



TraffiClair Monthly Updates

2025.12. 2025 Highlights.

TraffiClair Team

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Happy New Year 2026!



Dear All,

As we step into 2026, we extend our heartfelt gratitude for your consistent trust and support. It has been an honor to partner with you, and we eagerly look forward to the year ahead. Wishing you a joyful, prosperous, and truly extraordinary new year. Let's achieve remarkable things together.

TraffiClair Team

TraffiClair Product Family



Signal Control



Freeway Monitoring &
Management



Priority, Counting &
Parking



Safe Mobility



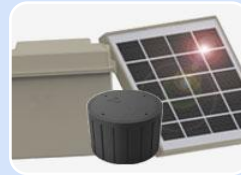
ClairBox AI
Box



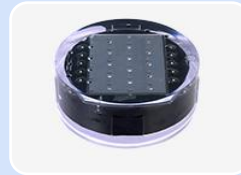
ClairEye AI
Traffic
Video
Detectors



ClairWav
Microwave
Radar
Detectors



ClairGeo
Wireless
Magnetic
Detectors



ClairSRS
Smart
Road
Studs



ClairSaf
Safe
Mobility
Products



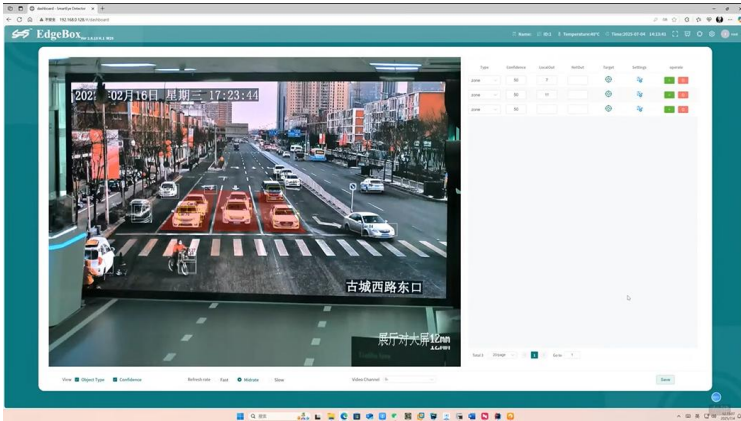
ClairLup
Inductive
Loop
Detectors



ClairPLC
PLC
Extender

ClairBox AI Box

2025 Highlights



Leveraging Existing Traffic Cameras, ClairBox-R Transforms Raw Video Streams into Actionable Insights

Traffic management is entering a new era of intelligence with ClairBox-R AI Box—an advanced video recognition device powered by cutting-edge AI. By leveraging existing traffic cameras (violation monitoring, incident detection, or surveillance feeds), ClairBox-R transforms raw video streams into actionable insights.

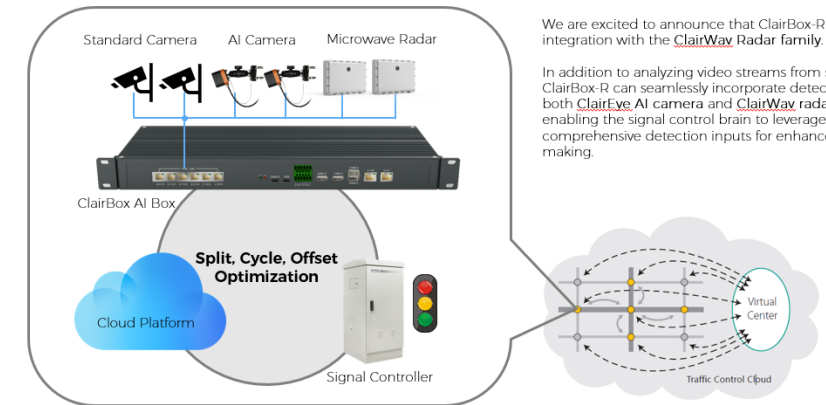
[Youtube Video](#)



Jitter-Resistant Performance, ClairBox-R Solves Camera Jitter Problems in Smart Traffic Systems

Traffic detection cameras are critical for modern intersections, but vibration/jitter remains a major challenge. Strong winds, heavy trucks, or mechanical instability can cause false positives/missed detections due to shifted fields of view (FOV).

