PAYMENT MANAGEMENT SYSTEMS FEATURES

Charge Memo Details From Agency Server

Internet

PMS Server With PMS Software

Internet

Online Payment

Offender 2

Payment Gateway

Reports

Offender's Bank Account in another Bank

Daily email with Transaction details

Cash

Receipt

Offender 1

Cash with Remittance Challan
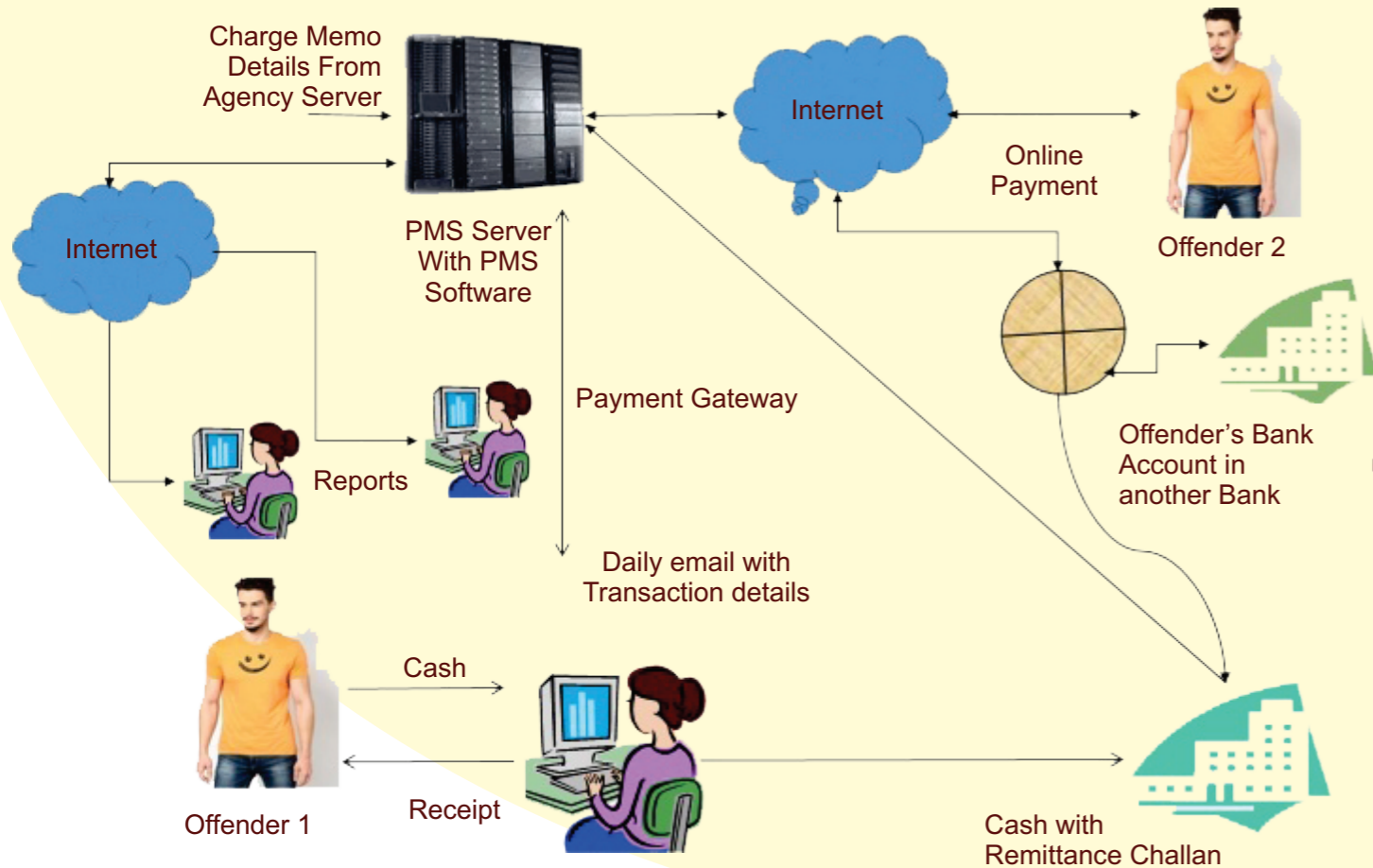
☞ Cash payment through various collection points throughout the state

