



TraffiClair Monthly Updates

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ClairEye-i Use Case

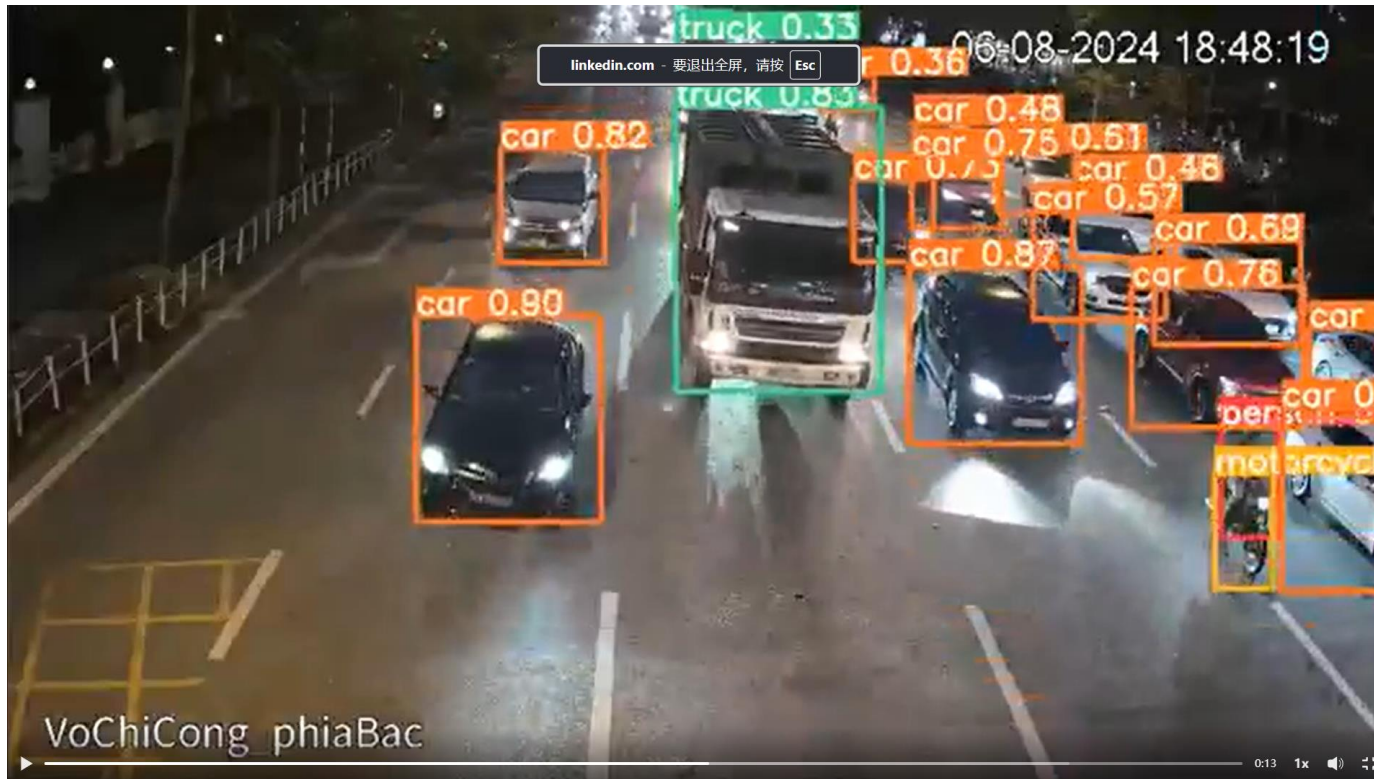


Our partner in Malaysia has recently implemented the ClairEye-i traffic AI video detector as part of a trial project.

The ClairEye-i is an advanced traffic AI video detection system, utilizing state-of-the-art neural network processing to deliver reliable, real-time traffic monitoring in complex urban environments. It provides detailed insights into vehicle presence, traffic flow, occupancy, road user classification, and event detection. This is all achieved solely through the camera itself, eliminating the need for an external edge computing box. With a sleek, compact design, the ClairEye-i is easy to install and highly energy-efficient, consuming less than 3 watts of power.

