

Access and Parking Applications.





DSRC Transponder TS3203.

In an extremely specialized and competitive market such as parking and access, flexible payment solutions which can easily be adapted to the needs of operators and at the same time provide compatible traffic solutions to end users are essential. Utilising standards-compliant technologies recognised worldwide for their adaptability, reliability, accuracy and ease of use, Kapsch TrafficCom has created access and parking solutions which secure the revenue for the operator while offering convenience to the motorist.

Kapsch TrafficCom has specialized in providing Electronic Toll Collection products, systems and services to governments, road authorities and road operators worldwide, drawing on the experience gained of 223 installations in 36 countries.

Building on proven technology already designed, developed and manufactured for road user charging, Kapsch TrafficCom offers a secure choice in access and parking systems.

Kapsch Access Technology.

Kapsch Access and Parking solutions are based on standards-compliant Dedicated Short Range Communication "DSRC" microwave technology predominantly used in Electronic Toll Collection systems around the globe. This technology offers maximum accuracy and reliability, high data security, tamper resistant operation and proven performance.

How It Works.

For these applications a transponder is attached to the windscreen. The transponder is small and easy to use. As the vehicle approaches the entry and exit barriers of parking houses or open parking areas, a Kapsch Access Transceiver automatically detects an approaching vehicle and reads out the data from the transponder. If the unique ID matches e.g. to a white list of the access control system, the vehicle is allowed to enter. The Access Transceiver thereby transmits the transponder data to the access control system of the parking house which then opens the barrier. The Kapsch Access Transceiver can be configured easily via a web interface. It communicates with access control systems via serial Interface or Ethernet. A number of different protocols are available to provide easy integration with existing systems.

The Access Transceiver can either operate in conjunction with an access control system as for parking applications or in a standalone mode where it controls barriers, raises bollards and door controls autonomously. The smart transponder can also be used as payment device at petrol stations, drive-in restaurants, mobile payment on ferries, etc. and there is enough space to place additional ideas for payment solutions.



Access Transceiver.

The Building Blocks.

Kapsch TrafficCom designs, develops and manufactures the core technologies and products used for automatic access and parking solutions. The system is based on DSRC (Dedicated Short Range Communication) microwave technology, which is the dominant technology found in Electronic Toll Collection around the world, incorporating many advantages regarding accuracy and reliability. DSRC is a standardized solution with non-proprietary interfaces, offering the benefit of a highly competitive supply network.

TS3203 – The world's smallest CEN DSRC/EFC Transponder.

The transponder is a universal tool for access, parking and payment solutions. It contains vehicle or account specific information (e.g. licence plate number, vehicle class, credit/debit information) and is mounted on the windscreen inside the vehicle. Depending on the specific application involved, the transponder can hold an onboard purse as in for time-based parking payment or can verify that the customer has a pre-paid central account.

Kapsch Access Transceiver TRX-1x21-A.

Kapsch DSRC Access Transceivers are stationary communication devices mounted above or at the side of the entrance and exit to the parking or secure access area. This transceiver communicates via DSRC with the in-vehicle transponder, exchanging the OBU identity to the host computer. If the unique ID matches that in a white list of the access control system, the vehicle is allowed to enter and the barrier opens. The versatility of the product enables ease of implementation in different systems.

OBU Mobile Reader.

The Mobile Reader enables read out of transponder or OBU data via a handheld terminal to control parking fees or check access authorizations. It consists of a ruggedized PDA with colour touch screen and a DSRC modem for communication with the transponder. Transmission to the central system is realised via built in modules such as WLAN, GPRS, GPS.

OBU Programming Station.

The Programming Station personalizes the transponder with the required vehicle data. Whenever dedicated transponders are used (e.g. in a parking house application), the parking operator can load the vehicle or account specific information on to the issued transponders via a PC and the Programming Station.

Dependable and versatile products and solutions for access and parking from an industry leader in Electronic Toll Collection systems: Kapsch TrafficCom.

The Benefits.

Kapsch TrafficCom access and parking solutions offer an automatic, electronic method for access, parking and payment. Key attributes include:

- a standardized plug and play solution with non-proprietary interfaces, easily integrated
- custom-tailored for existing parking systems: Kapsch TrafficCom.
- demonstrated technical interoperability, enabling the use of a single transponder for a variety of charging activities, such as toll roads, parking garages, on ferry lines, taxi dispatch, or petrol stations, etc.
- simple and affordable onboard units are self-installable in minutes.
- cost-effective system operation enabled through interoperability and automated processes.



OBU Mobile Reader.



OBU Programming Station OPS-1955.

