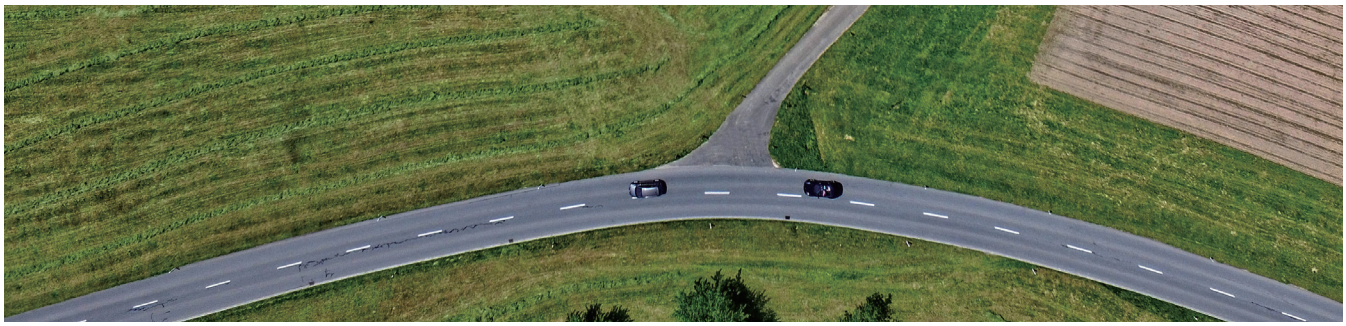
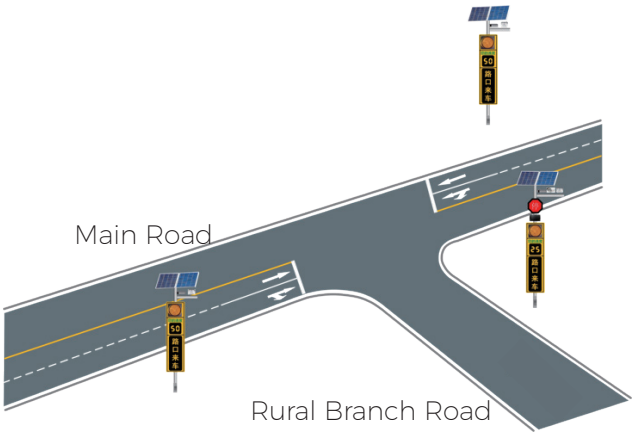
ClairSaf MP

Rural Intersection Conflict Warning System (RICWS)



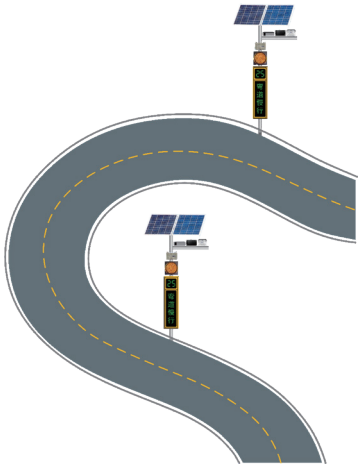
ClairSaf Rural Intersection Conflict Warning System (RICWS) utilizes a forward multi-object radar detector to real-time monitor the traffic operation status of motor vehicles, agricultural vehicles, etc., on rural roads. It conducts traffic flow data analysis, and the perception processor issues instructions for audio and visual safety warnings, prompting rational control of vehicle speed to reduce the occurrence of accidents at rural level crossings and curved road intersections. This system utilizes solar power and 4G/5G wireless communication technology, effectively addressing the challenges of power supply and network connectivity in rural and mountainous areas.

Rural Road Level-crossing



- For vehicles traveling on the main road: When the branch road detects the approach of a motor vehicle, it triggers the main road's "slow" active light signal and activates the yellow flashing warning lights to prompt vehicles on the main road to slow down and proceed with caution.
- For vehicles traveling on rural branch roads: When the main road detects an approaching vehicle at the intersection, it triggers the branch road's "stop" yield active light signal, activates the yellow flashing warning lights, and issues an audible warning (silent during nighttime or under specified conditions). This alerts rural side road motor vehicles, agricultural vehicles, etc., to pay attention to oncoming traffic on the main road and ensure safe passage.

Rural Road Bend Area



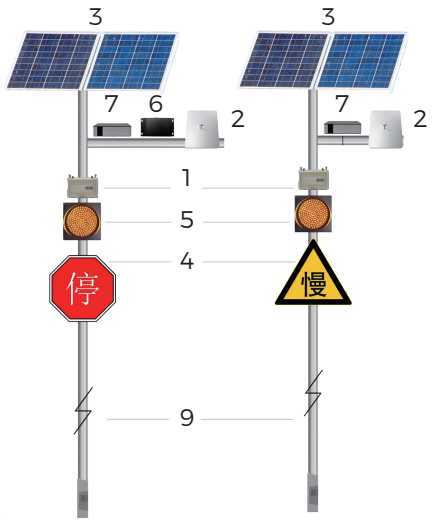
- Detecting no oncoming vehicles in the blind spot of the bend: The yellow flashing light blinks slowly, displaying the speed value of vehicles in this direction (red for overspeed, green for normal speed), illuminating the display with the message 'Curved Section, Slow Down,' indicating that vehicles should proceed with caution for safety.
- When oncoming vehicles are detected in the blind spot of the bend: The yellow flashing warning lights flash rapidly (alerting oncoming traffic to yield), simultaneously displaying the speed value of vehicles in this direction (red for overspeed, green for normal speed). The display illuminates with the message "Curved Section, Slow Down," prompting safe driving. Customizable digital broadcasting announces "Oncoming traffic ahead, slow down for the bend."

