Road Remote Monitoring System

Featuring LTE CAT6 high-speed network, dual-SIM failover, high-sensitivity GNSS and data encryption, the VG710 mounted in law enforcement vehicles can monitor illegal parking, speeding and other behaviors in violation of traffic regulations, compensating for the weakness of the existing methods and improving efficiency.

Background

An increase in the number of vehicles has put great pressure on the urban road system and led to more frequent accidents, where ignorance of traffic rules has been an important cause. To monitor driving behavior and prevent illegal acts, the authority has tried a variety of electronic policy systems. But due to long-time construction, high cost and environment constraints, those fixed systems cannot cover all roads that need monitoring. Besides, traditional surveillance measures like manual patrolling, banners and photos are rather time-consuming and inefficient.

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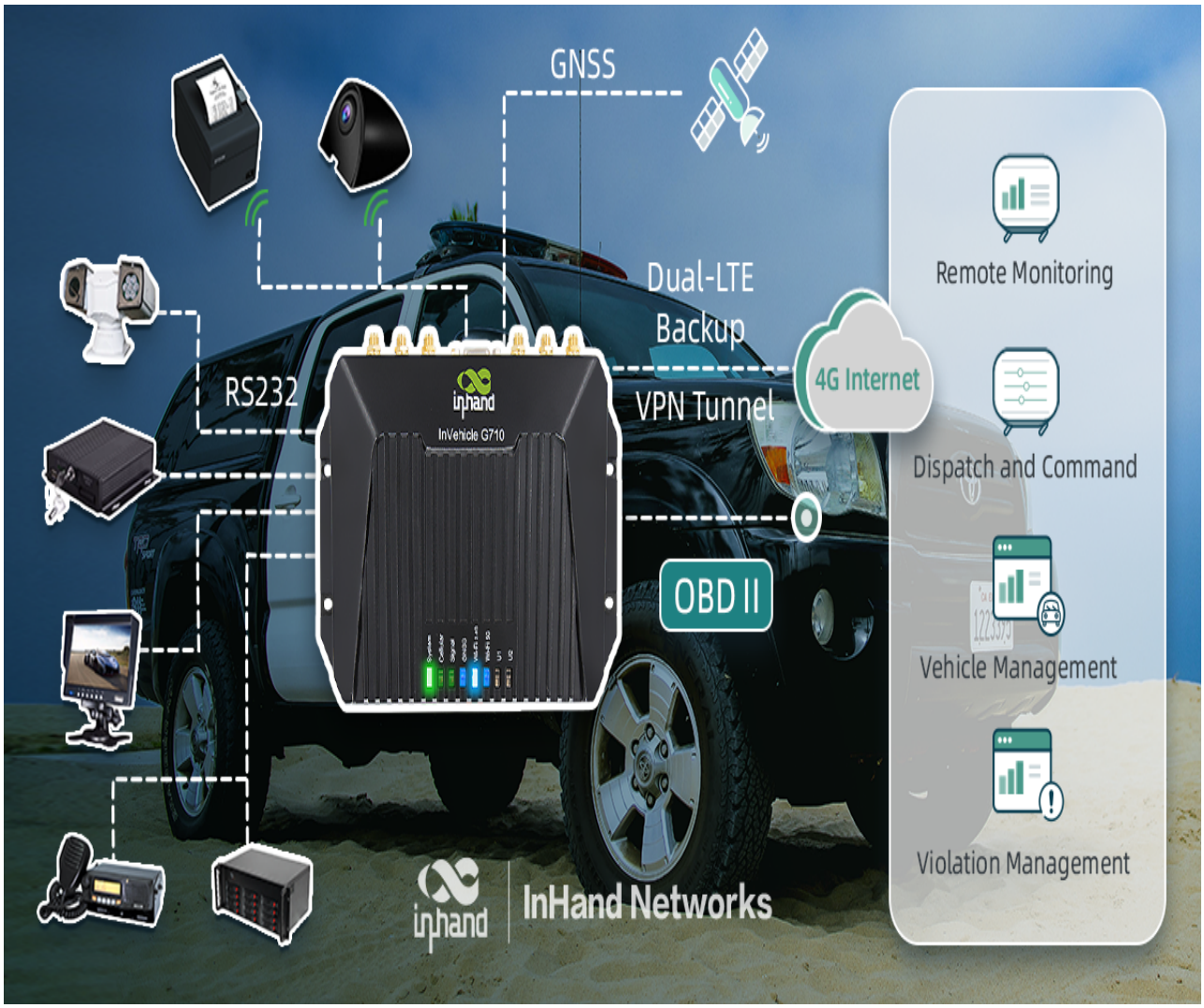
InHand's Solution of Vehicle-mounted Mobile Electronic Police System



The vehicle mobile electronic police system is installed in the law enforcement car. Integrating InHand's InVehicle G710 Gateway, a controllable 360°high-definition camera,
vehicle-mounted NVR, a speed measuring radar and other devices, the system automatically detects behaviors against traffic regulations, including illegal parking, speeding,
not yielding to pedestrians and running on solid lines. The photo-taking or video-recording function is triggered automatically or manually, and with the identified plate number
and location information, the system automatically generates proof of violation and uploads the information to the management platform via VPN.
Capable of quickly covering the monitored road, it greatly improves patrolling efficiency.

Through the vehicle gateway, the command and dispatch system tracks the accurate location of the enforcement fleet, and through the walkie-talkie system or SMS, quickly and precisely deploys vehicles, enhancing efficiency for accident handling and traffic dispersion.

On the enforcement scene, the system is constantly recording high-definition videos, recording the on-site investigation information and enforcement process. It also provides accurate location of the accident, improving rescue efficiency of the medical department.

The vehicle gateway connects the electronic police system to the monitoring system of the command center, ensuring reliable high-definition communication between the enforcement scene and the command center via audio or video talk.

The vehicle gateway monitors the status and diagnostic information of the enforcement vehicle and upload it to the management platform. Through diagnosis and analysis, the platform can detect abnormal vehicle status and carry out preventive maintenance, reducing the chance of faults during service.

Advantages:

- The InVehicle G710 Gateway provides a high-speed input of 300Mb/s for the system, ensuring high speed for high-definition audios and videos, and bandwidth-demanding vehicle business.
  With dual SIM cards, it ensures high reliability of the system communication. It supports carrier network switch with hardware, quick network recovery, and facilitates better networks.
  Data can be cached locally when network is not available and be resumed later, so that data integrity is secured.

- With years of experience in industrial IoT devices, InHand designs the gateway specially for vehicle environments. Of high industrial level and high preventive level,
  reliable and stable operation is ensured in mobile mission applications.

- The vehicle gateway is equipped with complete safety properties, and connected to the platform through encrypted message transmission, freeing users from safety concerns.

- The gateway carries high-precision, high-sensitivity GPS system, precisely tracking the vehicle's locations. With the inertia navigation system, it constantly offers
  precise positioning service even in places without satellite signals, such as tunnels, mountains, flyovers and high buildings.

- The gateway provides an open platform for secondary development, offering an easy-to-use and reliable environment for development. Users can deploy

rich ports
and function modules as well as other system resources, quickly develop applications, and flexibly extend the functions of the vehicle mobile electronic police system.