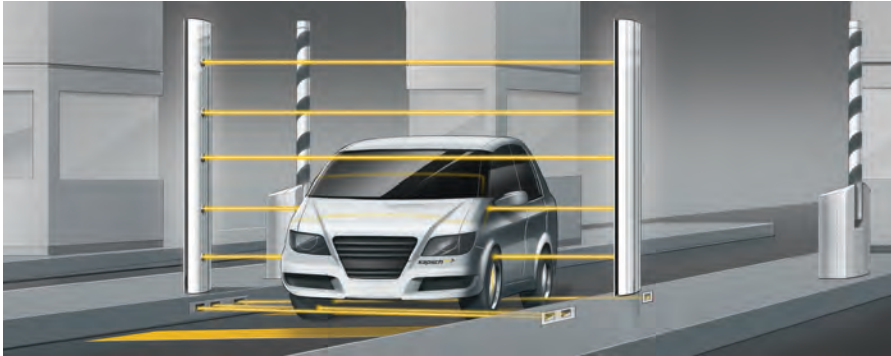


AVC

Automatic Vehicle Classification



Kapsch AVC is a key element for assessment of the correct toll fee at toll plazas and ensures accurate vehicle detection and classification, offering outstanding performance. Kapsch AVC is based on infrared sensor technology for low maintenance classification.

Kapsch AVC is flexible in design and supports changing classification schemes. The classification is based on axles, distance between axles, single and double wheels and multiple vehicle heights. Kapsch AVC is comprised of a controller unit, sensors and high-class software.

A specific interface to the toll lane controller enables the exchange of vehicle related transaction and passage data which is the base of consistent and verifiable transactions. Additionally AVC provides vehicle tracking information for the toll lane controller.

Via a dedicated ethernet interface Kapsch AVC reports vehicle transactions directly to central systems, authorities and toll plaza supervisors. This enables monitoring and controlling of correct toll payments to multiple points on different hierarchies.

As part of its enforcement capability Kapsch AVC detects abnormal vehicle passage events, such as vehicle standing, reverse direction, reverse entry after forward entry and reverse entry roll back.

Features

- Based on COTS components
- IR technology instead of treadles
- State of the art software development
- Classification of multiple vehicle classes

- Adaptable to multiple classification schemes
- Open system architecture enables integration of additional sensors
- Tamper protection
- Auditable product
- Serial communication protocol with TLC
- TCP/IP socket connection to DCS
- Local storage of vehicle transactions (limited only by hard disk capacity)



Technical features

Software

- Vehicle classification
- Vehicle tracking
- Transaction records
- Data storage
- Interface to toll lane controller
- Interface to authorities

Sensor:

- IR - sensor rails
- Loops
- Height sensors
- Additional sensors can be integrated (i.e. light curtains)

