



### 3 laser system for vehicle profiling

The 3D profiling system can provide a high resolution 3D file of the vehicles and measure them in height, width, length and volume.

The system is composed of 3 LSR2001 laser scanners: two are installed on the left and right sides of a gantry, the third one is installed on a side pole (or on a second gantry).

The first two lasers continuously scan both sides and the top of the vehicle, while the third one detects the position and movement. The result is a very accurate detection of: length, 3D shape, height, width, speed, profile and vehicle class.

The system is based on LSR2001 laser scanner, which has a scan angle of 96° with high definition. (274 measurements in 96° with an angular resolution of 0.35°).

One of the three LSR2001 sensors used in the profiling system acts as a master unit and combines the information given by the other two to create an accurate 3D profile of the vehicle.

#### APPLICATIONS

The profiling system can be used in a variety of applications, wherever it is necessary to have an accurate detection of the transit.

Typical applications are:

- Harbour trucks' analysis
- Analysis of vehicles at custom borders
- Weigh in motion when vehicles' dimensions are needed
- Tolling systems
- Measuring vehicles' silhouettes for alarm when different size



## LSR2001-PROFILER

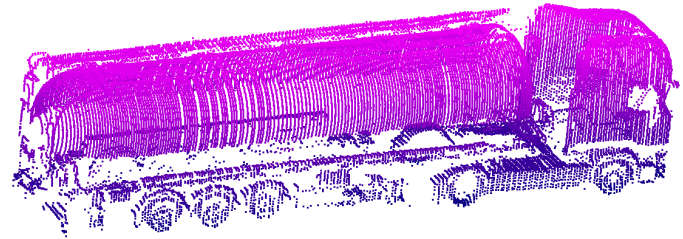


Figure 1: "point cloud" 3D file

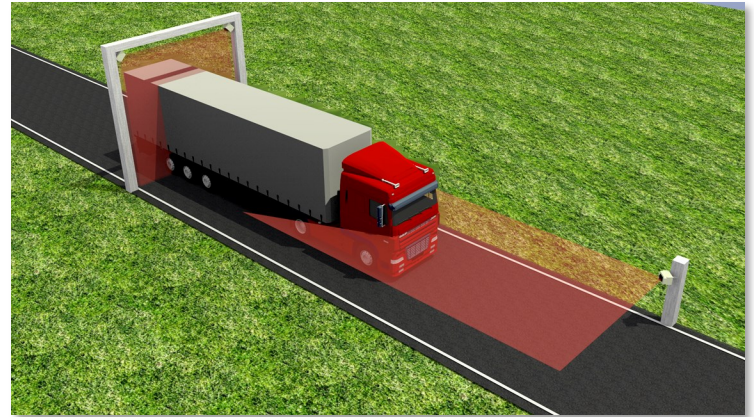


Figure 2: "multilane" installation

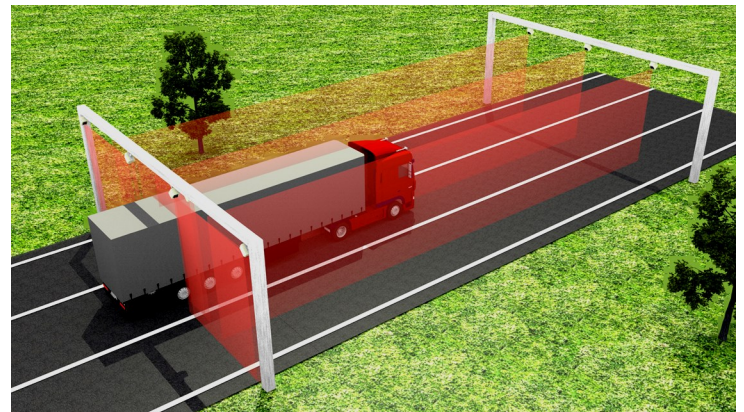


Figure 3: "multilane" installation