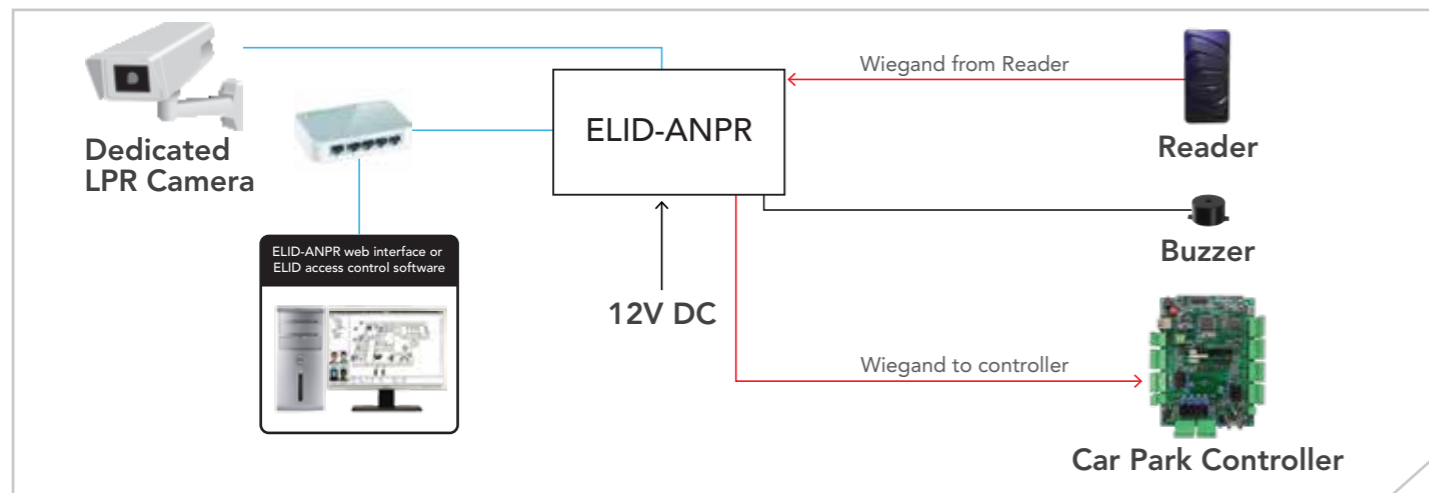
SPECIFICATIONS

Model no.	EV-200
Device platform	Linux
Working distance	Between 2 metres and 12 metres
License plate detection accuracy	>99%
License plate recognition accuracy	>95%
OCR algorithm	Deep neural nets
Recognition alert	Relay output to buzzer
Ethernet	Gigabit Ethernet 10/100/1000
Wiegand output	YES
Controller compatibility	Can be integrated with any standard access controller that takes wiegand input
User interface	ELID-ANPR web interface or ELID access control software
Maintenance	Firmware upgrade through web interface
Power supply	12V/5A DC
Operating temperature	-10°C - 60°C (14°F - 140°F)

SYSTEM INSTALLATION



SYSTEM CONFIGURATION



ELID-ANPR

Access Your Premises Effortlessly With Automatic Number Plate Recognition

It is time to take your access control system to the next level. With ELID's latest automatic number plate recognition technology, you can now use your vehicle's license plate number as your credential to gain access to your secured premises. ELID-ANPR does not just make driving in and out of your premises fast and convenient, it makes the actual process of gaining authorized access completely effortless. No more wasting time searching for your access card and rolling down your car windows to badge it. No more getting soaked while extending yourself trying to reach that entry/exit reader in heavy rain!



For more information: Check out the website at www.elid.com, or contact our dealers. ELID has a policy of continuous research and development, and reserves the right to change specifications without notice.

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we make your world secure

ELID-ANPR

Access Your Premises Effortlessly With Automatic Number Plate Recognition

WHAT IS ELID-ANPR?

