



## Features

- HOTA (Home Office Type Approved) product
- Best-of-breed proven solution – produces high quality images both day or night
- Uses non-invasive microwave radar as the primary trigger (no requirement for sub-surface carriageway induction loops)
- Directly retrofits into the Crown SmartPole or the existing FIP street furniture
- Economical upgrade path using the FIP cabinet and pole with simple shelf modification to accommodate the GS11 digital camera and decision unit
- Gatso RS-GS11-UK digital cameras can be rotated between sites that have been upgraded to operate digitally
- Encrypted and secure evidence capture using the camera's built-in SSD (Secure Storage Device) with offence metadata destruction in the event of tampering or vandalism
- Uses either BT ADSL or UTMS 3G transmission

# Gatso RS-GS11-UK Digital Fixed Site Speed Enforcement Camera

**The impact of excess speed still continues to be a serious traffic safety problem.**

Using fixed site speed cameras at accident black-spots and at locations where excess speed has contributed to incidents of high KSI (killed/seriously injured) statistics, has made a significant impact in improving road safety and reducing vehicle collisions. The technology provides a long-term solution which helps to ensure that drivers are more readily deterred from speeding and in doing so become more compliant with statutory regulations regarding traffic signage and speed limits across the highway network.

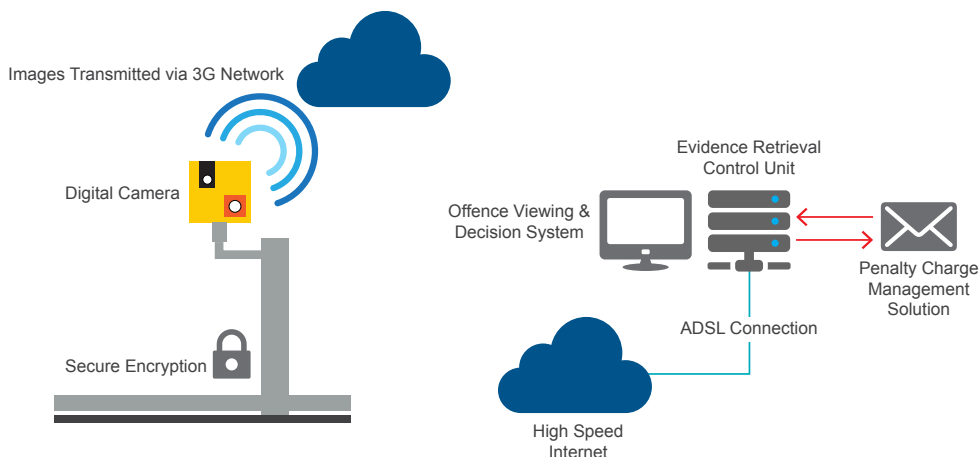
Cubic Transportation Systems continues to retain market leadership in the provision of fixed site digital enforcement technology. Our 24-year partnership with GATSO in the UK has now further developed with the Gatso RS-GS11-UK digital speed camera which achieved HOTA status in September 2012.

Our solution can be implemented as a new installation using the new Crown SmartPole with further enhanced vandal resistance, and the product also offers the added benefit of a direct upgrade path into the existing FIP cabinet and pole. These can be upgraded to operate digitally thus minimising the cost of digitisation by utilising and retaining the existing infrastructure.

In addition the Gatso trademark method of operation is retained where the camera can be moved between housings that have been upgraded to digital specification. Gatso RS-GS11-UK is an 11 megapixel high-definition digital system that produces excellent quality day or night image capture.

# Gatso RS-GS11-UK

## Digital Fixed Site Speed Enforcement Camera



The camera can be polled by the ERCU (Evidence Retrieval Capture Unit) which is sited in the Safety Camera Partnership offices to transmit encrypted offence data via our preferred method of transmission using BT ADSL. Alternatively UTMS 3G networks can be used subject to network availability. Encrypted offence data can then be transferred to DVD disc and decrypted by the OVDS (Offence Viewing & Decision System) computer prior to adjudication through the EROS 2 or the StarTraq BOF.

The system is fully HOTA approved and meets the requirements of the Speedmeter Handbook.

### Modes of Operation

Gatso RS-GS11-UK is an automatic speed detection device which uses non-invasive radar to measure the speed of receding traffic in up to four (4) lanes. Once it has been commissioned and tested it works by itself without direct and continuing human intervention and operates with an approved secondary check method. The systems primary detection method and is known as 'Across the road radar'.

A second method of speed measurement is carried out using the RS-GS11-UK digital camera which takes two (2) digital photographs taken at a known time interval. This evidence together with the carriageway secondary check markings are used to verify the primary speed measurement captured by the radar. The RS-GS11-UK digital camera system is HOTA approved for use at speeds including and in excess of 30 MPH. RS-GS11-UK uses 11 million effective pixels and operates with automatic exposure and fixed focus and has a colour depth of 12 bits per pixel and makes two images of each offence.

The offence file details are shown on a data bar on each image which denotes the parametric information. The data within the file is encrypted and protected using a combination of cryptographic techniques. A laptop can be connected to the RS-GS11-UK for keying and changing system settings.

The RS-GS11-UK uses an internal white light high-intensity flash for optimal image quality. An optional night flash extension can

be mounted on top of the FIP pole or mounted on a separate pole depending on the number of lanes, ambient lighting and site location on a separate pole depending on the number of lanes with ambient lighting and site location.

### Security

The RS-GS11-UK has a SSD (Secure Storage Device). The SSD is responsible for securely holding any data that has been loaded into it, and securely destroying data when commanded to do so, typically when it senses that physical access has been attempted through an external door switch. In the event of an attempt to tamper with the contents of the device, the data is destroyed, even if the power is not supplied to the unit.

### The FIP Cabinet and Crown SmartPole

RS-GS11-UK cameras are installed into either the existing FIP cabinets and poles or new Crown SmartPole which are modified with new shelf units. There is no requirement for a secondary flash pole and as such the existing infrastructure footprint remains the same.

The FIP cabinet and SmartPole are HOTA approved and are IP5X tested for ingress of dust and water. They incorporate high-security multi-point locking and are rated to BS EN ISO9001 for quality and reliability and are fully galvanised and painted and are resistant to corrosion.

The Crown SmartPole offers full operational flexibility allowing a lone worker (camera technician) easy access to the outstation equipment without the requirement for additional ladders, steps or climbing aids. Once the pole cabinet has been unlocked, the housing assembly is lowered to the desired and comfortable working height and elevated using a counterbalanced pulley system. This minimises the risk of unsatisfactory body movements i.e. twisting, lifting and lowering or compromise through excessive weight as the retractable camera shelf which forms the floor of the SmartPole housing supports all the weight considerations for the RS-GS11-UK system during camera rotations and maintenance operations.