[Youtube Video](#)



ClairBox Supports Integration of ClairWay Radar Family

We are excited to announce that ClairBox-R now supports integration with the ClairWay Radar family.

In addition to analyzing video streams from standard cameras, ClairBox-R can seamlessly incorporate detection data from both ClairEye AI camera and ClairWay radar systems, enabling the signal control brain to leverage richer and more comprehensive detection inputs for enhanced decision-making.

[Webpage](#) [Datasheet](#)

ClairEye AI Traffic Video Detector

2025 Highlights



ClairEye-iSeries AI Traffic Sensor Deployment in Sanhe City

Sanhe City, Hebei Province, deployed 200 ClairEye-iSeries AI traffic sensors across major intersections to enhance traffic management and optimize signal control. The system's advanced AI capabilities, real-time data output, and ultra-low power consumption made it ideal for addressing the city's complex traffic demands.

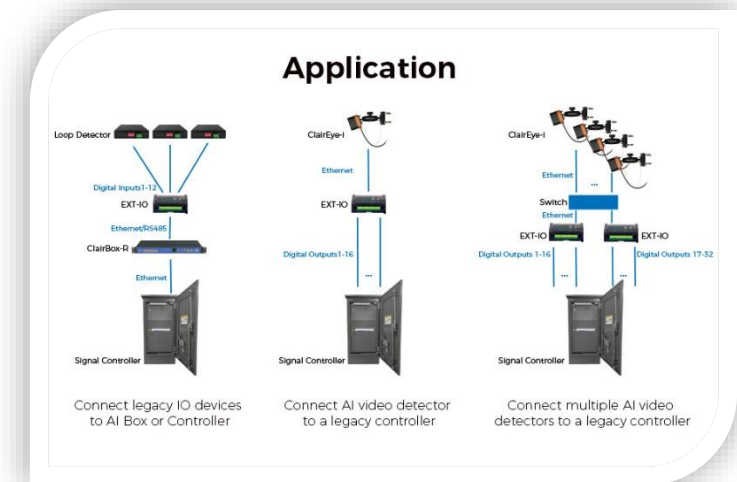
[Case Details](#)



EXT-AirLink, The Smarter Way to Power & Connect Your Traffic Detection System

Upgrade your intersection technology with EXT-AirLink, the compact yet powerful accessory kit designed to simplify and enhance your TraffiClair traffic detection system. By combining power extraction and wireless communication, AirLink eliminates complex cabling, reduces installation time, and ensures seamless connectivity between video detectors and central controllers.

[Product Page](#) [Support Radars as well.](#)



EXT-IO, Seamlessly Integration between Legacy & Modern

The EXT-IO is a high-performance interface conversion module designed to bridge TraffiClair AI-based detectors with legacy traffic controllers or third-party systems. It enables bidirectional signal conversion between Ethernet (TCP/IP), RS485, and digital I/O, ensuring compatibility across different generations of traffic detection hardware. The EXT-IO help realize seamless integration between legacy & modern Traffic Control Systems.

[Webpage](#) [Datasheet](#)

ClairWav Microwave Radar Detector

2025 Highlights

Higher Resolution, Unchanged Budget
Free 8MP Upgrade. Now Featuring the ClairWav-T24/T80.



