Interceptor

INTRODUCTION

Our Interceptor is a state-of-the-art vehicle designed to transform traffic monitoring and enforcement, reducing road accidents through real-time detection of speed, movement, and violations. Its user-friendly interface allows operators to efficiently monitor and control the system from within the vehicle. Available in two variants—Lidar-Based and Radar-Based Interceptors—this innovative solution reflects our dedication to providing reliable tools for modern traffic management.

:types of

:LiDAR Based

Our **Lidar-based Interceptors** utilize Advanced Light Detection and Ranging (Lidar) technology for accurate and reliable speed detection, even under challenging conditions. These systems set a new standard in traffic enforcement precision. Ensuring consistent performance across diverse environments while enhancing road safety and compliance.

Bike Interceptor: Compact and agile, it excels in congested areas and single-lane roads, providing precise speed measurements and effective enforcement in tighter spaces.

Car Interceptor: Engineered for highways and broad roads, it features a powerful Lidar system to monitor and enforce traffic regulations efficiently from long distances.

:RADAR Based

Our **Radar-Based Interceptor** is a sophisticated solution crafted to strengthen road monitoring and safety initiatives. Efficiently detecting multiple vehicles at a time, it is well-suited for busy, multi-lane roads.

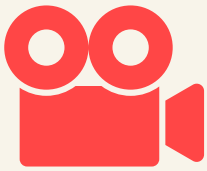
Utilizing advanced radar systems, it ensures accurate speed detection and violation capture for various vehicle categories.

The device aids in generating digital challans, streamlining enforcement procedures. With a portable and sturdy design, it offers law enforcement agencies a reliable tool to promote safer roads and lower accident rates.

:benefits

:Digital Challan Generation

This feature streamlines enforcement by automating and simplifying the process of issuing challans for traffic violations. It reduces manual intervention, minimizes errors, and ensures a quicker, more efficient system for handling violations.

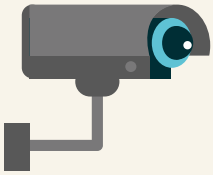


:Comprehensive Data Recording

The system maintains detailed logs of violations, supporting legal proceedings and data analysis for traffic improvement.

:Cloud-Enabled System

With cloud-enabled functionality, the device allows remote monitoring and real-time data analysis. This feature streamlines operations and enables better decision-making without the need for physical presence.



:Inbuilt ANPR

Equipped with an integrated ANPR system, the device automatically identifies vehicles in real time. This ensures seamless enforcement and accurate record-keeping by linking violations to vehicle identification.

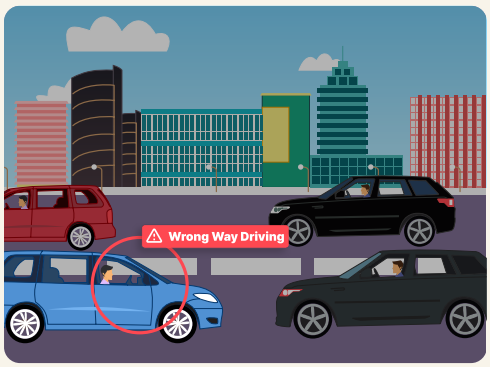
:Robust and Reliable Design

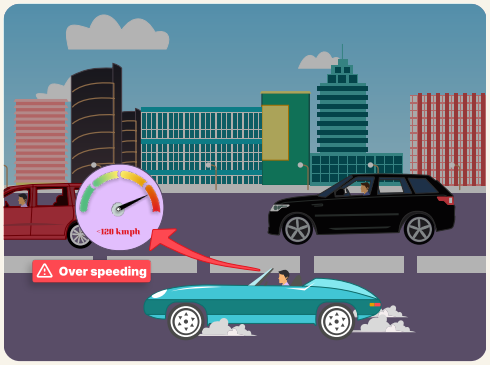
The Interceptor operates continuously, backed by 24/7 support for maximum uptime. This ensures reliable performance and minimizes downtime in critical situations.

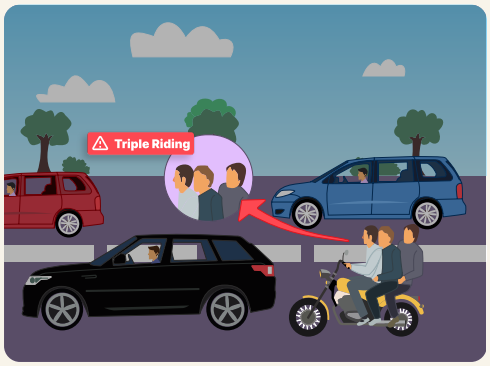
:features

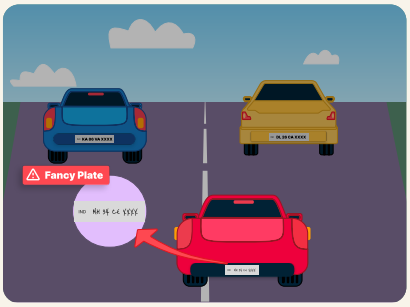
- ITMS
- Long-Range
- Weather Almighty
- Auto-configured
- Seeing Through
- Waterproof
- No-light
- Speed Detection

