

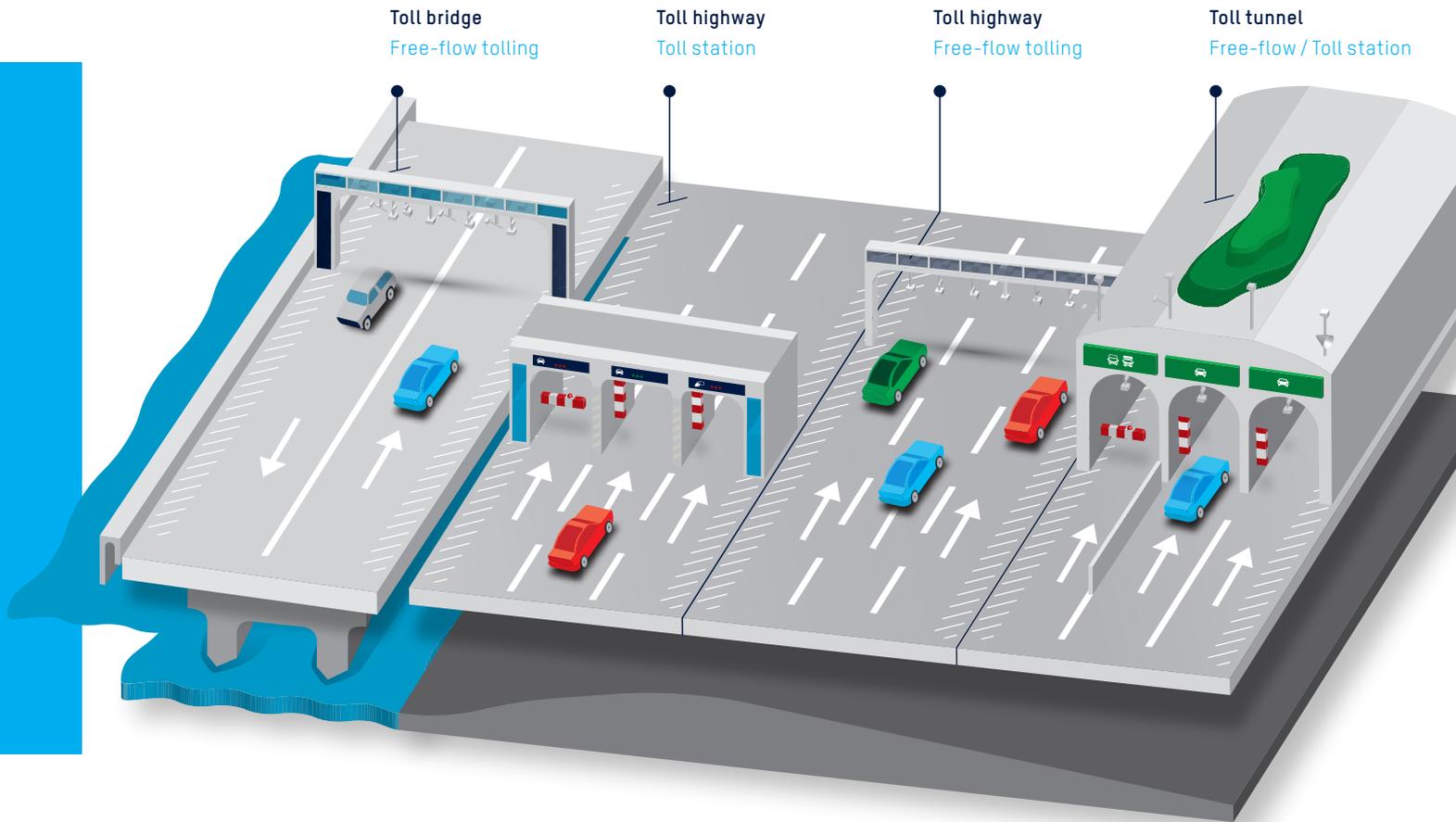


SINGLE SOURCE FOR ELECTRONIC TOLL COLLECTION

- > RFID Readers
- > Contactless Payment Terminals
- > Barrier Control Units
- > Induction Loop Detectors



Electronic Toll Collection



QUALITY PRODUCTS FOR ANY KIND OF ELECTRONIC TOLL COLLECTION

FEIG ELECTRONIC offers a wide range of quality products for electronic toll collection on all types of roads or toll objects, such as bridges or tunnels. Our portfolio includes UHF RFID reader technology for accurate vehicle identification, contactless payment systems for stationary charging, control units and loop detectors for barrier systems – all from a single source.

Free-flow tolling systems

Also known as 'open-road tolling', free-flow tolling offers many advantages compared to toll plazas with barriers. Because vehicles can drive through at higher speeds, there are no traffic jams at toll plazas and less risk of accidents caused by cars maneuvering into the right lane. In addition, free-flow systems cost less to implement because gantries are cheaper than barriers and ticket booths. Free-flow tolling is based on UHF RFID technology.