[-> Detail Report](#)

ClairEye-I Live Demo

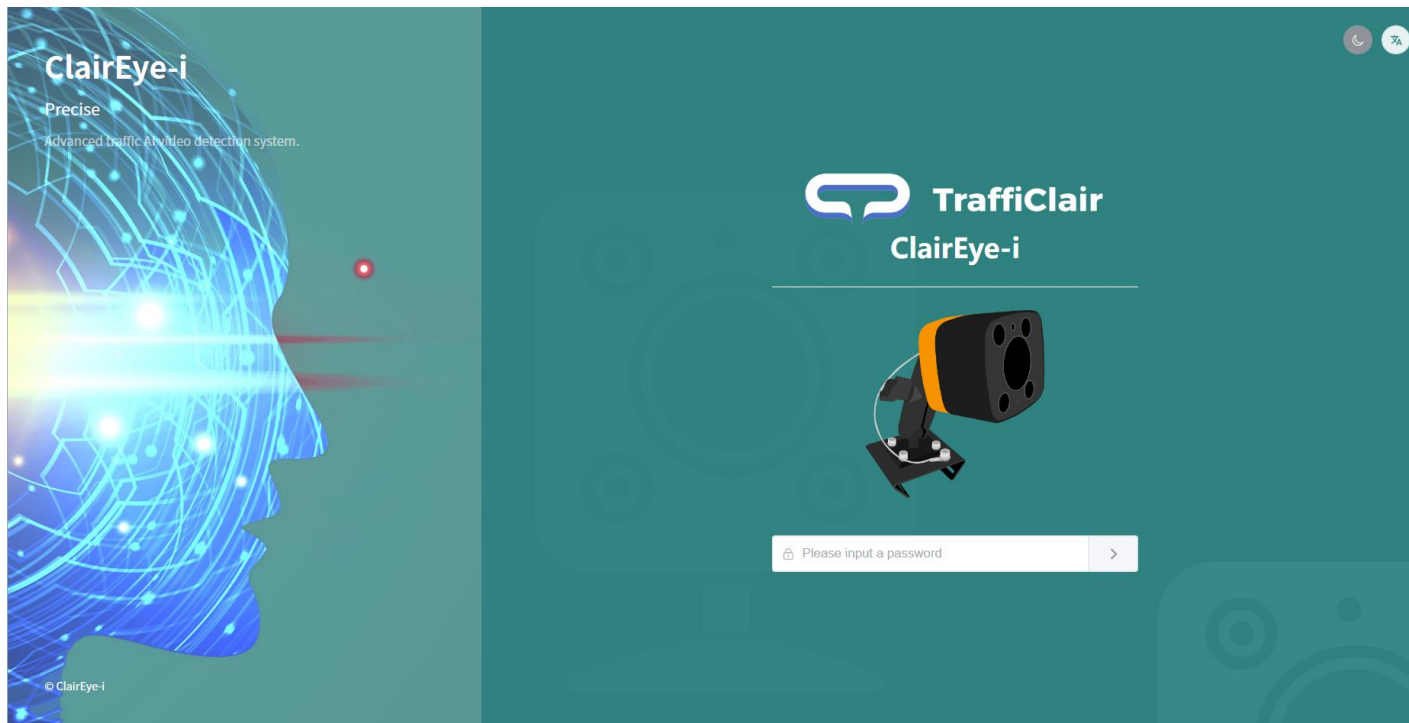


Experience the power of ClairEye-i, the cutting-edge AI traffic video detector that captures real-time insights with remarkable precision. Watch as ClairEye-i effortlessly detects all road users, from cars to motorbikes, in an instant. With its easy installation, high accuracy, and non-intrusive design, ClairEye-i is the ideal solution for modern traffic management. Powered by advanced neural network processing and consuming less than 3 watts, it ensures efficient and reliable performance. Ready to transform your traffic monitoring system? Discover ClairEye-i, the smart choice for seamless, next-level detection.