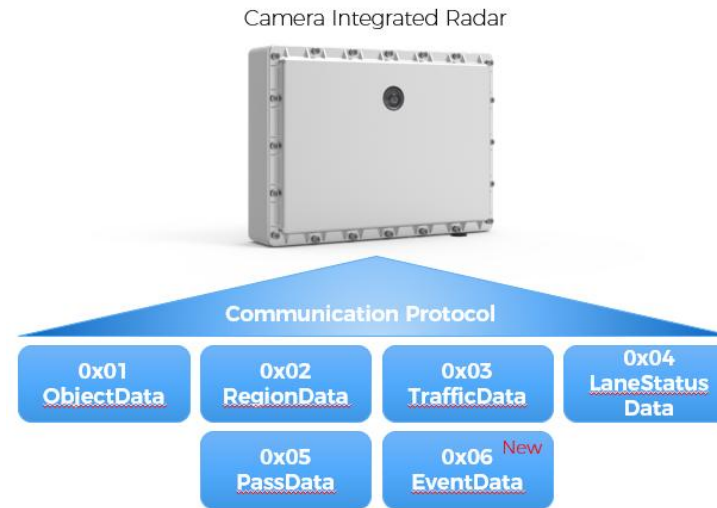
Superior Vehicle Classification
Accurate License Plate Recognition

ClairWav-T24/T80 Just Got Sharper. Now with 8MP, at No Extra Cost!

We're excited to announce a major upgrade to the ClairWav-T24/T80 radar camera series — now featuring an 8MP high-resolution camera, delivering sharper detail and enhanced performance without increasing the price!

[Detailed News](#)

[Product Webpage](#)



Enhancing Urban Traffic Signal Control with Camera-Integrated Radar Systems

- Real-Time Traffic State Perception & Adaptive Signal Control
- Traffic Flow Optimization
- Lane-Level Management and Prioritization
- Multi-Modal Traffic Support

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[Detailed News](#)

[Communication Protocol](#)



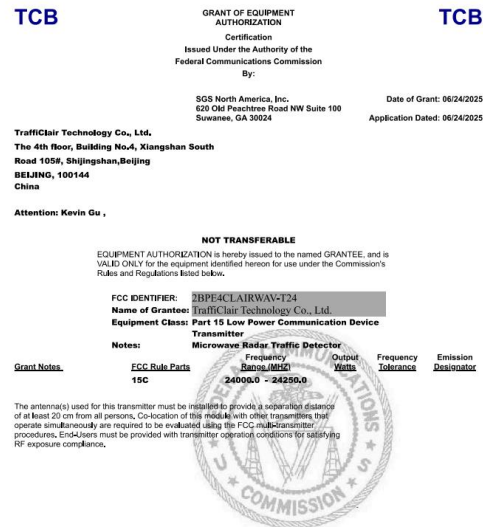
Plate Number Identification with ClairWav Radar-Camera Fusion

The ClairWav microwave radar family, now integrated with a high-resolution 8MP camera, enables real-time vehicle license plate recognition (LPR). This advanced fusion of radar tracking and visual data provides a powerful tool for precise vehicle trajectory tracing and automated traffic enforcement. To ensure high accuracy across different regions, the system can be customized through training on a localized dataset of license plates.

[Check Video on Youtube](#)
[Product Webpage](#)

ClairWav Microwave Radar Detector

2025 Highlights



ClairWav-T24 Radar Family Got FCC Approval

We are pleased to announce that the ClairWav-T24 Microwave Radar Family has received formal FCC certification. This milestone follows its CE approval in 2024, marking the product family's full readiness for global market deployment.

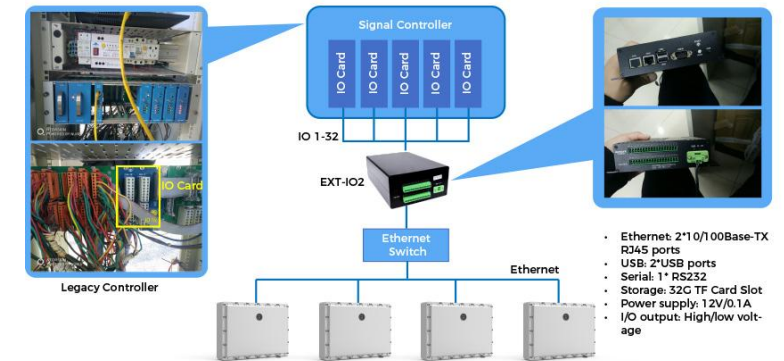
[Webpage](#)



ClairWav Radar Case Study: The Intelligent Traffic Signal Control Optimization System in Fuzhou City

The Intelligent Traffic Signal Control Optimization System in Fuzhou City. ClairWav Radars help the traffic control system realize accurate measurement, fast calculation, and optimal control.

