

Road Safety Support Case Study

Challenge

Road Safety Support is a not-for-profit company that is responsible for testing and calibrating red-light and speed cameras in the Home Office Type Approval process. They needed a way of verifying their test results and the accuracy of the measurements recorded, in a reliable and credible manner, in order to achieve ISO 17025 accreditation.



Solution

The **VBOX 3i** is **RACELOGIC**'s flagship GNSS data logger and offers precise measurements of position, speed and distance. The accuracy of the **VBOX** means it can be used as a reliable reference in speed tests, as well as for validating the accuracy of speed measurement equipment.

Using a **VBOX 3i** with RTK (a technique used to improve positional accuracy), Road Safety Support wanted to record the exact speed at which a vehicle was driven past a traffic enforcement camera, to verify whether it was activating at the correct speed.

However, they first had to demonstrate the accuracy of the **VBOX** to the auditors responsible for awarding ISO 17025 accreditation. In order to do so, they calculated a vehicle's speed manually, driving past studs hammered in the ground at fixed intervals, that had been measured using a laser scanner and road wheel.

The time taken to travel between each point was used to calculate the vehicle's speed using this reliable but manual approach and compared to the reading from a **VBOX 3i**, installed in the same vehicle.



"The **VBOX 3i gives us a reliable and traceable method for testing and calibrating speed measurement devices."**

Steve Callaghan, Technical Support Manager

Results

The resulting **VBOX** measurements were consistent and accurate, with the auditors satisfied that a **VBOX 3i** could be used for reliable and repeatable testing of speed measurement devices.

They were happy to issue Road Safety Support with ISO 17025 accreditation and one of the key factors behind this was being able to record and evidence the measurements and test results in an accurate and traceable manner, using a **VBOX**.



"We were delighted to be awarded ISO 17025 accreditation and the use of the **VBOX** greatly assisted us."

Steve Callaghan, Technical Support Manager

Key Facts



The **VBOX 3i RTK** offers 2cm position accuracy, as well as speed accuracy of 0.15 km/h



The majority of police forces in the UK and Wales work with Road Safety Support, along with forces in Asia and Oceania



A **VBOX** video data logger was also used for synchronised HD video and data analysis



Road Safety Support have their own specialist test facility and can test speed measurement devices on any road in the world

