



Automatic Vehicle Classification System



Automatic Vehicle Classification is the toll lane system that detects and classifies vehicles based on the number of axles.

The basic AVC system is a set of sensors that detects the different vehicle categories, based on various criteria, mainly: number of axles, detection of dual wheels, volume, height and profile. Obtaining this information depends on the add-ons installed on the AVC device.

A very common method to manipulate AVC classification is blocking sensors to wrongly classify a vehicle. Any such attempt here will result in alarm and notification with date, time and lane details for CCTV footage running to identify the culprit.

AVC (automatic vehicle classification) is a key element for assessment of the correct toll tax at toll plazas and ensures accurate vehicle detection and classification.

AVC System Components

- **System with Customized AVC Software**
- **Integration of Tolling Software with AVC sensors.**
- **AVC Sensor**
- **MD-440 and MD-220**
- **Loop Detector**
- **Power Supply**
- **PUR Filling Material**

AVC Product Benefits

- **Easy & Fast Installation at Lowest Risk**
- **Standard Warranty** (1 year or 5 million axles whatever comes first)
- **Adapts to Any Road Surface**
- **Reinforcement Against Lateral Extensions Causes a Higher Lifetime**
- **Unique Strip Lifetime ensures Lowest Maintenance Costs**
- **Highest Detection Accuracy is ensured through a Defined Installation with Hanger Bars**
- **Increased Signal Uniformity along the Sensitive Area**

AVC Product Features

- **Fiber Optic Sensor is sensitive to vertical pressure only.**
- **As the sensor does not include any metal parts it is immune against electro-magnetic disturbances, corrosion, and lightning.**
- **A ready to install PUR Sensor™ comprises the sensor element itself, and a fiber optic feeder cable spliced directly to it and terminated with fiber optic connectors The sensor installation is done flush and even to the road surface in small saw cut slots using approved cement-based filler material and special hanger bar tools.**
- **To operate the PUR Sensor it is connected to an opto-electronic interface, e.g. SENSOR LINE dynamic or static Optical Transmittance Analyzer.**
- **Common applications are axle, dual tire and direction detection, speed measuring, vehicle classification and WIM pre-selection.**

AVC System Benefits

- **Automatic classification based on axles and vehicle size**
- **Minimum human intervention**
- **Real-time classification (<100ms)**
- **High accuracy (close to 97%)**
- **Ensures that everyone will pay as per their vehicle category**
- **Automatic Display of the Vehicle type and toll at the operator's terminal**
- **AVC is used for transportation modeling, performance monitoring, and traveler and operator information activities.**
- **Real time profiling and counting**
- **Effectively works in all-weather condition**
- **Save image of the vehicle with timestamp**
- **Zero Maintenance**