Key Features

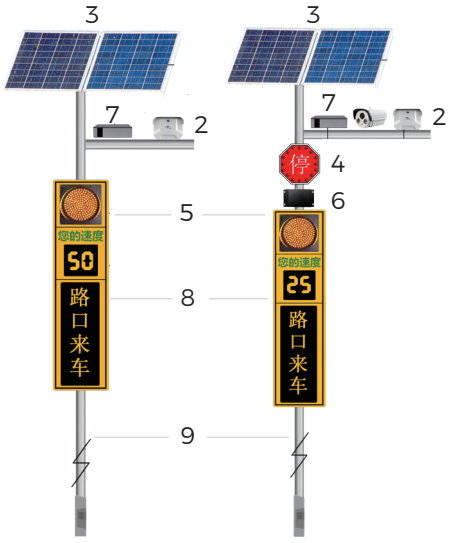
The Rural Intersection Conflict Warning System is characterized by mature technology and system reliability. The cloud control platform employs edge computing, allowing remote monitoring of device operation status. The system can perform statistical analysis on effective warning data and vehicle type flow speed data. It offers advantages such as simple installation and debugging, as well as easy maintenance.

- A safety warning system integrated with detection technology, edge computing, audio-visual displays, and wireless signal transmission operates seamlessly around the clock, effectively preventing the occurrence of traffic accidents.
- The cloud control platform enables real-time monitoring of device operational status, effective warning data, and statistical data on large/small vehicle flow and speed.
- The perception processor, based on control scene requirements, achieves sub-second logical operations, coordinating with devices at both ends of the main road, side roads, and curved sections. It provides real-time warnings to drivers and pedestrians.
- The system adopts an assembly-based approach, making assembly quick and convenient.
- Each terminal can connect to the central platform through 4G/5G, allowing for remote inspection and maintenance.
- Solar power supplies energy, and signals are transmitted wirelessly, eliminating the need for on-site cable laying, saving costs, and enabling rapid deployment. The device can continue to function normally for up to a week in rainy and overcast weather.

Hardware Components



ClairSaf-MP1 (Branch)　　ClairSaf-MP2 (Main)



ClairSaf-MP4 (Main)　　ClairSaf-MP3 (Branch)

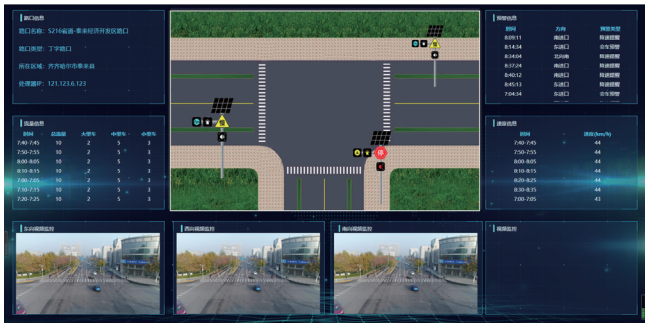
1. Process unit. Be in charge of data collection and edge computing.
2. Multiple targe radar. Range 0-150m.
3. Solar panel and battery. 2x150w solar panel and 300Ah battery.
4. Stop/slow down sign. Fully backlit illuminated character. IP67.
5. Yellow flash warning light.
6. Speaker. 25W horn for warning sound broadcasting, can remotely set the voice content and mode.
7. Wireless access unit. Including a 4G/5G router. Share the same power supply with the pole.
8. LED Display. Shows speed and customized characters.
9. 4.5/5.2m pole. Surface spraying, ground cage structure

Software Platform

ClairSaf-MGT

Rural Intersection Conflict Warning System Cloud Management and Control Platform





Device Management

- Road network information, intersection device location configuration, etc.

Status Monitoring

- Monitoring device operational status, including device location, online/faulty status, etc.
- Single intersection operational status viewing, supporting display of vehicle target trajectories.
- Traffic operation monitoring video viewing and playback, supporting remote control functionality.

Data Analysis

- Traffic parameter statistics: Statistical analysis of main/support road motor vehicle flow, speed, and other data.
- Warning data statistics: Statistical analysis and display of effective warning data, supporting data export.

System Management

- Area management, user management, department management, role management, etc.

Ordering Information

Model	Process Unit 1	Radar 2	Solar Panel & Battery 3	Stop Sign 4	Slow Sign 4	Yellow Flash Warning Light 5	Speaker 6	Wireless Unit 7	LED Display 8	Pole 9
Hardware										
ClairSaf-MP1	√	√	√	√		√	√	√		4.5m
ClairSaf-MP2	√	√	√		√	√		√		4.5m
ClairSaf-MP3	√	√	√	√		√	√	√	√	5.2m
ClairSaf-MP4	√	√	√			√		√	√	5.2m
Software										
ClairSaf-MGT	Rural Intersection Conflict Warning System Cloud Management and Control Platform									