AVC Controller

- PC
- Electrical equipment
- Storage device
- Temper protection

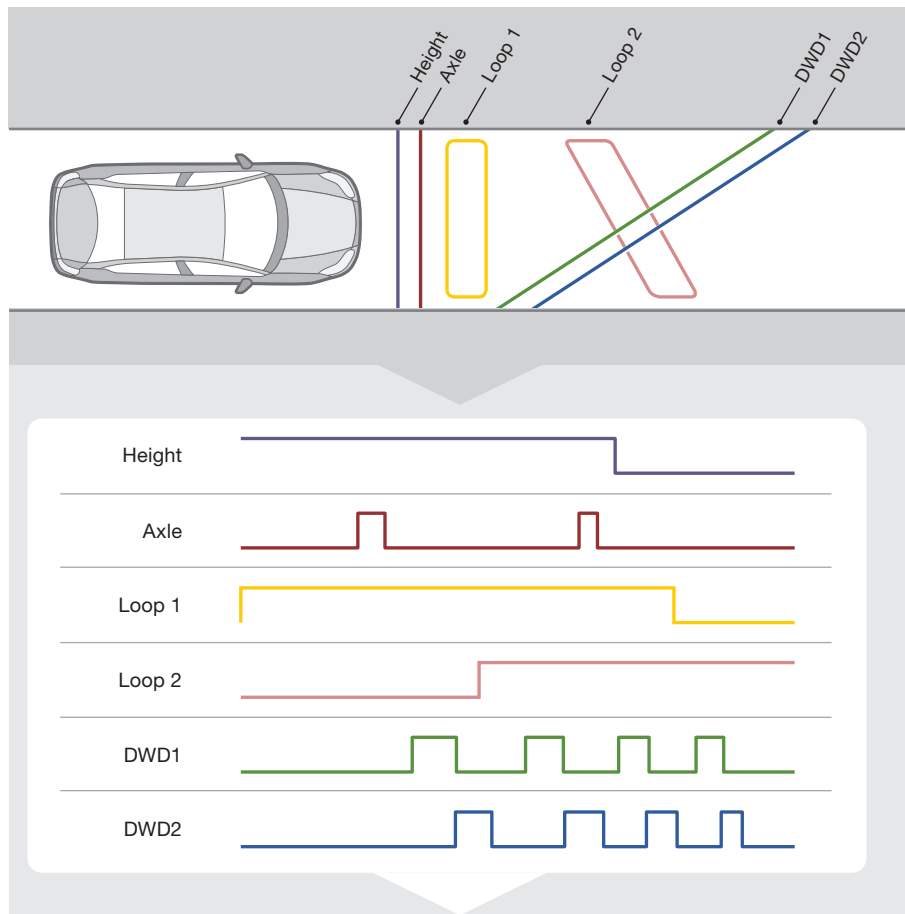
Vehicle classification features

- Multiple height limits
- Axle counting
- Double wheel detection
- Interaxle distance
- Speed measurement
- Length measurement
- Vehicle width

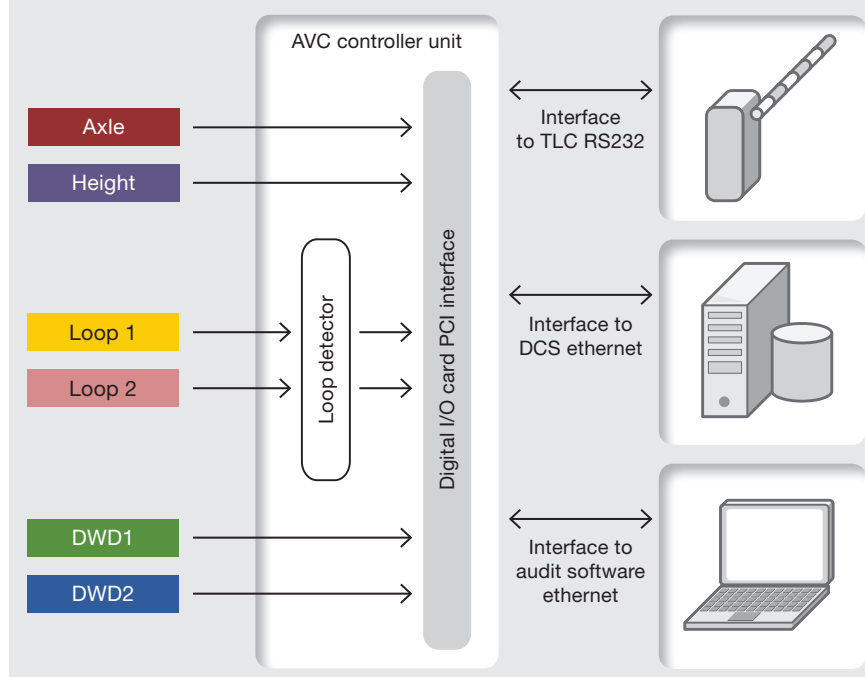
Detection of abnormal vehicle passage

- Vehicle standing
- Reverse direction
- Reverse entry after forward entry
- Reverse entry roll back

AVC functional concept



AVC system architecture



Kapsch Group

The companies of the Kapsch Group – Kapsch TrafficCom, Kapsch CarrierCom and Kapsch BusinessCom – are leading the international markets for Intelligent Transportation Systems (ITS) and Information and Communication Technologies (ICT). Kapsch. Always one step ahead.