☞ Credit Card / Debit Card (ATM Card) online Payment with payment gateway

☞ Highly secured multi level Authorisation and Authentication Systems

☞ Data security through Encryption

☞ Secured Socket Layer for financial data transfer through internet

☞ Automation of Bank Reconciliation Process

☞ Easily make available financial reports and various MIS reports

☞ Provide quick and easier search facility

☞ Provide reminders/alerts

MEDIATRONIX
ISO 9001:2008 certified

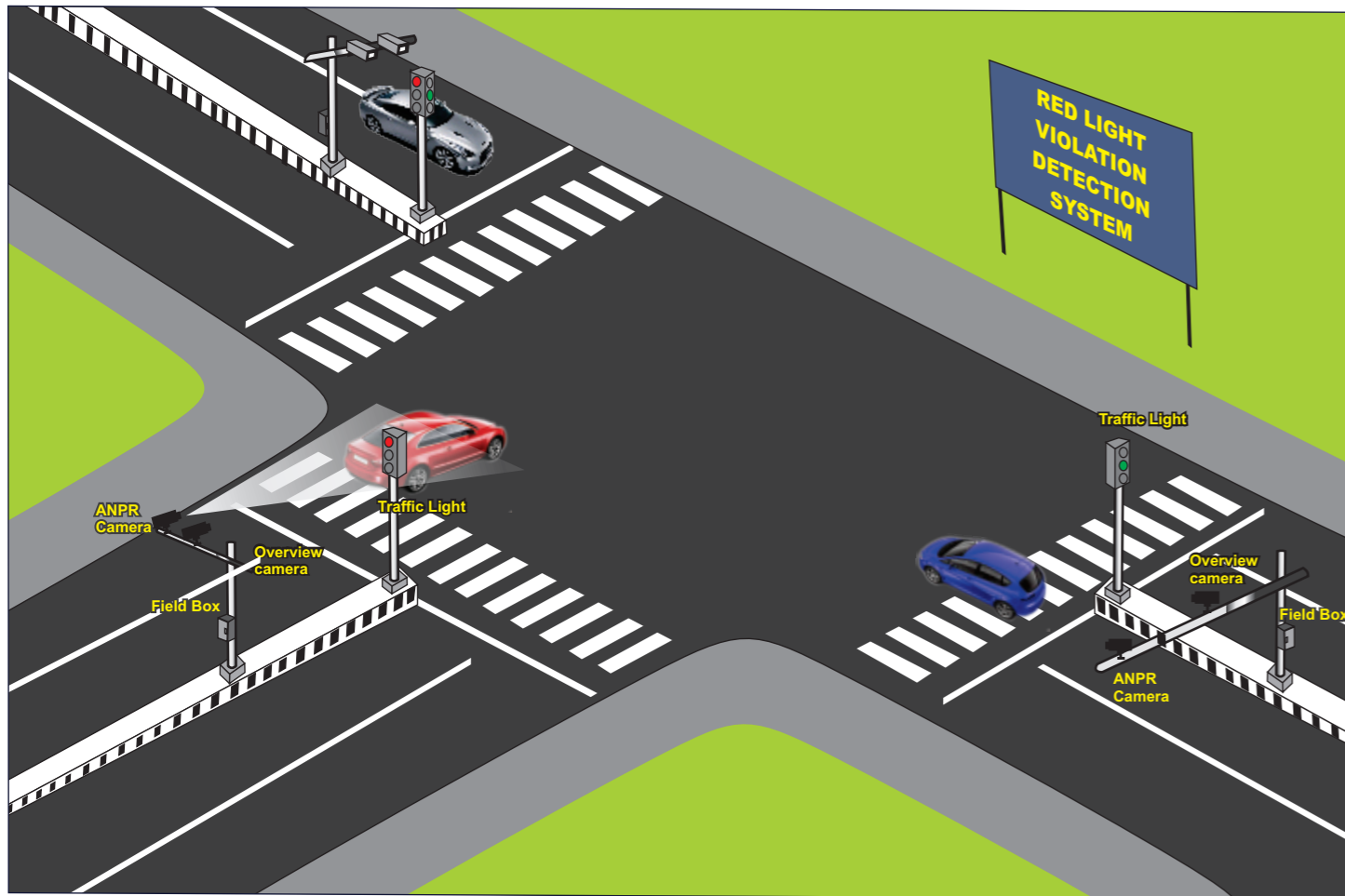# REDLIGHT VIOLATION DETECTION SYSTEM

Model –M-RLVDS-DL

M-RLVDS system uses advanced vision sensor technology to detect and capture images / license number of all types of Vehicles violating Red Light signal. System works fully automatically during day and night conditions.