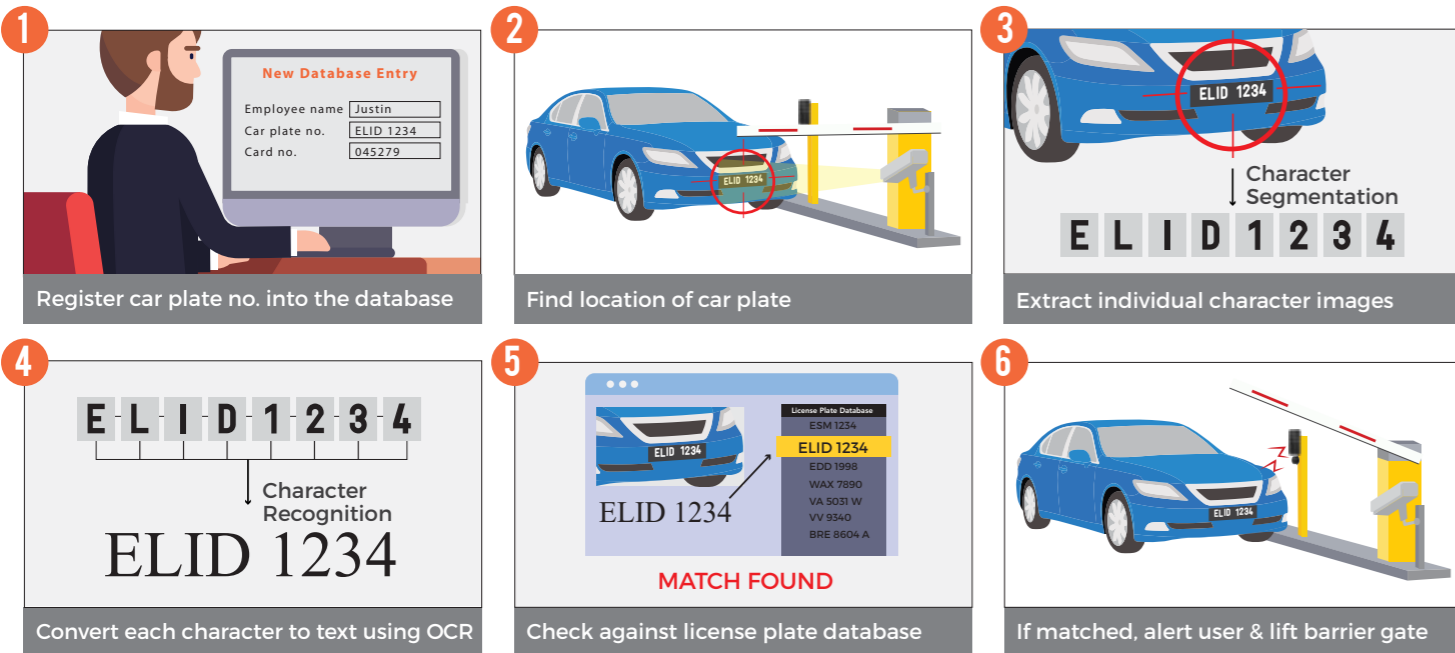
Automatic number plate recognition (ANPR) is a technology that uses optical character recognition (OCR) to recognize license plate numbers from captured images of the vehicle license plate. ELID-ANPR is a stand-alone Linux-based ANPR system with superior OCR performance, achieved by deploying state-of-the-art deep neural networks. It is meant to be installed and used at the edge – this eliminates the need for any PC or software installation. ELID-ANPR is equipped with a built-in web-server, which allows the user to perform important functions like database management, adjusting settings and software updates through the web interface. It can also be directly managed from ELID's access control softwares. The system is packaged with a powerful, dedicated IP camera that is specifically designed to be accessed by ELID-ANPR processing unit for obtaining crisp images of license plates.

HOW DOES ELID-ANPR WORK?

Step 1: Automatic Number Plate Recognition: ELID-ANPR executes the following pipeline to recognize license plates. The processing unit acquires a continuous video feed from the IP camera over the network. If a vehicle is found in any video frame, the location of the license plate is determined. Next, individual characters in the license plate image are segmented. The images of the segmented characters are then processed by OCR to convert them to text. Finally, these text characters are sequentially arranged to output the license plate number.

Step 2: Database Comparison: The license plate number is then compared to the list of registered license plates in the database. This database can be updated via the web interface or from ELID access control software.

Step 3: System Response: If a match is found, a buzzer is sounded to alert the driver of the vehicle that their license plate has been successfully recognized and matched. Immediately after that, authorized access is granted by lifting the barrier gate.



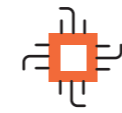
OPERATION MODES

Solitary, Standard Output: If ELID-ANPR finds a match for a license plate, it activates a standard output. This output can be used as desired, either to trigger an alarm or raise a barrier gate.

Solitary, Wiegand Output: ELID-ANPR is integrated with a standard access control system. Each entry in the database is a pair of license plate number and a card number, such as [WMMV9872, 040987]. If ELID-ANPR finds a match for a license plate, the corresponding card number is sent as a wiegand signal to the access control system. Since an access control system treats ELID-ANPR like a normal reader with a standard wiegand interface, ELID-ANPR can easily replace any existing card reader.

Parallel Configuration With Card Reader: ELID-ANPR can also operate seamlessly in parallel with an existing card reader – hence if someone does not have a vehicle or did not bring their car, they can still use their access card for authorized access. The wiegand signal from the card reader is connected to ELID-ANPR and not the access control system. The wiegand output of ELID-ANPR is connected to the access control system instead. Internally, ELID-ANPR parallelizes both wiegand signals – the one sent from the standard reader and the one sent out by ELID-ANPR when a license plate match is found.

WHY ELID-ANPR?



State-of-the-art Technology

Leverages the cutting-edge in artificial intelligence by applying deep neural networks for OCR. This produces recognition results with very high accuracy.



True Unconstrained Performance

No need to abide by restrictions such as "License plate number cannot be two rows" or "License plate cannot have unusual fonts" or "The characters of the license plate cannot touch each other; they must have space between them".

Using advanced image processing and machine learning algorithms, ELID-ANPR is able to reliably recognize license plate numbers despite the presence of the afore-mentioned complications.



Real-time ANPR

There is no need to stop the vehicle to facilitate recognition. Rather, the vehicle merely needs to slow down slightly as it approaches the barrier gate. The license plate number will be recognized and the barrier gate will be lifted, allowing the vehicle to continue moving, without ever having to stop.



Easy Installation And Set-up

Stand-alone configuration avoids all the hassle associated with software installation and PC maintenance. The system can be easily set up remotely, either through the web-interface or from ELID access control softwares.



Effortless Integration

ELID-ANPR can easily be interfaced with any standard access controller that takes a wiegand input. This allows the access controller to treat the ELID-ANPR as a standard reader, and utilize number plate recognition to record the entry/exit times. ELID-ANPR can also function seamlessly in parallel with a standard card reader, allowing authorized access using access card and/or vehicle.



24/7 Operation

High performance IR LED illumination enables continued functionality even at night time, allowing 24 hour, 365 day operation.



All Weather Conditions

The system can compensate for extreme weather conditions, allowing reliable operation despite heavy rain and/or snow.



Evidential Image Storage

System stores images of both the recognized license plate as well as the vehicle. These images are very useful for verification purposes if there are any suspicious/unusual events.