VSDS Vehicle Speed Detection System

YOUR SPEED 102 Kmh

YOUR SPEED 96 Kmh

Based on ATMS 2021 Manual

Adhering to

MORTH
Government of India

NHAI
National Highways Authority of India

IHMCL
Indian Highway Management Company Limited

Guidelines

CAR

CAR 45 Km

H ABC1234
Vehicle Type: Car
Speed: 80km/h
Direction: Approach
Vehicle Color: Orange
Plate: ABC1234
Plate Color: White
Count: +1

• AI-powered LPR Algorithm
• Vehicle Feature Recognition
• License Plate Recognition
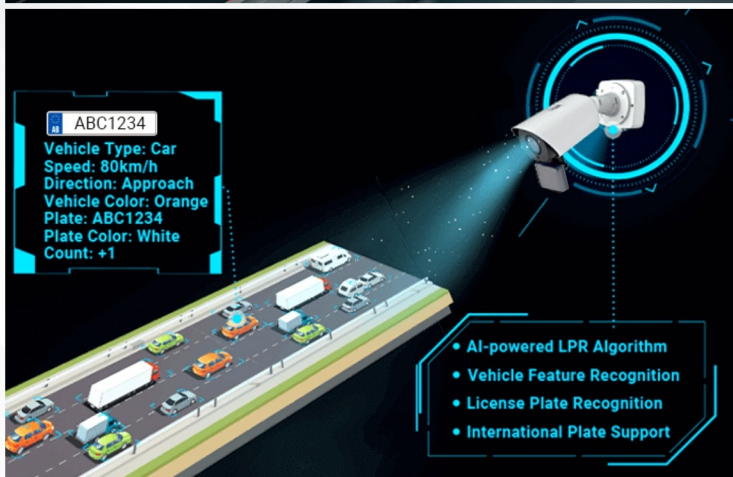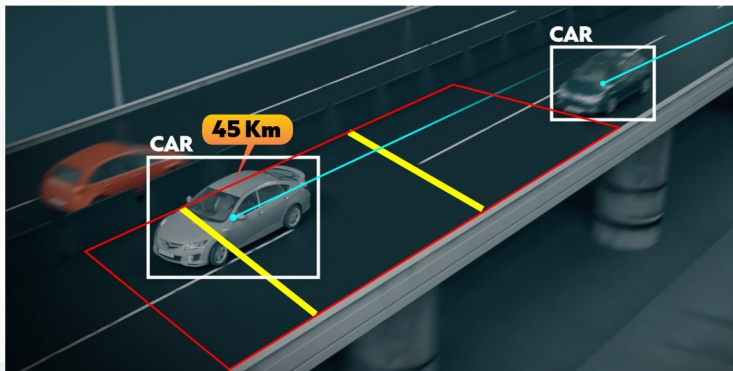• International Plate Support

VSDS OVERVIEW:

The Vehicle Speed Detection System (VSDS) consists of an ANPR camera, an LED display, along with a 3D speed radar sensor. It is a comprehensive package compliant with the ATMS 2021 manual and operates in real-time. This project is exceptionally exclusive, boasting high accuracy pared to products from other manufacturers.

How VSDS works?