[View Video on Youtube](#)



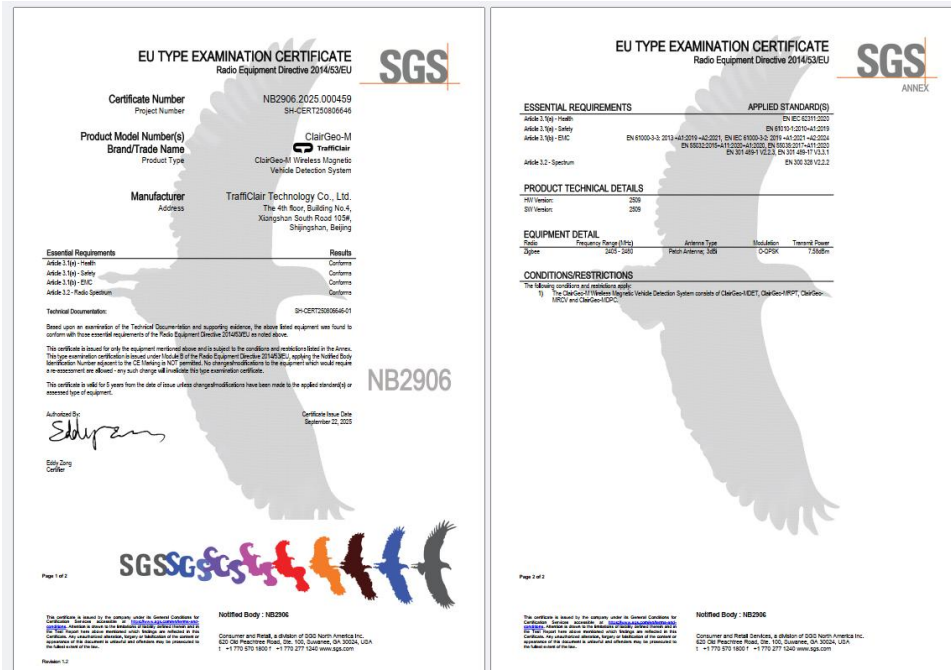
EXT-IO2 for ClairWav Radar Family, Seamlessly Integration between Legacy & Modern

The EXT-IO2 digital I/O interface box is designed specifically for this challenge. It allows your new ClairWav radar systems to communicate seamlessly with legacy controllers that require traditional IO inputs. By converting rich Ethernet data from up to 8 radars into simple contact closures, the EXT-IO2 bridges the gap between cutting-edge detection and existing hardware.

[Webpage](#) [Datasheet](#)

ClairGeo Wireless Magnetic Sensor

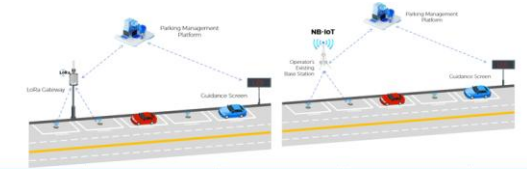
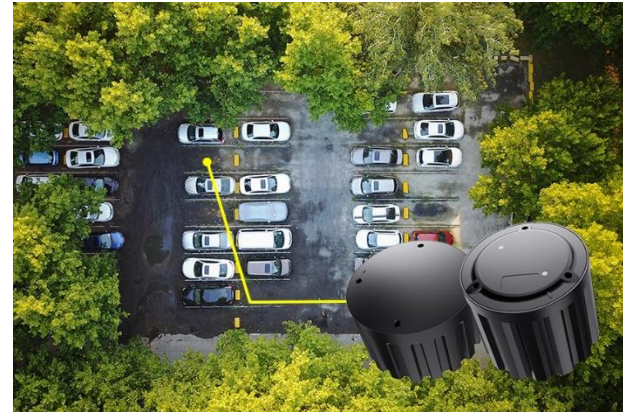
2025 Highlights