[View full video on Youtube](#)

[Product webpage](#)

ClairEye-i Remote Operation Application Now Open



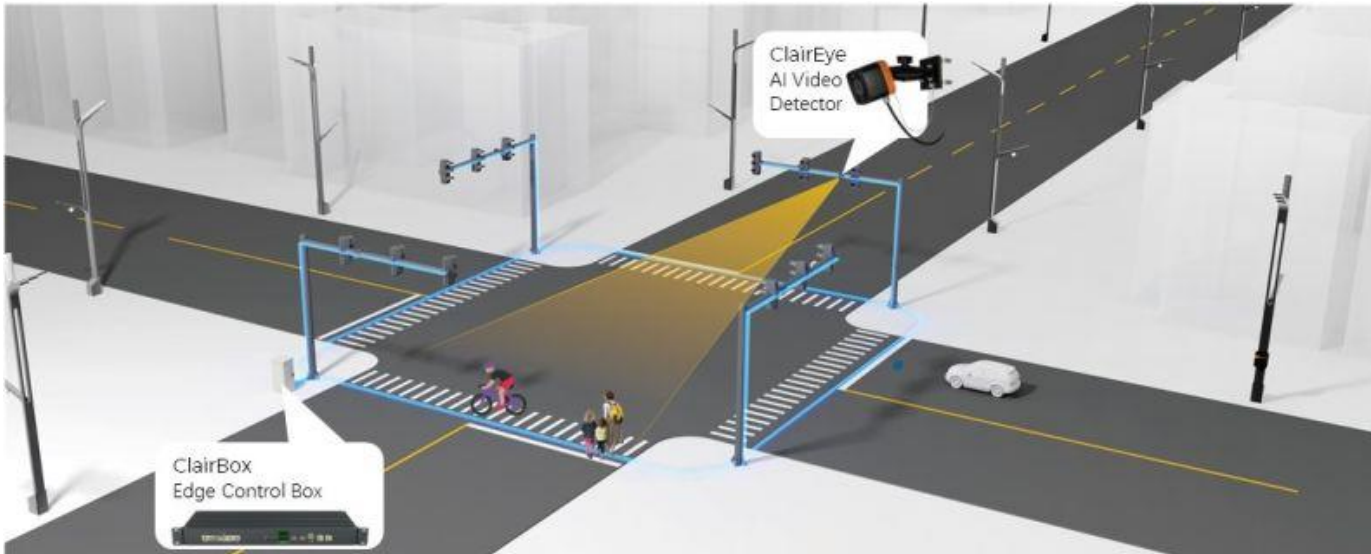
We are pleased to announce that remote operation for ClairEye-i is now available for application! ClairEye-i is a cutting-edge traffic AI video detector designed for real-time, energy-efficient performance. Leveraging neural network technology, it provides intelligent traffic insights with low power consumption.

To apply for remote operation access:

- Contact our support team at sales@traffyclair.com.
- Receive remote operation setup assistance from our technical experts.

Take advantage of this opportunity to enhance your traffic management systems with ClairEye-i's innovative remote capabilities!

Vulnerable Road User Friendly Adaptive Traffic Signal Control System



This system integrates the information of motor vehicle, special vehicle, and the most importantly, vulnerable road users including pedestrian, cyclists traffic demand at intersections. Automatically calculates and generates signal optimization plans in real time according to different traffic demands. Identifies and responds to traffic scenarios and sudden special traffic events. Realizes intersection adaptive traffic control without excessive human intervention, and effectively improve the safety of vulnerable road user safety and solves traffic congestion problems.

Benefits

- AI video analysis algorithm, accurate identification of vehicles and vulnerable road users including pedestrians, cyclists, and scooter riders.
- Traffic signal adaptive control favorable for vulnerable road users. Eliminates the need for human investigation and operation. Greatly improve the safety and traffic efficiency.
- Separate users in time by providing leading pedestrian/cyclist intervals or longer cycles especially while event of large crowd gathering occurs near stadium, schools and public transit stations.

[-> Product Webpage](#)

Non-contact Pedestrian Crossing System



Video recognition technology detects the pedestrian status in the pedestrian waiting area and crosswalk area in real time, including the number of people in the waiting area, the comprehensive waiting time, the pedestrian walking speed in the crosswalk, and the detention situation. Combined with the traffic flow demand of road vehicles and the coordinated control demand of upstream and downstream, it realizes the optimal control of non-contact automatic pedestrian traffic signals. A pedestrian radar is also a cost-effective option for pedestrian movement detection including tracking trajectories and identifying stationary positions. Pedestrian radar is often adopted in locations where pedestrian privacy is a concern.