The ANPR camera captures license plate information, while the 3D speed radar sensor measures vehicle speeds accurately. The collected data is then displayed on the LED screen in real-time.
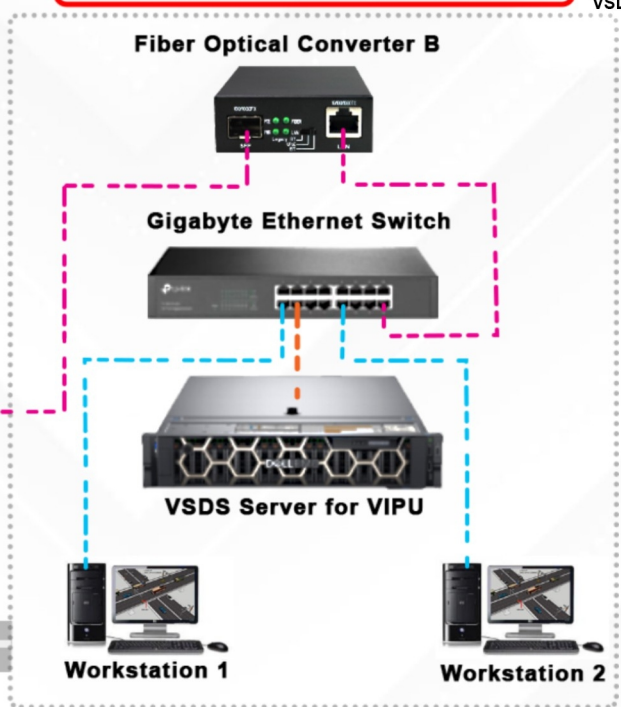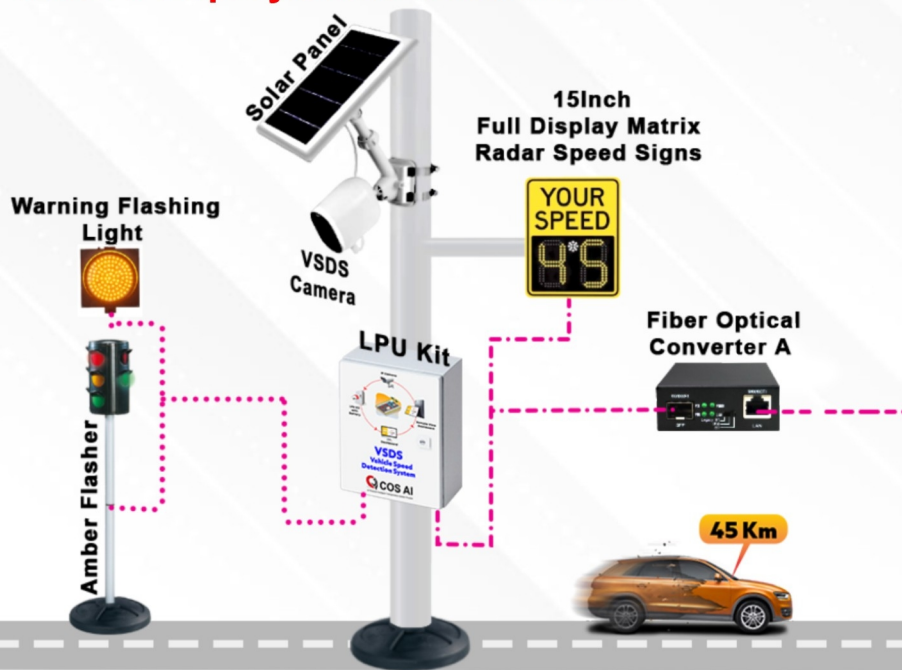
Key Features:

★ **Maximum Speed Limit:** Capable of detecting speeds up to 160 km/h, ensuring comprehensive speed monitoring.

★ **High-Definition Image Capture:** Provides clear and detailed images for accurate identification and evidence.

★ **Automatic Challan Generation:** Automates the process of issuing traffic violation fines, improving efficiency and accuracy.

★ **Customized Reporting:** Offers a fully customizable reporting system to tailor reports to specific business needs and requirements.