CE Approval of ClairGeo-M System

The ClairGeo-M Wireless Magnetic Vehicle Detection System, consists of ClairGeo-MDET, ClairGeo-MRPT, ClairGeoMRCV and ClairGeo-MDPC, has passed CE certification.

[Webpage](#)



Model	Product	Sensor Mode	Communication Mode	Installation
ClairGeo-AP2		✓ Radar Sensor ✓ Geomagnetic Sensor	✓ LoRa ✓ NB-IoT	✓ In-Ground
ClairGeo-AP3		✓ Radar Sensor ✓ Geomagnetic Sensor ✓ Photosensitive Sensor	✓ LoRa ✓ NB-IoT	✓ In-Ground
ClairGeo-APS		✓ Radar Sensor ✓ Geomagnetic Sensor	✓ LoRa	✓ Surface-mount for indoor usage

ClairGeo-AP Geomagnetic Parking Sensors, Multi-band Connectivity for Global Market

Built for international deployment, every sensor in the ClairGeo-AP family supports multi-band connectivity

- LoRaWAN
Full support for CN470, EU868, AS923, US915, AU915, KR920, IN865 and more—compliant with LoRaWAN v1.0.3 Class A for long-range, low-power operation.
- NB-IoT
Comprehensive multi-band coverage across B3, B5, B8, B28 and other licensed spectra, enabling reliable cellular IoT connectivity wherever NB-IoT is deployed.

[Webpage](#) [Datasheet](#)

ClairLup Inductive Loop Detector

2025 Highlights



CE Approval for ClairLup-V8/V8F

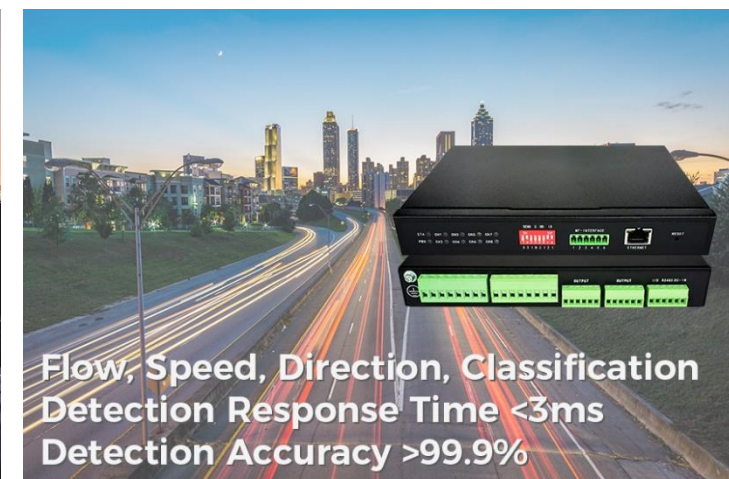
ClairLup-V8 8-Channel Inductive Loop Detector



- Supports cascading of up to 8 loop channels per device for flexible expansion
- Delivers <5ms response time for accurate traffic flow, enforcement, and security monitoring
- Features advanced anti-lock algorithms and hardware-based detection for long-term stability

[Webpage](#)

