

HOW RUT956 AND TSW202 POWERS URBAN SURVEILLANCE IN CHILE

HIGHLIGHTS

- ✓ Rising crime is costing [Chile 2.6% of GDP](#) each year, with iconic spots like Santiago's La Piojera forced to close early as businesses, consumers, and the wider economy take the hit.
- ✓ [SISTEK](#), a Chilean systems integrator, developed an outdoor smart surveillance pole to improve public safety in Santiago. The unit combines lighting, video monitoring, and mobile connectivity in a single, [rugged structure](#).
- ✓ Inside the pole, Teltonika's [RUT956](#) router delivers dual SIM 4G with failover, load balancing, VPN, and firewall for secure connectivity. The [TSW202 PoE switch](#) supplies power and data to cameras, ensuring the whole system stays online.

THE CHALLENGE – FIGHTING CRIME WITHOUT INFRASTRUCTURE

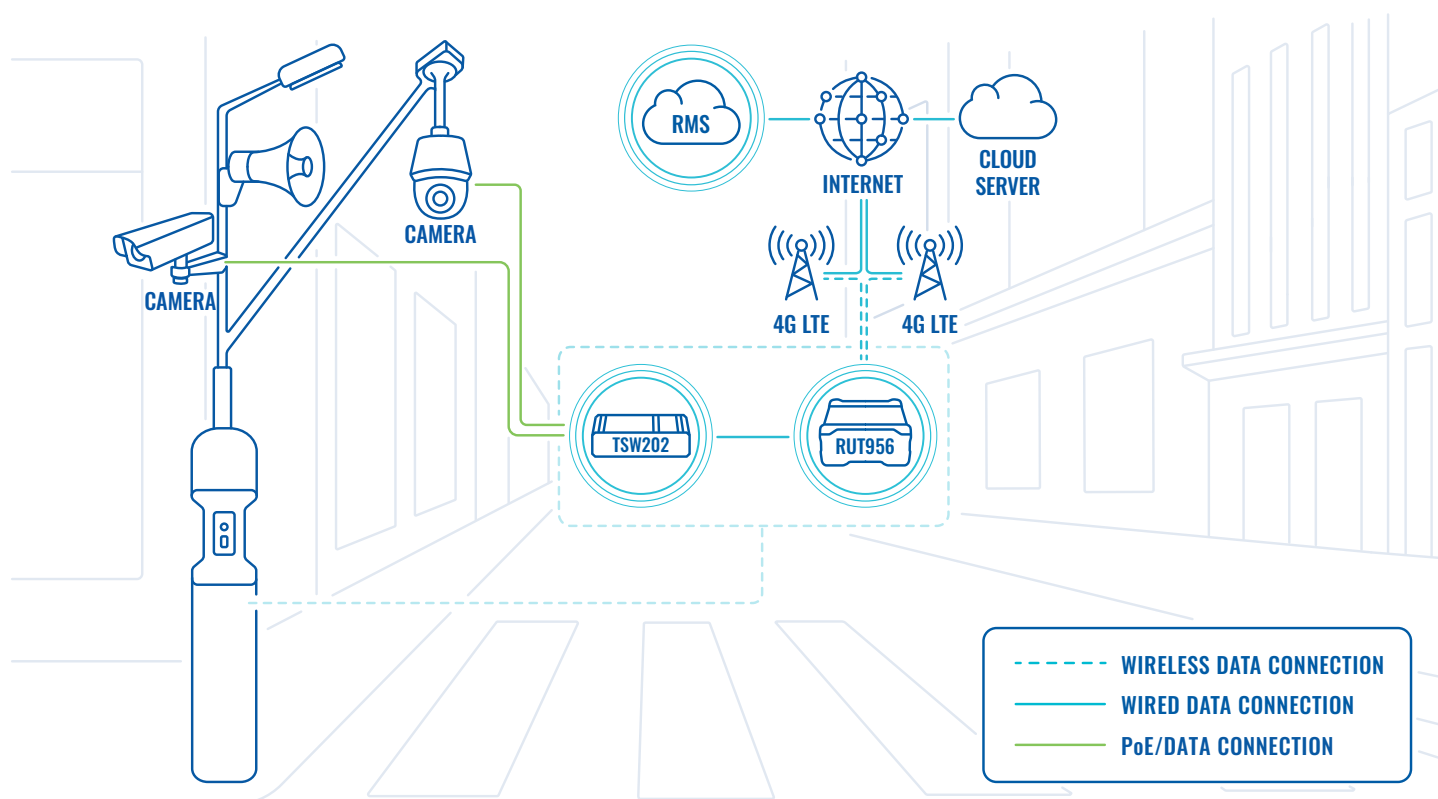
Rising crime is costing Chile 2.6% of GDP annually around US\$8.2 billion, as iconic spots like Santiago's La Piojera are forced to shut earlier and sales plummet, according to [Reuters](#). This surge in violence is pushing urban areas like Santiago to turn to technology for improved safety and visibility.

However, many public spaces lack the network infrastructure required for traditional video surveillance. Running fiber or wired connections can be costly and time-consuming, especially in outdoor environments where flexibility and speed of deployment are critical.

Authorities and system integrators need reliable video access from anywhere, the ability to control devices remotely, and secure real-time data transmission. Traditional setups do not offer the flexibility to meet these demands. Wired systems also require extensive infrastructure, making them unsuitable for rapidly expanding urban surveillance.

A new solution was needed to provide high-quality video streaming, stable connectivity, and centralized control in a completely self-contained unit.

TOPOLOGY



THE SOLUTION – A SMART POLE POWERED BY A ROUTER AND A SWITCH

SISTEK designed a smart surveillance pole that houses all essential equipment in a sealed, weather-resistant structure. The pole features a galvanized steel body with internal compartments for electronics, a luminaire for public lighting, and a 1KVA UPS to ensure continued operation during power outages.

The core of the connectivity solution is the Teltonika's [RUT956](#) industrial cellular router, a 4G router built for industrial applications. It connects to a Layer 3 managed [PoE](#) switch [TSW202](#), which distributes both data and power to two surveillance cameras. A camera enables remote directional control and streaming through peer-to-peer communication. A second camera, with built-in license plate recognition, captures and transmits vehicle data in real time.

The RUT956 router ensures reliable TCP/IP connectivity, while connected IP cameras use RTSP and ONVIF protocols for live video streaming and seamless integration with video management systems. This dual sim card uses two cards from different carriers. If one connection fails, the router automatically switches to the other. [Load balancing](#) helps optimize network performance under varying conditions.

With Ethernet, RS232 and RS485, digital I/Os, the [RUT956](#) can provide versatile connectivity that links cameras through the switch and supports integration with sensors, controllers and alarms, making each surveillance pole adaptable for future urban security needs.

To manage the system remotely, SISTEK relies on Teltonika's [Remote Management System](#). With RMS Management, Connect, and VPN services, operators can monitor signal strength, check data usage, push firmware updates, and troubleshoot issues from a distance. No physical presence is required for maintenance, making the solution ideal for field deployment.

This smart pole transforms standalone locations into secure, connected monitoring points. It helps the city to expand their surveillance networks quickly, with minimal disruption and full visibility. The result is a safer urban environment supported by reliable connectivity and centralized control.

Looking to modernize public safety infrastructure without laying new cables? Contact us to see how Teltonika's devices can support your smart city projects.

