



TRAFFITIX

Smart Radars

Product by



Tahaluf



PRODUCT BRIEF



Traffitix Smart Radar pole is a radar pole with an advanced camera system, AI Processor, and sophisticated sensors. Using the video stream from the radar pole, the smart radar uses AI technology to instantly detect traffic violations, vehicle speed and gathers traffic data of all vehicles on the road. Traffitix radar is integrated with a smart platform that enables its users to receive instant alerts for violations, view advanced analytics, generate reports, and more.

PRODUCT DESIGN



Integrated video cameras with night vision capabilities



Powerful AI Processor with AI-Powered video analysis



Live video streaming to the smart platform



Integrated cooling System



Allows Remote Configurations & system updates



Dimensions (height 300 cm x radius 30 cm)



Can operate normally in harsh weather conditions

Product Features



Traffic flow speed

The system automatically detects the flow speed of the road, in real-time. The flow speed is the average speed of all the vehicles, which can be an indicator of traffic congestion



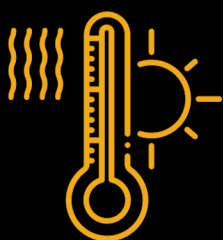
Traffic flow density detection

This feature determines the flow's density, where the number of vehicles is divided by the average speed. This number helps determine the vehicle density of each lane.



Traffic anomaly

The system reports any abnormal or unusual traffic situation like odd average speed (i.e the average speed is zero), traffic and pedestrian violations, objects left on the road, or basically anything other than normal traffic flow.



Weather analyzer

This feature analyzes the weather in the radar area. It constantly measure temperature, wind speed and direction, humidity, rain and visibility (lights condition, fog, dust,..etc.)



Vandalism Detection

The system detects and immediately reports whenever anyone attempts to damage the radar itself so that traffic authorities can take proper action immediately.



Vehicle-based speed limits

With the help of the night mode feature, Traffitix can accurately analyze live and recorded video streams even if the video streams captured the road in the night-time in poor lighting conditions.

Product Features



Night mode

With the help of the night mode feature, Traffitix can accurately analyze live and recorded video streams even if the video streams captured the road in the night-time in poor lighting conditions.



Simultaneous dual-direction speed detection

The system simultaneously detects the speeds of all the vehicles in the video stream for both road directions.



Speed detection for multiple vehicle orientations

The system simultaneously detects the speeds of all the vehicles in the video stream, for all vehicle orientations.



License Plate Detection & Recognition

The system detects and immediately reports whenever anyone attempts to damage the radar itself so that traffic authorities can take proper action immediately.



Vehicle type detection

The system simultaneously detects the speeds of all the vehicles in the video stream for both road directions.



Vehicle color, make & model detection

The system simultaneously detects the speeds of all the vehicles in the video stream, for all vehicle orientations.




Product Features



The smart radar can be customized to have one (or more) of the following radar customizations.

High Way Radar

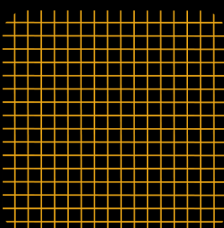


The system detects when a vehicle suddenly switches lanes with a speed faster than the permitted road speed and instantly notifies the smart platform with this violation.




Tailgating is when a car is driving very closely behind another car with very little distance between them.

Traffic Light Radar




The system can immediately detect stopped cars within the yellow box area, as well as any identifiable reckless movement in this area that might lead to an accident.



The system automatically detects whenever a driver tries to make a wrong U-turn, Suddenly cutting across multiple lanes to take a nearby u-turn, Doing a u-turn that is dedicated to the other road direction.

Pedestrain Radar



This feature detects whenever a pedestrian is crossing the road



Traffitix immediately detects Jaywalking and reports it to the smart platform. Jaywalking is when pedestrians cross a road that has traffic, in a place or time in which they aren't allowed to cross it.



Platform Features

1

Alerting Module



Traffitix platform instantly receives all the detections (violations, vehicles,... etc.), in real-time. High-risk alerts (i.e. accident , major violations,...etc.) automatically trigger alerts on the platform

2

Search & Query



This module issues alerts whenever any violations are detected (i.e driver distraction, driver smoking during trip,...etc.). It can also be configured to issue alerts for any needed detection as specified by the platform users.

3

Analytics Dashboards



Traffitix's platform analyzes all the collected data from all video streams and provides AI-powered traffic analytics and insights.

4

Report Generator



Traffitix's platform analyzes all the collected data from all video streams and provides AI-powered traffic analytics and insights.

5

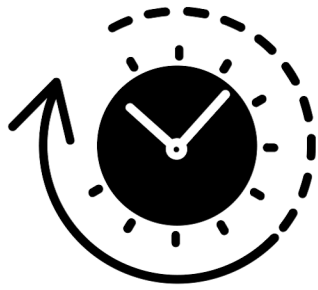
Easy Integration



Traffitix Platform can easily integrate with internal and external systems, transferring any specified alerts, detections or data from and to the platform.



Business Benefits



Faster response time for detected accidents and road blockage.



Instant alerting of critical violations.



AI-Powered analytics for data-driven traffic, road planning.



Better informed traffic and road policy-making.



Safer roads, cities and municipalities.

About Tahaluf

Tahaluf was founded in 2015 and has taken from Abu Dhabi, the capital of the United Arab Emirates as home. From the beginning, we have always strived to provide the latest high-tech trends and solutions to help our customers stay up to date with the constantly evolving requirements of the market as well as maintain the flow of their business uninterrupted and ensuring its efficiency and effectiveness.

What Tahaluf has exceptionally achieved in a short period of time lead to successfully securing a prominent and prestigious position in the technological world as a leading company in information technology in general and cyber security in specific. This could not have been achieved without the dedication, team effort, and passion of our innovative experts who have a wide range of experience in the region and overseas in their field and who are always on the hunt for new ideas and ways to make the life of our customers easier and to add a sustainable value to their business.

TRAFFITIX

Traffic Monitoring for
Safer Roads