Stationary plaza tolling

While free-flow tolling systems charge registered customers in advance, non-registered users need to stop at a toll station and pay by cash or credit card. In this case, contactless payment systems based on debit and credit cards or smartphone 'wallets' are the easiest and fastest way to pay at the toll plaza. Payment terminals need to support both RFID-based customer cards for regular users and contactless debit / credit cards for occasional users.

Tolling at bridges and tunnels

Toll collection systems for bridges are often free-flow. UHF RFID readers identify tags mounted on the car and process the charging transaction. Access to tunnels is often controlled by barrier systems and traffic lights. After identification of registered users or payment by occasional users, traffic volume in the tunnel then needs to be regulated. FEIG also supplies control units for barrier systems and loop detectors for traffic light control.

ALL FROM A SINGLE SOURCE: RFID, CONTACTLESS PAYMENT TERMINALS AND BARRIER CONTROL UNITS

FEIG supports system integrators with electronic toll collection systems based on high-performance RFID technology. We also offer a comprehensive portfolio of contactless payment terminals, control units for barrier systems and induction loop detectors.

FEIG UHF reader technology meets the technical and legal requirements of several markets, including automatic vehicle identification and road tolling. Our readers are also extensively used in the logistics and automation sector, worldwide.

FEIG contactless payment terminals for closed and open loop payment enable secure and convenient payment in public transport systems, parking and ticketing machines, charging stations and stationary tolling systems.

We are one of the world's leading providers of control units for industrial gates and barrier systems, specializing in controllers with integrated frequency converters. These enable the fast and safe opening and closing of gates or barriers.

Single and multi-channel induction loop detectors from FEIG ensure the smooth operation of light signal systems and are used in vehicle detection.



RFID reader technology

For free-flow tolling systems and vehicle identification at toll plazas, FEIG offers several long-range UHF readers and antennas. These accurately identify vehicle-mounted transponders integrated into the license plate or a windshield sticker. The readers have a range of up to 16 meters and feature an integrated security element that prevents transponder cloning. Identification can take place at speeds in excess of 200 km/h and our systems are ETSI and FCC certified for worldwide use.

Contactless payment terminals

While UHF RFID technology is used for free-flow tolling systems, contactless payment terminals guarantee secure and convenient payment at toll plazas. Certified according to the highest security requirements, the terminals support both closed and open loop payment for residents' cards as well as contactless debit/credit payment for occasional users. Mobile payment is of course also accepted. FEIG terminals accept all major card types as well as RFID cards based on Mifare, Felica or Cipurse.

Barrier controller & detectors

As well as RFID technology for vehicle identification and payment terminals for stationary charging, FEIG also offers barrier control units and induction loop detectors for barrier systems. Control units and detectors work seamlessly together with our RFID hardware to ensure easy installation and optimum long-term performance.

WHAT CHARACTERIZES FEIG ELECTRONIC AS AN EXPERT?

The basis for successful cooperation is mutual trust. System integrators need to be able to trust hardware suppliers to deliver the right products in the right quantity at the right time. Hardware suppliers need to know that they can rely on their customers to master the technology and provide accurate advice to end-users about the benefits of the hardware. FEIG ELECTRONIC is an expert hardware supplier for various markets and applications, with advanced expertise in technology, market requirements and production methods.



Technological expertise

As a specialized supplier of selected markets and a flexible and reliable partner, FEIG ELECTRONIC offers you a wide variety of high-end products. We focus on market-specific requirements and can provide you with expert on-site support, worldwide. Our product portfolio is backed up by our highly trained technical department to ensure that you get maximum value out of our systems. This technological expertise enables us to fulfill our mission to make our customers successful by deploying optimal electronic solutions.

Innovation leadership

As an innovative company that is constantly searching for improvements, we aim to inspire both customers and employees. That is the reason for our innovation leadership in several core markets. This leadership enables our customers to grow alongside us – a classic win-win situation. Our shared innovation power, creative collaboration and regular investments in modern production facilities are the basis for growth – for us and for our customers.

High-quality products

The development and production of high-quality products is only possible with dedicated, motivated staff. As a 100% owner-managed company, FEIG ELECTRONIC can take strategic decisions independent of external influences. We have strong management continuity and offer our employees stimulating and diversified jobs with flat hierarchies and a lot of teamwork. We believe that satisfied employees generate high-quality products. This is the basis of our ability to achieve lasting customer satisfaction.



SOME MAJOR PROJECTS



Warnow Tunnel in Rostock, Germany

Warnow Tunnel in Rostock, Germany, uses UHF Long Range Readers from FEIG ELECTRONIC for toll collection across 11 lanes. To enable authentication, UHF transponders are integrated into stickers mounted on vehicle windscreens.



Mersey Gateway Bridge near Liverpool, UK

The new Mersey Gateway Bridge near Liverpool, UK, uses UHF Long Range Readers across 6 lanes to charge tolls for the crossing. In addition, cameras record vehicle license plates to ensure that the registered transponder number is assigned to the vehicle holder.



National Highways, India

Hundreds of UHF Long Range Readers from FEIG are in use on India's national highways. Ever since the Indian government stipulated the use of UHF technology for road tolling, FEIG had been one of the main suppliers of RFID readers and antennas for road tolling in India.



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