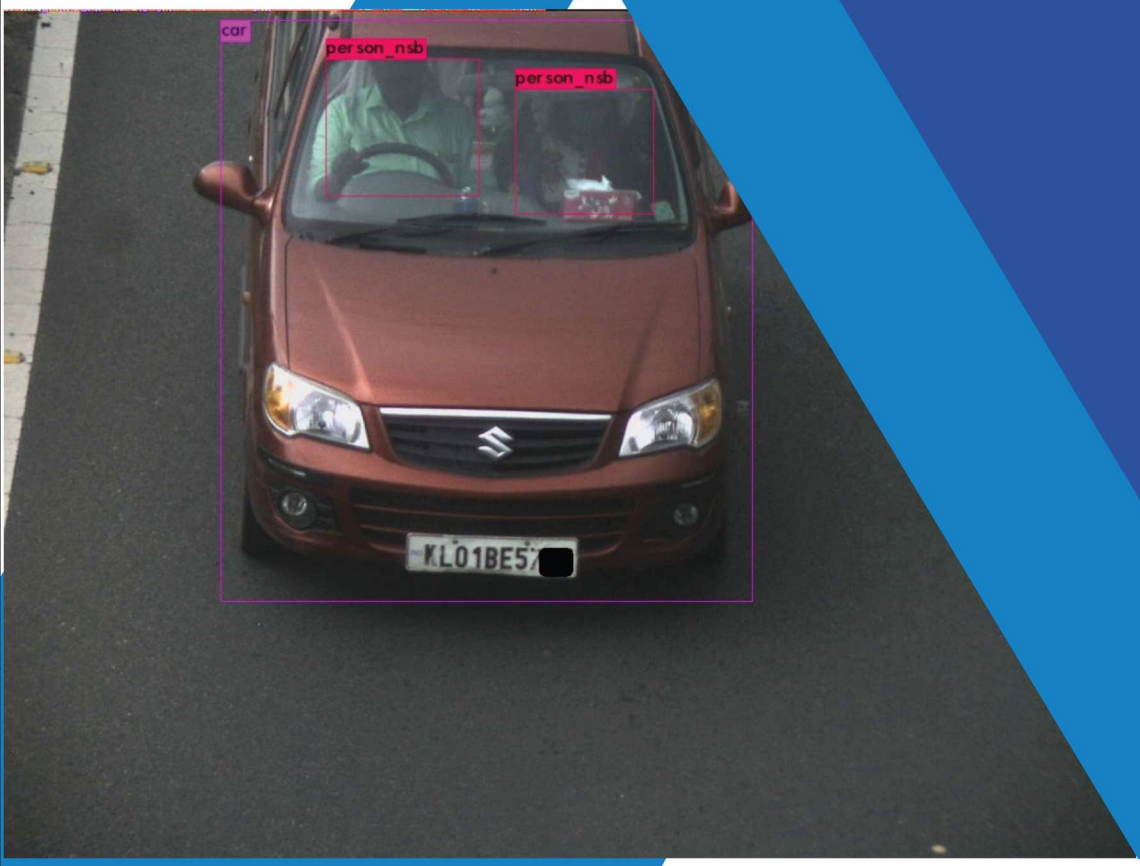
KELTRON
Kerala State Electronics Development Corporation Ltd.
[A Govt. of Kerala Undertaking]

AUTOMATIC TRAFFIC VIOLATION DETECTION

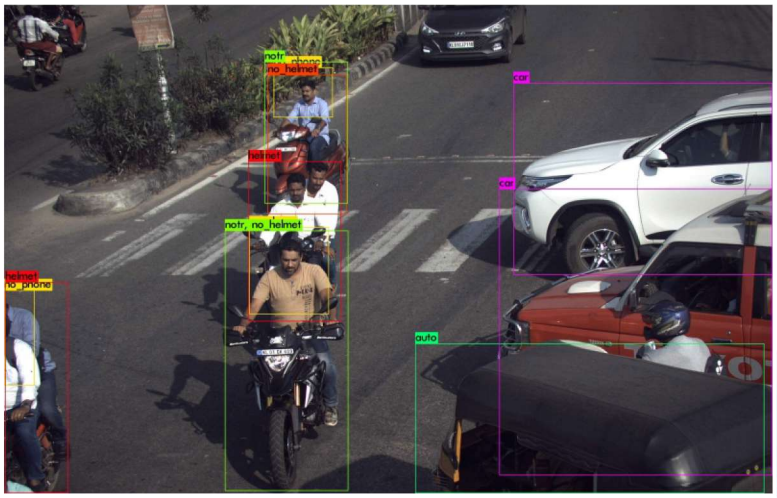
SMART CAMERA SYSTEM



Model : KEL - AIC

Keltron Automatic Smart AI Cameras can be deployed at strategic points to help the law enforcement agencies to detect Helmet less driving, Seat belt Violation, Triple Riding, Mobile phone usage, Unauthorized entry of banned vehicles, Analyze the vehicle details for Permit, Insurance, PUC validity etc.

These AI based cameras use state of the art deep learning technology to learn and automatically detect various incidents and report the same to the control room. They are also equipped with IR illuminators, for night capability.



Automatic detection of these Cameras include

- ☞ Helmet less driving
- ☞ Seat belt Violation
- ☞ Triple Riding
- ☞ Mobile phone usage while driving
- ☞ Unauthorized entry of vehicles

Features:

ANPR camera with vehicle detection (Model: K-ANPR-GS-5M)	Sensor: 5 Mega Pixel Sony Pregius sensor (2465 X 2048), type 2/3", Global Shutter, 3.45 µm, 25 fps, Processor: Arm quad core @ 1.46 GHz, 2 MB Cache, GPU 921 MHz, 10/100 Base-T Motorized zoom, focus lens.
IR illuminator Model: K-IRILM-600W	Infrared flash for image capture at night, Synchronized flash with global shutter of camera, Peak pulse power > 600 watts, Average power < 20Watts, Wavelength: 850 nm, Flash power sufficient to capture vehicle images at night. Capability to capture retro reflective and non-reflective number plates.
Violation detection method (on site engine)	Deep learning – AI based vehicle detection for day & night in local site. Transmit violation images only to control room.
Type of violations	Helmet less driving, Seat belt Violation, Triple Riding, Mobile phone using while driving, Unauthorized entry of vehicles, Analyze vehicle Permit / PUC verification, Insurance etc.
Lane coverage & Images	1-3 lane coverage, 1-2 images per violation
Road side hardware	Road side Embedded hardware, with GPU for deep learning to reduce network bandwidth. (Industrial type). Storage local min 256 GB, AES
Enclosure	Pole mounted rugged outdoor type, with Rain canopy etc.
Connectivity	Connectivity 4G, Cloud connectivity for health monitoring
Power & Field hardware	EB power / Solar power, under voltage / overvoltage protection (EB power), Solar power min 36 hour day autonomy Hardware designed for 0 - 55 deg C operation, IP 65, conformal coated PCB's for environmental protection, (Solar power optional)
Mounting	Road side pole mounting for easy portability

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