ClairLup-V8F 8-Channel Flow Detection Inductive Loop Detector

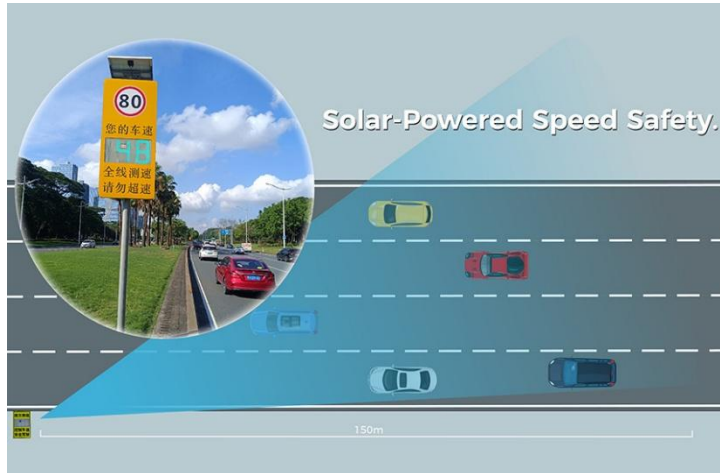


- Each device supports 8-channel loop input for 4-lane traffic flow statistics. With a sub-3ms response time, it delivers precise real-time data
- Employs intelligent anti-lock algorithms and auto-updating frequency tracking to ensure maintenance-free operation.
- Classifies vehicles into four customizable types (small/medium/large/unknown). Optional Ethernet connectivity supports flexible data transmission and remote device management.

[Webpage](#)

ClairSaf Safe Mobility Products

2025 Highlights



ClairSaf-Speed, Solar-Powered Radar Speed Sign!

ClairSaf-Speed solar-powered radar speed sign is an eco-friendly traffic safety device designed to monitor and display vehicle speeds in real-time. Powered by solar energy, it operates efficiently without the need for external electricity, making it ideal for remote or off-grid locations.

[Demo Video](#)

[Webpage](#)

[Datasheet](#)



ClairSaf-Speed Radar Signs Gain Traction in Malaysia

TraffiClair's innovative ClairSaf-Speed radar speed sign system continues its successful installation rollout across Malaysia. This solar-powered solution is transforming roadside safety and traffic management by actively encouraging drivers to obey speed limits while providing authorities with powerful, data-driven insights.

[Webpage](#) [Full Story](#)



ClairSaf-CatEye, Solar-powered Synchronized Warning Light for the Highway Barrier

Keep roads safer with ClairSaf-CatEye Solar Synchronized Warning Lights—a cutting-edge, solar-powered flashing beacon designed to enhance visibility and prevent accidents in high-risk zones.

[Youtube Video](#)

[Webpage](#)

[Datasheet](#)

ClairSaf Safe Mobility Products

2025 Highlights



ClairSaf-VEX, Integrated Traffic Light

ClairSaf-VEX redefines the traditional pedestrian signal by seamlessly integrating modular features—such as dynamic countdown displays, red-light violation capture, audio guidance for the visually impaired, multimedia screens, and smart crosswalk controls—into a single, aesthetically advanced unit. This innovative system not only enhances traffic safety and efficiency but also contributes to urban beautification through its modern design and multifunctional capabilities.

[Webpage](#) [Datasheet](#)



ClairSaf-Beacon, APS Audible Beacon

ClairSaf-Beacon is an advanced audible beacon system designed to guide pedestrians with visual impairments safely across complex intersections. It provides clear, directional auditory cues to help users navigate wide or irregular crosswalks with confidence.

[Webpage](#) [Datasheet](#)



ClairSaf-Post, Pedestrian Signal Guidance Post with Voice Alert

The ClairSaf-Post is an intelligent, standalone pedestrian safety device installed at crosswalks. Utilizing an industrial laser sensor to detect pedestrians in the waiting zone and a signal detection module to monitor the traffic light status, it provides targeted voice warnings only when pedestrians attempt to cross during a red signal. The post also features synchronized visual guidance through an LED text display and auxiliary signal lights that mirror the official crossing indication.

[Webpage](#) [Datasheet](#)

ClairSRS Smart Road Studs

2025 Highlights



ClairSRS Solar, Solar-powered Active Smart Road Studs

ClairSRS Solar Mag is a solar-powered smart road stud with a built-in geomagnetic sensor, capable of detecting the speed and movement of passing vehicles and triggering corresponding response mechanisms. It utilizes various light colors and flashing frequencies to provide different signaling functions such as warnings, guidance, or traffic diversion.