Benefits

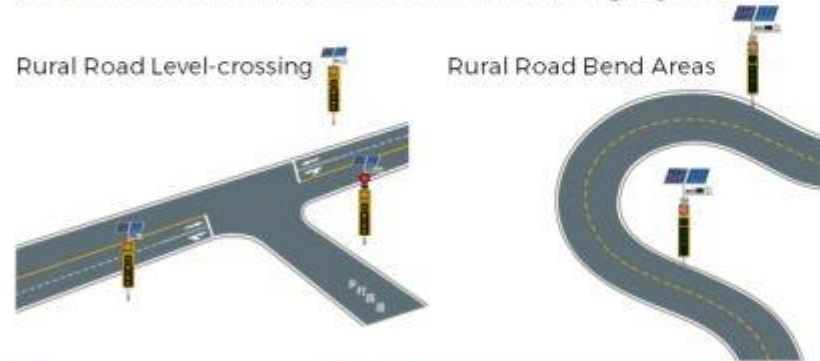
- AI video detection of pedestrian crossing demands, automatic cancellation of requests for pedestrian departures.
- Pedestrian radar provide cost-effective detection of tracking trajectories and identifying stationary positions.
- Pedestrian crossing adaptive control without human intervention.
- Dramatically improve the safety of pedestrians
- Elimination of confusing pole mounted buttons and the spread of germs and viruses.

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Rural Intersection Conflict Warning System (RICWS)

Reduce the Fatal and Serious Injury Crashes at Rural Non-signalized Intersections

ClairSaf RICWS (Rural Intersection Conflict Warning System)



Safety Warning
Reduces accidents

4G/5G Wireless Communication
No need for fiber cables

Solar Power
No need for power cables

Customization Acceptable



The ClairSaf Rural Road Safety Warning System addresses the lack of traffic lights in rural or mountainous areas, where power supply and network connectivity pose challenges. The system employs a forward multi-object radar detector to monitor real-time traffic conditions for vehicles and vulnerable road users, such as pedestrians and cyclists, on rural roads. Through traffic flow data analysis, the perception processor issues audio and visual safety warnings. This prompts prudent control of vehicle speed, reducing accidents at rural level crossings and curved road intersections. The system incorporates solar power and 4G/5G wireless communication technology, effectively overcoming power supply and network connectivity challenges in rural and mountainous regions.

Benefits

- ✓ Improved the safety in rural road level-crossing and rural road bend area by reducing accidents dramatically.
- ✓ Solar power supply eliminates the need for power cables.
- ✓ 4G/5G wireless communications ease the remote management and eliminates the need for fiber cables.

[-> Product Webpage](#)

Smart LED Zebra Crossing



[-> Product Webpage](#)

Pedestrians are considered vulnerable road users in traffic environments, and conflicts between pedestrian crossings and vehicular traffic in bustling intersections can lead to significant traffic safety incidents. The Smart LED Zebra Crossing automatically illuminates LED floor tiles when the pedestrian signal light is green. When the pedestrian signal turns red, the LED floor tiles either automatically extinguish or display a red light. Additionally, when combined with pedestrian detection devices, the system can automatically identify the presence of pedestrians on the crosswalk. It then lights up the floor tiles to warn approaching vehicles, ensuring pedestrian safety.

Benefits

- Significantly enhance attentiveness and awareness, facilitating easier identification of vulnerable road users by vehicles.
- Implement visible boundaries to separate users in space, especially in low-light conditions.
- Utilize lighting warnings to decrease vehicle speed and enhance the safety of vulnerable road users.

