

# Secure and barrierless parking with Nedap's ANPR Lumo in Estonia

Viru Keskus and Finest Business & Parking House are known parking houses located in the capital city of Estonia: Tallinn. Because both parking houses have spaces for residents and are near located at many shops and cafes, hundreds of vehicles drive in and out every day. To avoid queues at the barrier and to know who is driving in and out, the parking operator Ühisteenus AS was looking for an innovative and cost-effective solution for both parking houses. Nedap's ANPR Lumo cameras were chosen because of its high accuracy. With this solution, vehicles are automatically identified based on their license plate resulting in easy, safe and barrierless parking. N.W.T Solutions OÜ integrated Nedap's ANPR Lumo and the parking operating software of Ühisteenus AS.



## Viru Keskus

As the capital city of Estonia, Tallinn is a popular destination for tourists. The most famous shopping center of Estonia is located in the center of Tallinn: Viru Keskus. With 100 shops, cafes and the largest beauty and jewelry areas visited by 15 million visitors annually, Viru Keskus is the best visited center in the Baltic countries. On the top floors there is a large parking garage for almost 369 vehicles. Special parking spaces have been set up here for visitors (short-term parkers) and residents who live in the area (long-term parkers).

## Finest Business & Parking House

Finest Business & Parking House is located not far away from Viru Keskus. This is also a well-known parking garage in Tallinn. This parking house is aimed at visitors to the city center on the one hand and long-term parkers, such as people who live and work around the parking facility, on the other hand.

## Traditional parking system

A traditional parking system was used at both Viru Keskus and Finest Business & Parking House. Barriers were in place at the entrance and exit and a traditional ticket system was used where users had to get a ticket in order to pay. This traditional parking & ticket system involved a lot of costs and maintenance. Therefore, the parking operator Ühisteenus AS was looking for an innovative solution to upgrade the current parking systems and find a cost effective solution for both parking houses. Ühisteenus AS is a parking operator who delivers parking services and control.

One requirement was that the solution had to be as simple as possible for the user. On the other hand, the solution had

to be able to identify and register vehicles. A high accuracy of the technology was important.

## High accuracy with Nedap's ANPR Lumo

N.W.T. Solutions OÜ and Nedap have joined forces to upgrade the parking systems for Viru Keskus and Finest Business & Parking House. N.W.T. Solutions OÜ is an Estonian company that focuses on offering and implementing parking solutions. [Nedap's ANPR Lumo camera](#) was selected and integrated into the parking operating software of Ühisteenus AS by N.W.T Solutions OÜ.

The ANPR Lumo is a high-end Automatic Number Plate Recognition camera who can identify vehicles by their number plates. Deep learning algorithms enable a high accuracy with common license plate formats and non-standardized license plate forms. Moreover, the camera's performance remains optimal under difficult (sun) lighting condition. It is also the perfect combination for situations where vehicles need to be granted access temporarily or incidentally, to handle reservations, or to install ticketless app based parking solutions. With this, Nedap takes on a market leader role that fits in with the well-thought-out parking solutions that N.W.T. Solutions OÜ and Ühisteenus AS offers.

## Automatic vehicle identification

With the upgrade of the parking system with Nedap's ANPR Lumo, barriers are no longer needed. When a driver drives into Viru Keskus or Finest Business & Parking House, the vehicle is automatically identified based on their license plate. The camera sends vehicle information to the parking operators software. To serve the user even better, N.W.T Solutions OÜ has placed a display at the entrance of Finest

Business & Parking House.

The vehicle information from the camera is sent directly to Ampron display, so that the license plate of the vehicle is visible on the display instantly. Moreover, it is indicated on which floor you should park on the display. For example, the upper floors are reserved for long-term parkers and lower floors for short-term parkers. This was made at Viru Keskus with Dahua display.

It is now also possible to activate parking via a mobile app, SMS or pay in advance on a foot machine. If the driver has activated the “automatic parking” service, the parking management software starts automatically after entering the parking garage and stops automatically when leaving the parking garage. Paying has never been made easier for users.

### Barrierless and easy parking

This solutions provides easy, safe and barrierless parking for both Viru Keskus and Finest Business & Parking House. The high accuracy of the ANPR Lumo ensures that operators always know which vehicle are going in and out. There is also no need for a barrier anymore, making it very user-friendly technology. Finally, this technology contributes to a longer life span and less maintenance.

*“It was a pleasure to collaborate with N.W.T Solutions OÜ and Ühisteened AS on a joint solution for improving the security and registration process of different user groups in Estonia’s parking facilities. It was great to experience that the high accuracy, ease of installation and the professional support by Nedap were reasons to choose for the ANPR Lumo camera.”*

**Bart van Lijf, Business Development Manager at Nedap Identification Systems**



*“As always, co-operation with Nedap was smooth and support was fast. Camera installation and setup was easy as always. Regular updates to cameras have improved accuracy nearly to 100%.”* **Thomas Kaarjärv, CEO at N.W.T. Solutions OÜ**

*“Nedap’s Lumo cameras have proved themselves to be as accurate as promised. Due to very good integration documentation, integration with our current software was easy. Functionality features of Nedap Lumo are covering all our needs.”* **Aare Sepp, Development and Support Services Manager at Ühisteened AS**