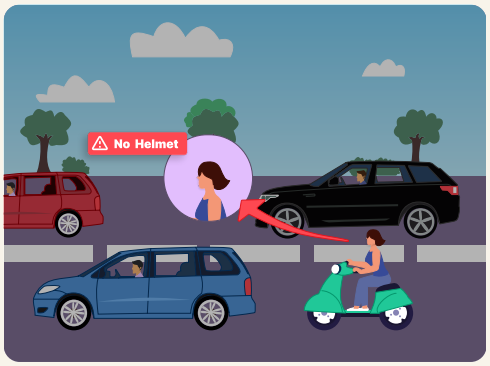
:violations

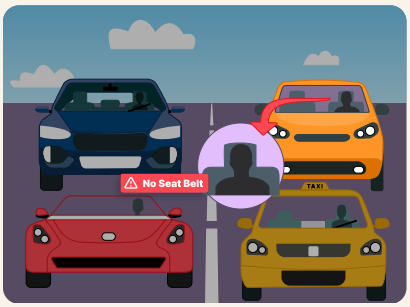












:model view

*Our products are fully customizable according to the user's needs.

:specifications

LiDAR Based Interceptor

Laser class	Class I
Maximum Distance of the object for Speed Measurement (Meter)	3000 Meters or better
Maximum high speed measurement	320 Km/hr or more
Size of Touch Screen	3.5/5.5/ 7/ 10.1 inch
Laser Camera	Inbuilt and integrated
Camera Resolution (In mega pixel)	Min 2MP & as per user requirement
Different Speed Limit for different categories of Vehicle, Selectable by operator by a single button press	Four Categories (MMV, LMV, HMV, Two Wheeler)
Data Transfer provision to transfer data from Laser Camera to a station computer	USB Port, Data Card, Remote data transfer provision for Laser Camera to central server via 3G/4G
Data Security	128/256 bit data encryption
Availability of Test Report from Govt/NABL approved/ILAC accredited Lab to prove Conformity to the specifications	Recognized Lab
Weight	as per user requirement
Horizontal & Vertical Tilt	360 Degree both
Violation Detection	No Helmet / Tripple Riding / No Seatbelt / Vehicle Classification like Electric / commercial / Private
Number Plate Classification	Commercial / Private / Electric
Role Based Access	Multi User and Multi Role Management System
Optical Zoom of lens	33x or more
Mode of Operation in Laser Speed Meter	Manual Mode , Automatic Mode, Automatic Mode with Automatic Number Plate Recognition

Type of image	Yes, should have essential absoluter documentary evidence. Temper proof sighting laser spot dimension correspond to laser spot for unambiguous identification of target vehicle.
Quick data retrieval from storage offence images using Registration number /Vehicle number/ offenders name, etc.	Yes
Speed Sensor	Should be of USA, South Korea or other countries Should not be of China
Calibration	Accuracy of calibration to be undertaken by the bidder
Ingress protection rating	IP67 or better

RADAR Based Interceptor

Frequency	77 ~ 81 GHz
Update Rate	50ms
Output Data Interface	1000BASE-T1 Ethernet x 1
Vehicle Data Interface	CAN FD x 1
Point Cloud Output (per frame)	Yes (Max. 3000)

Mode	Long Range	Short Range
Maximum Detection Range	Car: 250m	Car: 100m Man:50m
Range Resolution	1.40m	0.46m
Maximum Doppler Ambiguity	±280km/h	±280km/h

Mode	Long Range	Short Range
Doppler Resolution	0.161km/h	0.167km/h
Azimuth FOV	100°(±50°), 30° (±15°) @250m	100°(±50°)
Azimuth Angle Resolution	2.0°	2.0°
Elevation FOV	24°(±12°), TBD @250m	24°(±12°)
Elevation Angle Resolution	4.7°	4.7°

VINAYAN
Vinayan (India) Consulting & Services Pvt. Ltd.

Next Gen Traffic Management System

Vinayan is transported to be part of groundbreaking projects and takes immense pride in contributing to India's journey toward becoming a digitized, technology-empowered nation. Together, we're building the roads of tomorrow—today!

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DRIVING INNOVATION ENHANCING SAFETY