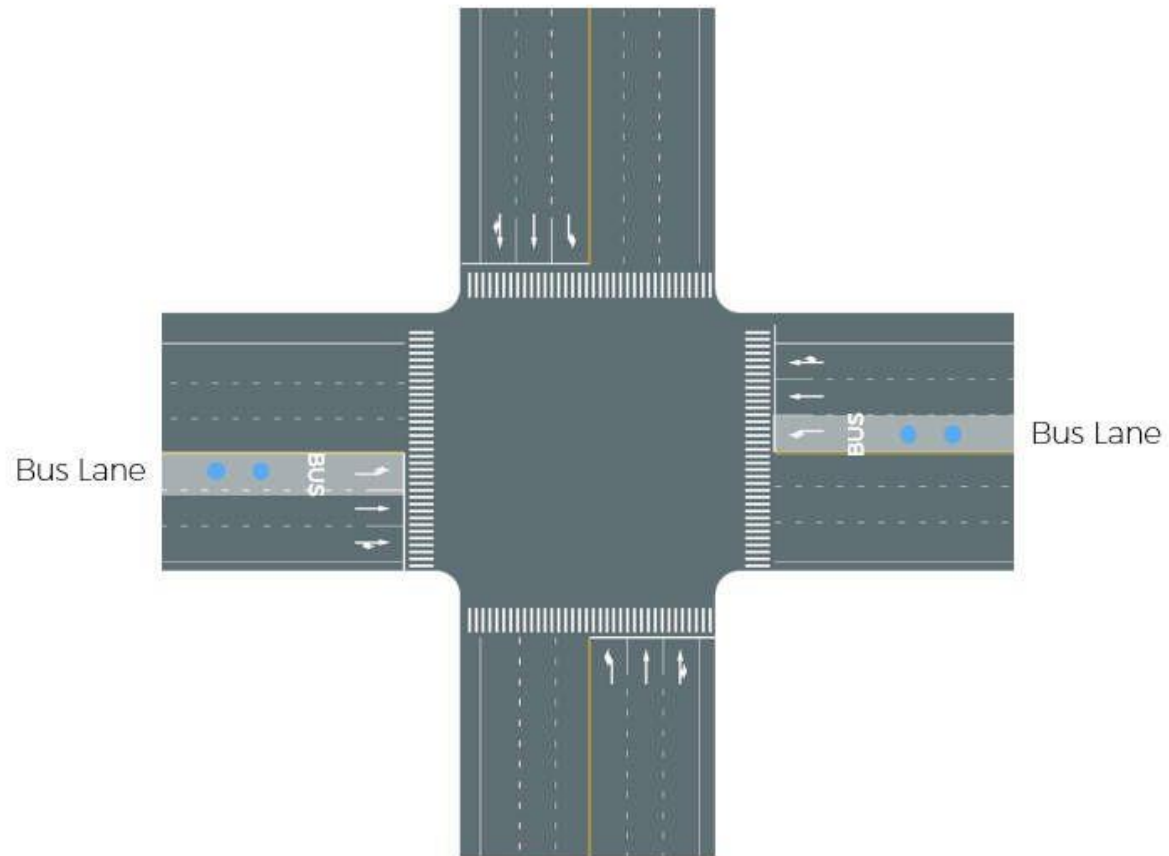
Detection of Priority Vehicles



Emergency vehicles preempt the right-of-way by interrupting the normal phase sequence of the signals along the route to allow for their safe and rapid passage. After a preset time period, the signal returns to normal operation. Transit vehicles receive priority treatment by extending the green signal phase or changing the signal to green as soon as possible to expedite movement of the vehicle along its route. Video detection provided an effective solution easy to implement.