[Webpage](#)
[Datasheet](#)



ClairSRS Wired, Wired-powered Active Smart Road Studs

ClairSRS Wired is a wired-powered smart road stud equipped with a 5x6 matrix of ultra-bright LED lights. It can display various signals such as straight, stop, no entry, and left turn, and supports custom complex patterns. This smart road stud can be connected to signal control devices or video and radar detection systems, enabling applications such as dynamic road rights, tidal lanes, variable lanes, lane-sharing for left turns, and smart crosswalks.

[Webpage](#)
[Datasheet](#)



Solar Smart, Safety Start.

Luminode Road Studs
for Safety Lightening

Luminode, Road Studs for Safety Lightening

Part of the ClairSRS Smart Road Stud Series, the Luminode model offers a sensor-free, energy-efficient solution for lane discipline and nighttime collision prevention. Installed on road curbs or fast/slow lane dividers, it pairs with road markings to deliver high-visibility flashing warnings, enhancing driver awareness and reducing accidents.

[Webpage](#)
[Datasheet](#)

ClairPLC PLC Extender

2025 Highlights

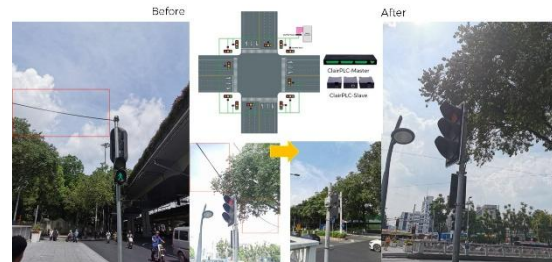


Case Study 1:

Separating Left-Turn and Straight-Through Signal Lights Without Additional Wiring

Achieve the separation of left-turn and straight-through phases in just 2 hours using existing wiring, eliminating the need for additional cabling or extensive installation work.

[Case Story](#)



Case Study 2:

Guangzhou's "Black Tech" Triumph: Overhead Wires Vanish at Key Intersection!

By transmitting signal data through existing power lines (no extra cables or road digging!), the tech cleared the skies, boosting safety and visual appeal. A win for smart cities!

[Case Story](#)



Case Study 3:

ClairPLC solves critical cable faults at Gongyi's key intersections while traditional repairs were impossible.

When floods crippled critical signal cables at Gongyi City's major intersections, traditional repairs were impossible. Facing urgent traffic chaos, the city deployed ClairPLC's power line communication (PLC) system—bypassing damaged cables to restore signals within hours. Beyond emergency recovery, the solution introduced real-time light control and infrastructure health monitoring, transforming a crisis into a long-term smart city upgrade.

[Case Story](#)



Case Study 4:

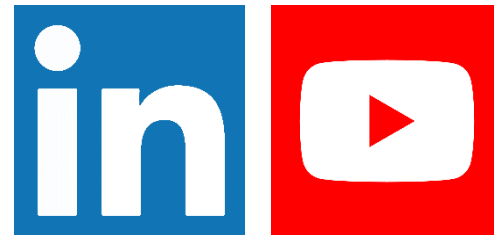
The Traffic Lights That Heal Themselves: A Tech Revolution in Yiyang

TraffiClair PLC Extender Solution revolutionizes traditional traffic light maintenance by enabling simultaneous power delivery and data communication through a two-core power cable. This system not only resolves signal failures efficiently, but also continuously monitors the operational status of each signal light and its connecting cables—effectively equipping the infrastructure with a "digital nervous system".

[Case Story](#)

Join the journey towards the future of mobility.

Follow us on LinkedIn and YouTube as we unfold the next exciting chapter in traffic innovation!



[202509](#), [202510](#), [202511](#), [all previous issues...](#)



Thanks

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