☞ *Day & Night with IR Flash*
☞ *Court evidence camera capture - capable of capturing the "RED traffic light" even when using IR flash at night*
☞ *Capable of capturing images of vehicles (including 2 Wheelers) at Day & Night*
☞ *Capable of capturing both Retro & Non-retro reflective type offenses plates.*
☞ *No inductive loops / road cutting*
☞ *Light sensor for all round image quality*
☞ *Lightning protection, on-line health monitoring*
☞ *Motorized zoom lens for perfect focus at day & night*
☞ *Uses global shutter camera with synchronized high power flash*
☞ *End to end solution – Hardware, control room software and payment module software*
☞ *Software feature – Challan processing and payment software (cash counter and e-payment method)*
☞ *Software supports clustering of servers for 24 x 7 fail safe operation*

FIELD INSTALLATION DIAGRAM

RED LIGHT VIOLATION DETECTION SYSTEM

Traffic Light

ANPR Camera

Overview camera

Traffic Light

Overview camera

Field Box

ANPR Camera

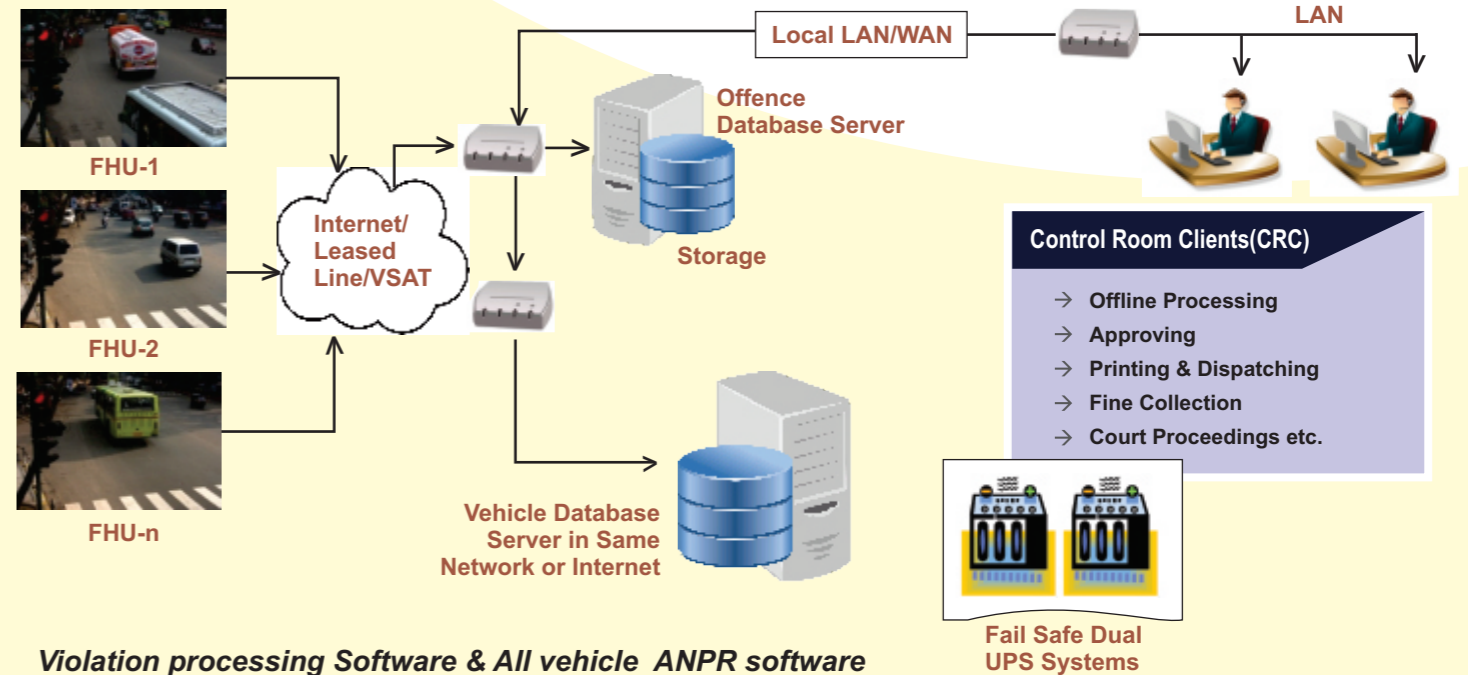Field Box

SPECIFICATION:

Technology	M-RLVDS-DL system uses vision sensor technology to detect and capture images / license number of all types of Vehicles violating Red Light signal. System works fully automatically during day and night conditions.
Road side hardware	
Image Capture subsystem	
Primary detection	Vision based sensor for red light jumping & stop line violation detection. System should be able to detect vehicles with no number plates or damaged plates also. Also vehicle classification should be possible.
ANPR Camera Model: ANPR-CAM-GS1-X (ANPR camera one per lane)	**Sensor:** Mega pixel resolution, CMOS Global shutter sensor, Exposure time 1ms - 10µs, (1:1000 – 1:100,000) **On board Processor:** Video processor at 432 MHZ, 10/100 base T Ethernet, JPEG compression, Trigger in, Flash strobe out Lens :Motorized zoom, focus lens
Evidence	**Sensor:** Mega pixel resolution, CMOS Global shutter sensor, Exposure time 1ms - 10µs, (1:1000 – 1:100,000) **On board Processor:** Video processor at 432 MHZ, 10/100 base T Ethernet, JPEG compression, Trigger in, Flash strobe out, wide angle lens
Infrared Flash Illumination Model : M-RLVDS-DL-IR6	Infrared flash for image capture at night Synchronized flash with global shutter of camera Peak pulse power >600 watts, Average power < 25Watts Wavelength: 850 nm, Flash power sufficient to capture vehicle images also at night. Capability to capture retro reflective and non reflective number plates.
Light sensor for Exposure control	Light sensor (5 decade measuring range) to be used for adjusting camera parameters (Exposure time, Gain) to get optimum image quality under all conditions. Day of time exposure : before noon , after noon and night modes to get high quality images under all conditions of illumination , independent of road

Vehicle image Capture	Along with number plate, high quality image (rear side) of vehicles (all types of vehicles, including two wheelers), also to be captured at Day and Night for all vehicles including two wheelers. Evidence camera should capture images of vehicle on the road along with the traffic signal light.
Traffic light interface	Wired / non wired interface
Other features	
Road side processing Hardware and Software	System controller: Local storage of video from ANPR camera
RLVDS Configuration	2/3 lane, 2-3-4 road junctions
Power supply	On line DC UPS for road side hardware with min 3 Hr back up, and also soft shutdown of Hardware in case of power failure with auto restart. Utility power supply with power meter
Health Monitoring and control	Temperature, battery , UPS, Mains voltage status, power supply working status, vibration sensor, (Anti tamper with siren) camera status, remote control of reset, shutdown
Protection	Protection against lightning, under/over voltage, Low power standby mode for long period mains power failure condition
Remote notification methods	Cloud based remote notification.
Field Enclosure	Pole mounted outdoor type with Rain canopy etc.
Camera mounting	Gantry / cantilever option
Road side connectivity requirements	
Suitable high speed connectivity to match the requirements – ADSL / Leased Line / OFC/3G/4G	

SYSTEM DIAGRAM

Violation memo Format - Minimum Two images per Violation memo - one with Vehicle rear side with License plate visible clearly and other images of vehicle on the Road along with the traffic signal. Also to have info like date, time of offence, location ID, Violation ID, Motor vehicle applicable Law/ Act, fine amount, due dates etc

JUNCTION/ ROAD

FHU-1

FHU-2

FHU-n

Internet/ Leased Line/VSAT

Local LAN/WAN

LAN

Offence Database Server

Storage

Vehicle Database Server in Same Network or Internet

Control Room Clients(CRC)

→ Offline Processing
→ Approving
→ Printing & Dispatching
→ Fine Collection
→ Court Proceedings etc.

Fail Safe Dual UPS Systems

Violation processing Software & All vehicle ANPR software

- *Automatic download of captured violations by server software from multiple locations. Automatic Number Plate recognition by System Software while downloading*
- *Configure the capture stations*
- *User can use any standard web-browser to access violations downloaded by the server software*
- *Options for penalising and dispatching violations available.*
- *Challan format can be modified according to the project/ system requirements*

- *User Management – Multiple users can be created for using the Challan Processing Software and privileges can also be set*
- *Getting vehicle/owner information from State Motor Vehicle database*
- *Various reports like Search Vehicle, User's Report, Violation Analysis Report, Dispatch Report, System Events Report etc., are available*