



## Point-to-Point®

### Time over distance traffic enforcement

**In the ever-increasing demand for rigorous traffic management, coupled with the need to monitor multiple traffic lanes, speed enforcement has proven to be instrumental in speed reduction and improving road safety.**

Time over distance monitoring has been shown to significantly reduce accidents caused by excess speed. Cameras installed at several locations along the highway record and measure the average speed of vehicles over a pre-determined distance, encouraging drivers to reduce speed to comply with the limit. The resulting smoother traffic flow not only reduces traffic hold-ups and accidents, but the reduction in emissions is better for the environment.

Gatsometer's unique Point-to-Point® traffic enforcement system provides a tailor-made solution for speed enforcement on motorways and multiple-lane highways. The system monitors all types of vehicle 24 hours a day, seven days a week in all weather conditions, regardless of lane changes.



GATSO METER B.V.

[www.gatsometer.com](http://www.gatsometer.com)

## System operation

Infrared-sensitive monochrome digital cameras mounted above each lane at the start of the enforcement zone capture an image of all vehicles using an infrared flash; roadside computers produce a unique signature of each vehicle. At the end of the enforcement zone, a second image is captured and the vehicle's average speed between the two points is calculated using GPS time measurement.

Images and data of vehicles exceeding the speed limit are transmitted to the control room for further processing and issue of the prosecution notice by the relevant authorities. Data on vehicles not exceeding the speed limit is erased.

## Unique image recognition capabilities

Point-to-Point® uses automatic number plate recognition to ensure all licence plates are accurately read; however, the system is unique in that it also identifies other areas of the vehicle image, such as lights or window stickers, to deliver an exceptional matching average with a high degree of accuracy.

## Remote control

Point-to-Point® may be set up and operated remotely using suitable communications media, which also enables offence images and data to be automatically downloaded at pre-set times.

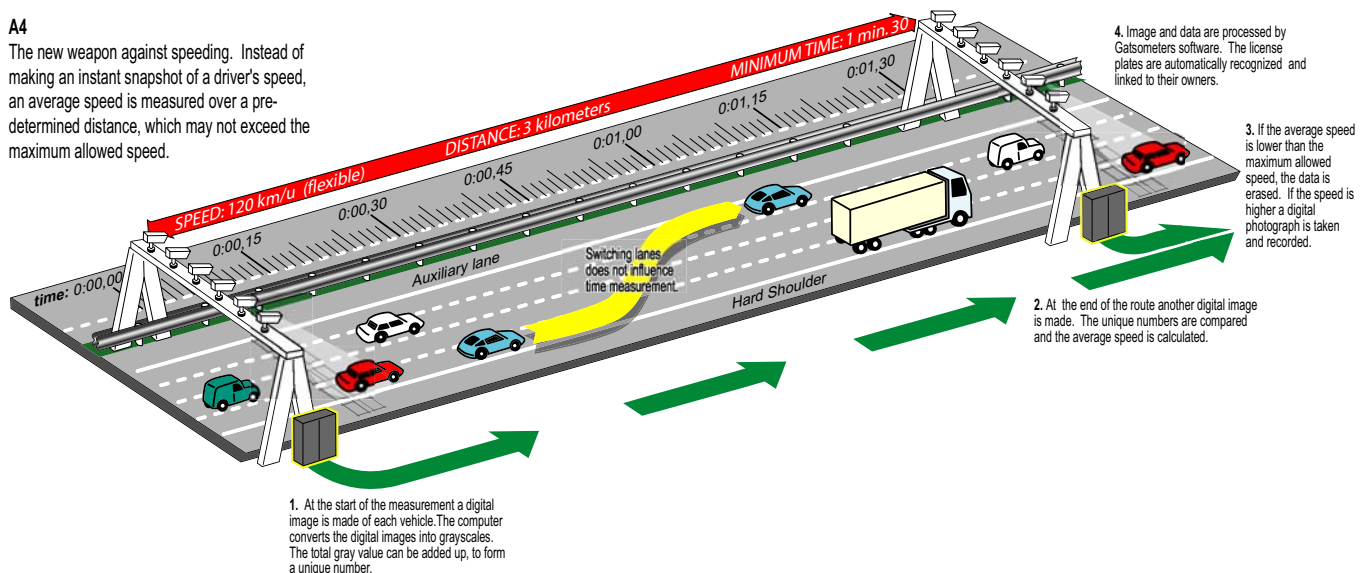
## Point-to-Point® benefits

- A tailor made speed monitoring and enforcement system for all traffic applications
- Use of vehicle signatures ensures a high level of accuracy
- All vehicle types recognised
- Uses eye-safe infrared flash
- 24 hour operation in all weather conditions
- Remote set up and operation



### A4

The new weapon against speeding. Instead of making an instant snapshot of a driver's speed, an average speed is measured over a pre-determined distance, which may not exceed the maximum allowed speed.





The camera



Roadside cabinet



The loops



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### System description

#### Camera

An infrared-sensitive monochrome digital camera is gantry-mounted above each traffic lane and may be controlled remotely.

#### Flash

Eye-safe infrared LEDs are installed alongside each camera to provide optimum image recognition and capture.

#### Roadside cabinet

Loop detectors and computers are housed in two roadside cabinets at the beginning and end of the enforcement zone. The cabinets also store images and data of all vehicles, which are compared by the two computers using wireless communications and stored for further processing if an offence has been committed.

#### Vehicle detection

Point-to-Point® uses Gatso's proven GLD4-2S inductive loop detection; as a vehicle passes over the loops, its inductance profile is automatically analysed and measured to produce a profile unique to that vehicle.

#### Signature server

The signature server analyses images captured by the cameras to produce a totally unique vehicle identification 'signature'.

#### AMDIS

Point-to-Point® is a time measurement system and uses AMDIS to add an accurate time stamp to each image in real time.

#### GrabPC

Images captured by the cameras are transmitted to the GrabPC, which combines them with data from AMDIS for analysis by the signature server.



30 Aug 2004 14:27:37.778  
AAA 16.3

Detector 1: 888889798877  
Detector 2: 88888979CC12  
Categorie A, TP6400



30 Aug 2004 14:26:05.621  
AAA 13.1

30 Aug 2004 14:27:33.059  
AAA 16.3

Detector 1: 82888895554  
Detector 2: 88888979A959  
Categorie A, TP6400

### Technical specifications:

|                            |                         |
|----------------------------|-------------------------|
| Operating temperature:     | Between -10°C and +60°C |
| Relative humidity:         | 95% (non-condensing)    |
| Monitoring distance:       | From 500 m to 100 km    |
| Number of lanes:           | 1 to 8                  |
| Digital camera resolution: | 1600 x 1200 pixels      |
| Infrared flash:            | IR-LEDs                 |

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