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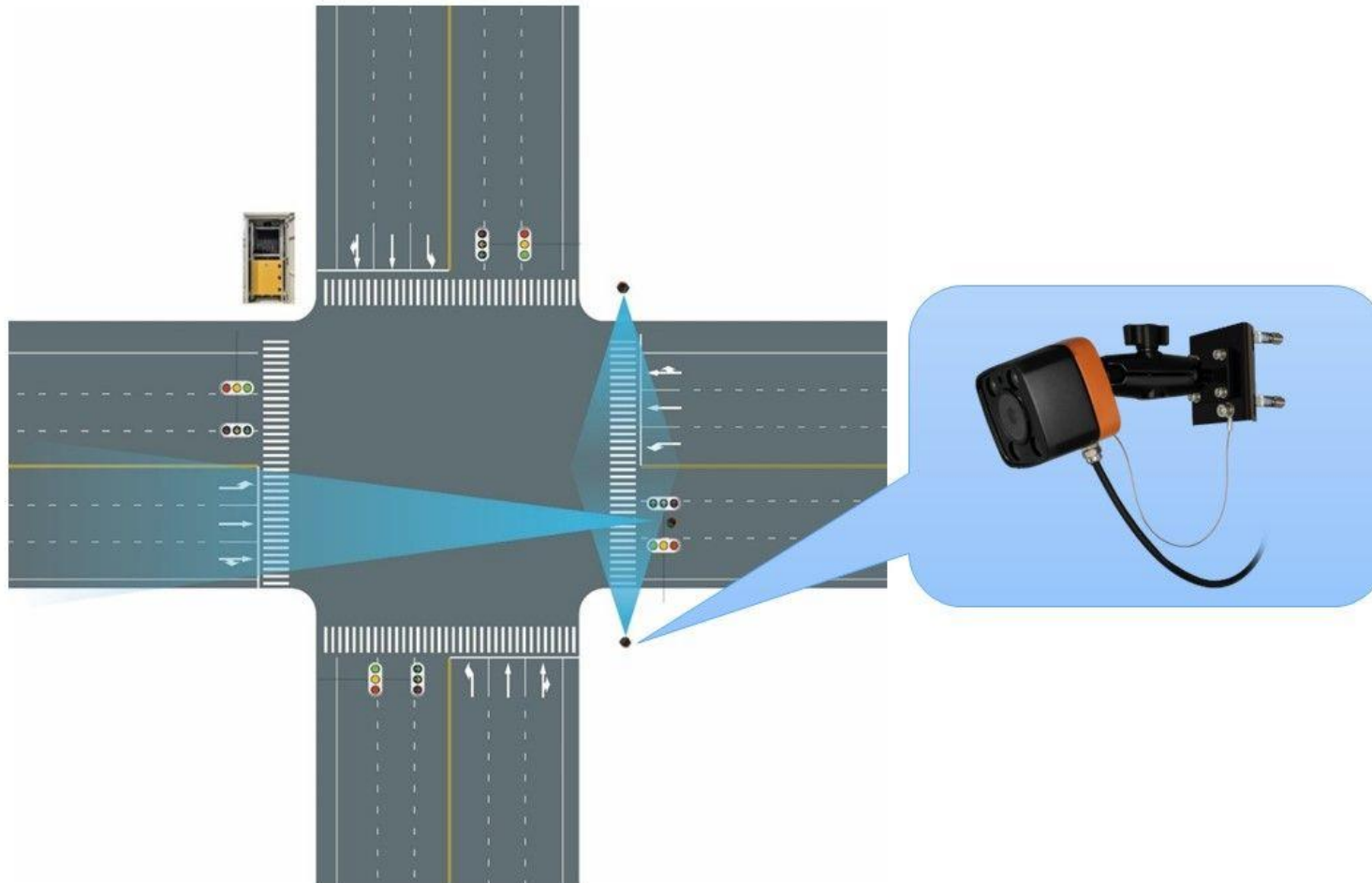
Bus Priority Control



Each dedicated bus lane is equipped with two magnetic sensors or two loops to provide information such as traffic flow, speed, and occupancy. Before a bus approaches an intersection, if the traffic light at the intersection is currently green, it will be timely extended to allow buses that have not yet reached the intersection to have sufficient time to pass through. This approach enhances the efficiency of bus transit, ensuring operational speed. Microwave radar will also be available for same application. And video detector will be able to identify the bus from its shape, so it will be more efficient while no dedicated bus lane is defined.

[-> Product Webpage](#)

Detection of Pedestrian



Detectors like video detectors and microwave radar detectors are deployed collecting the number of people in the waiting area, the comprehensive waiting time, the pedestrian walking speed in the crosswalk, and the traffic flow demand of road vehicles and the coordinated control demand of upstream and downstream. Signal controllers adopt such information and realize optimal control of non-contact automatic pedestrian traffic signals.

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Parking Management

Triple Detection:
Geomagnetic + Microwave Radar + Photosensitive Sensor

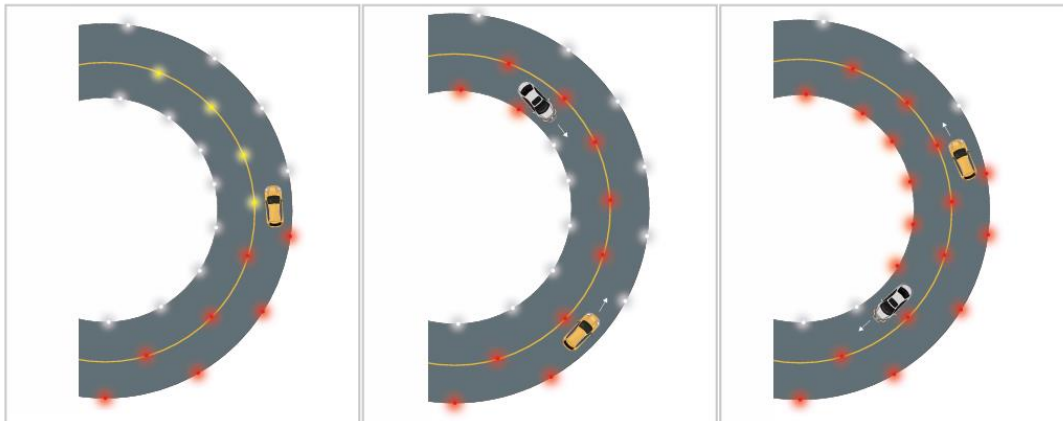
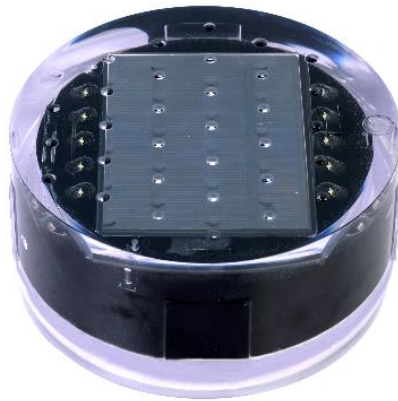


