



WE KEEP YOUR EYES ON THE ROAD

ENFORCEMENT DEPUTY™

Traffic Enforcement Package

RoadMetric is leading the revolution in digital traffic enforcement with its comprehensive state-of-the-art video and data processing technology. The RoadMetric system allows you to convert video events recorded both manually and automatically into hard evidence of traffic violations, without leaving the patrol car. This ability dramatically increases efficiency and lowers costs for both enforcement agencies and the judicial system. Less time in court means more time on the road for patrolling officers to do their job.

RoadMetric's automated detection features allow patrolling officers to maximize their focus on reckless driving behavior, while letting their vehicle automatically record speeding violations and solid-line crossings. Upon detection of reckless driving, the officer merely presses a button or activates standard devices such as LIDAR, and the system creates a video event documenting the violation and the vehicle's plate number.

RoadMetric's sophisticated back-end software uses recorded video footage, ANPR and GPS technologies to calculate the average speed of moving vehicles, and compares it with the maximum permitted speed between any two points. Speeding violations can thus be detected automatically by cross-referencing the data uploaded from multiple patrol vehicles.

As this detection can be carried out anywhere at any time, drivers are forced to maintain proper speed limits at all times.



ROADMETRIC

SYSTEM DESIGN

RoadMetric's Traffic Enforcement Package helps detect and prosecute a wide variety of violations:

Speeding

- 3rd party detectors such as LIDAR and Doppler detect the speeding car.
- The camera system captures video evidence of the violation using ANPR technology to identify the vehicle
- The back-end system uses proprietary algorithms to process the input of calibrated cameras and alert the officer in real time of any speeding cars in the region.
- Mobile average speed is calculated dynamically on the basis of GPS locations and license plate scans from both mobile detectors and fixed cameras in key locations.

Illegal passing

- Automatic detection of vehicles crossing a solid line, illegally passing and lane hugging.

Illegal use of public transport lanes

- Automatic detection using GPS and ANPR technologies in tandem with video analytics.

Illegal parking

- Detected automatically using GPS and ANPR technologies as well as payment data.

Reckless driving

- Reckless driving includes drunk driving, tailgating, cellphone use, disuse of seat belts, littering, and any other behaviors classified as violations of traffic law.
- The patrolling officer presses a button or issues a voice command that activates the video system to create evidence of the violation.

System Specifications

Processing unit	In-vehicle fan-less computer with Intel® quad-core processor
Dimensions	205 mm (W) x 146 mm (D) x 44 mm (H)
Weight	1.9 kg (including one 2.5" HDD and DDR3)
Recording media	Industrial grade 256GB solid state drive
GPS	Integrated
External interfaces	LIDAR, body camera, VMS
Video Transfer	Wireless (802.11ac) and/or wired (Ethernet)

Technology

Video compression	H.264 high profile (2-8 streams)
Camera	1920 x 1080P, 2-16 cameras in array (default 4), 30 fps
Recording triggers	Video analytics, push button, light bar, siren, RS-232, dry contact, 12VDC
Pre/post recording	Predefine 30 seconds, unlimited
Redundancy	Continues recording – event created between 2 bookmarks
Hours of recording	Up to 66 hours from 4 cameras at maximum resolution and frame rate
Video analysis	Speeding, tailgating, crossing a line, right/left passing

Audio

Audio source inputs	3 (1 wired + 2 wireless)
Audio compression	MP3 128 KBPS (multi-channel), 20 Hz – 20,000 KHz +/- 79dB

Operational

Temperature range	-25°C ~ 70°C
Operating system	Windows 8.1
Operating voltages	8~35V DC input
Humidity	10%-90%, non-condensing
Vibration	Operating, 5 Grms, 5-500 Hz
Shock	Operating, 50 Grms, half-sine 11 ms duration
EMC	CE/FCC Class A, according to EN 55022 & EN 55024