★ **Integration with e-Challan Software:** Seamlessly integrates with e-Challan software for streamlined enforcement and record-keeping
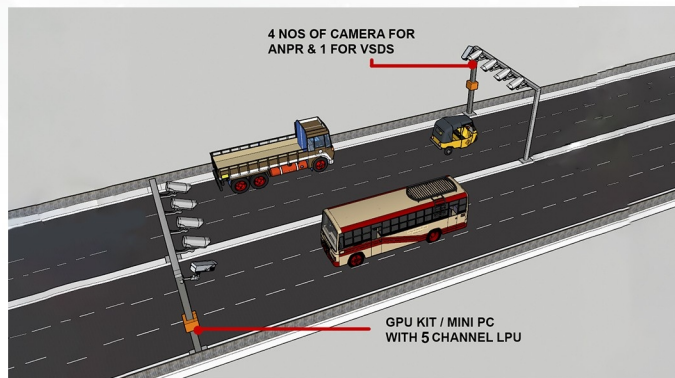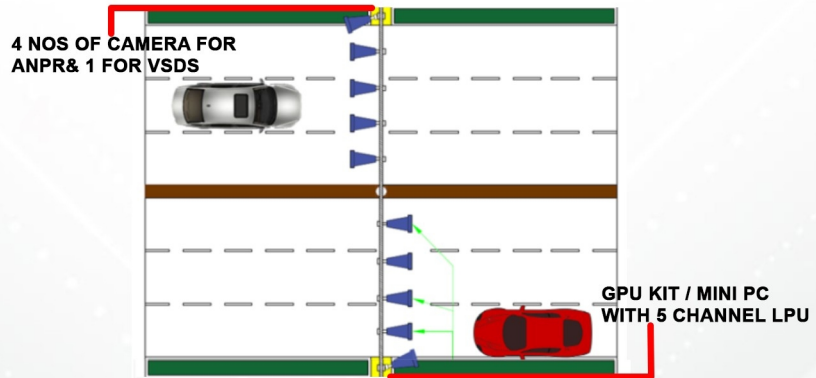
COS AI Deployment Architecture

Solar Panel

15Inch Full Display Matrix Radar Speed Signs

Warning Flashing Light

VSDS Camera

YOUR SPEED

LPU Kit

VSDS Vehicle Speed Detection System

Amber Flasher

Fiber Optical Converter A

45 Km

Fiber Optical Converter B

Gigabyte Ethernet Switch

VSDS Server for VIPU

Workstation 1

Workstation 2

COS AI 's Indicative VSDS Components

Sl.No	VSDS Components	Qty.	Unit	Cost per unit + Tax	Remarks
1	COS AI VSDS Software	1	No.	Contact	COS AI
2	Hardware of COS AI LPU Kit	1	No.	Contact	COS AI
3	ANPR – Radar based speed detection IP Camera 2MP / 5MP	1	No.	Contact	Client
4	Lighting Pole for 8.0m Pole with 1m Arm @ 5.5m	2	No.	Contact	Client
5	PoE Switch TP Link / HIKVISION	1	No.	Contact	COS AI
6	Internet Dongle	1	No.	Contact	COS AI
7	FIBER Cable / Media Converter for internal connectivity of camera and other network elements	1	No.	Contact	Client
8	LED Focus Lamp 1000W / 500W as per site condition	2	Nos.	Contact	Client
9	To viewing the real time scenario - Desktop (Specs.: i5/ 8GB RAM / 512 GB SSD)	1	No.	Contact	Client
10	15 Inch Full Display Matrix - Radar Speed Signs	1	No.	Contact	Client

4 NOS OF CAMERA FOR ANPR & 1 FOR VSDS

GPU KIT / MINI PC WITH 5 CHANNEL LPU

4 NOS OF CAMERA FOR ANPR& 1 FOR VSDS

GPU KIT / MINI PC WITH 5 CHANNEL LPU

3D - VIEW
VSDS/ANPR CAMERA @ EVERY 10 KMS

PLAN
VSDS/ANPR CAMERA @ EVERY 10 KMS

Terms & Conditions

★ The client is responsible for covering the costs associated with Uninterrupted Power Supply, lighting, Internet Broadband line, Network Cabling, Camera mounting, and any other miscellaneous works.

★ Camera installations must be positioned at a minimum height of 18 feet above the surface.

★ Any expenses related to establishing connectivity from the camera pole to the toll center, including fiber connectivity, are the responsibility of the client.

★ Two lights will be installed, necessitating placement of two poles in front of the camera pole. A minimum space of 20 meters between each pole is required on both LHS and RHS. Additionally, a third light will be installed near the camera with a road-focused beam.