- Front-end data collection and real-time monitoring of parking space status by employing detection approach with highly sensitive magneto-resistive sensors, millimeter-wave radar, and photosensitive sensors to detect vehicle information. This parking management system can be deployed widely in roadside parking, residential area parking, highway service area, guidance for parking in large parking lots, and airport parking guidance.

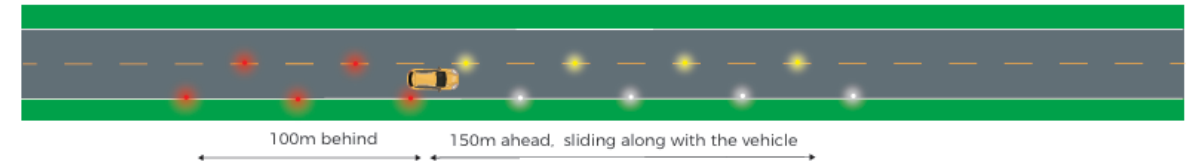


New Product at a Glance

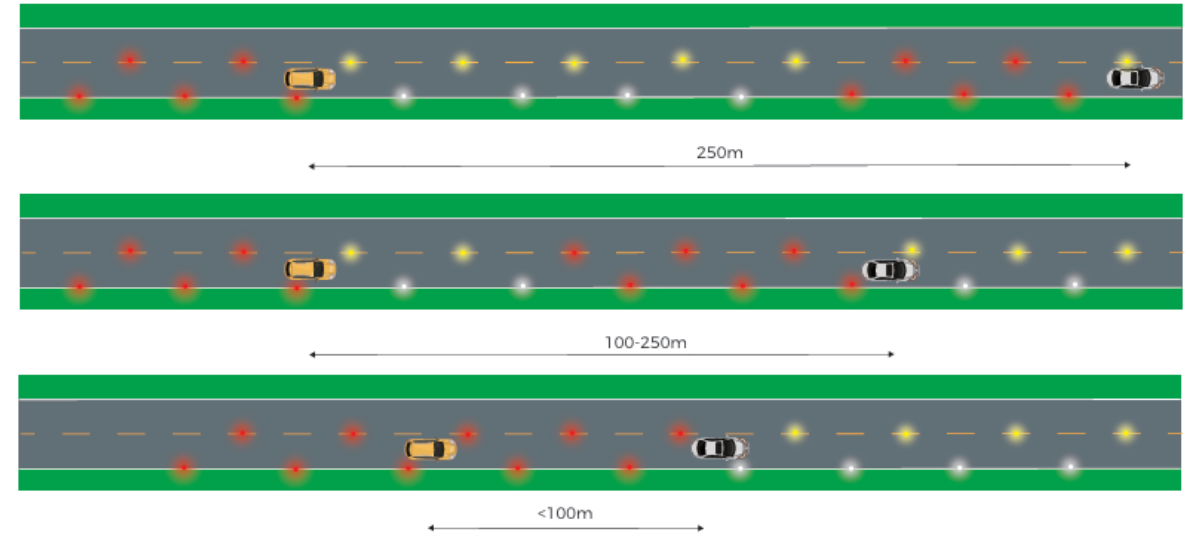
ClairSRS Smart Road Studs



Single-vehicle operation



Multiple-vehicle following



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Join the journey towards the future of mobility.

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Thanks

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