



# Gatso GS11 digital camera

A single camera solution for traffic enforcement

Protecting People in motion!



## Future-proof camera for traffic enforcement

Designed exclusively for traffic applications, Gatsometer's state of the art 11 mega pixel GS11 camera delivers the highest level of evidential security.

The GS11 provides an innovative single camera solution for a range of traffic enforcement applications due to its built-in digital control unit. Other features include:

- High precision industrial camera
- 12-bit high dynamic range
- Captures both shadow and highlight detail simultaneously with over 68 billion colour shades
- Sharp, high quality images in all lighting or weather conditions
- 11 megapixels provides superb image quality
- Low energy consumption
- Fully RoHS compliant



The GS11 camera

### Burst rate

A single GS11 camera monitors up to four lanes of traffic and captures clear images of offending vehicles. In red light, speed on green or speed enforcement applications, images are captured. A burst rate of four images per second ensures that all offending vehicles are captured, even in dense traffic. The high resolution of the GS 11 camera provides high quality images for accurate Automatic Number Plate Recognition (ANPR) or driver identification in all weather or ambient light conditions.

### Encrypted images

In common with all Gatsometer digital camera systems, offence data (including speed, date, time, direction, etc.) is superimposed on the image, digitally signed and encrypted in real time to ensure it is tamperproof. All encrypted violation images and data are electronically stored and in Gatsometer's Secure Digital Image (SDI) encrypted file format.

### All unicode characters in data bar

All the data, related to the offence, is real time superimposed in the picture. In the data bar all the data about the violation is presented: time, location, speed, etc. Captured images, simultaneously combining both the offence and the offence data are compressed and encrypted to international standards.

```
03/03/2006 10:37:50 Lane 2 Image 2/2 Violation  
Red 1.8 Yellow 3.3 Delay 0.8 Int
```

Data bar can contain all possible languages.

```
Mandarin 和平  
Korean 평화
```

```
Tamil (India): அமைதி  
Greek: Ειρήνη  
Thai: สันติภาพ  
Arabian: سلام
```

All unicode characters can be used in de the data bar.

The system's in-built monitoring system continuously checks and reports on system functionality, while an intrusion alarm sends a warning to the remote control centre in the event of vandalism or other damage.





The Colour Graphic User Interface



The GTC-GS11

### Graphical User Interface

Gatso digital enforcement photo enforcement systems are equipped with a Graphical User Interface (GUI), with easy to use menus and clear displays. The GUI enables users to remotely control and configure the system and monitor system status.

### System operation

#### Camera

The GS11 has a colour depth of 12 bits per pixel providing over 68 billion colours; its broad dynamic range rules out over or under-exposed images. The camera's sophisticated software analyses each 12-bit image and saves the data in Gatsometer's Secure Digital Image (SDI) encrypted file format, ensuring:

- the full dynamic range of the camera is always used
- high quality offence images
- use of extra gain is unnecessary

Each GS11 has fully automatic lens control and fixed focus lens. A range of various lenses is available.

#### Camera Interface Tool

Gatso provides several software tools in order to interface with the equipment both remotely or locally. The software maximizes the performance of the functionalities, like downloading and online viewing of captured images, viewing and printing of camera properties and statistics. Systems parameters such as threshold speed, direction, etc. can also be set.

#### Detection technologies

The camera may be triggered by loops, radar or non-invasive Loopless Trigger Radar (LTR).

- Loop detectors provide accurate and reliable speed or traffic light control, even on busy stretches of road. Gatso digital traffic cameras are supplied with Gatso loop detectors as standard for speed or red light detection. Vehicles are monitored by two loops installed in each lane, which ensures optimum detection of offences.
- Radar is a reliable and flexible detection technology and requires no inroad installation. A single radar installation at the roadside monitors both receding and approaching traffic and is capable of distinguishing between cars and trucks. Gatso radar technology uses a slotted wave antenna on a 24 GHz frequency that is approved worldwide for enforcement applications. Installation of the radar is totally flexible, due to the 22° vertical beam.
- Gatsometer's non-invasive LTR provides the same accurate, reliable and versatile detection as conventional loops, without disruption to traffic during installation. LTR can be mounted at the side of the road for easy access and projects a virtual loop via radar on to the road surface, providing excellent detection over up to four lanes of traffic. With a capture rate of better than 98%, LTR is a highly reliable product for enforcement applications.



## Advantages:

- The combination of 11 mega pixels and full 12 bit dynamic range delivers superb image quality and clear contextual detail
- A single camera solution for enforcement of up to four lanes of traffic
- Colour Graphical User Interface
- A range of easily changed lenses
- Data bar may be configured for different languages
- Optional ANPR capability
- One file contains up to three violation images
- Offence images encrypted to international standards to avoid tampering
- Built-in digital control unit, so no need for ground based unit



## Technical specifications:

### Digital colour camera

Type	GS 11
Dimensions (h * w * d)	145 * 195 * 95mm
Image capture	4 images per second
Resolution (h * w)	4008 x 2768
Weight	4 kg
Relative humidity	max. 95%, non-condensing
Operating temperature	-20°C to 60°C

### Lens

Fixed focus	35mm, 50mm, 85mm or 100mm
Diaphragm setting	Automatic

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