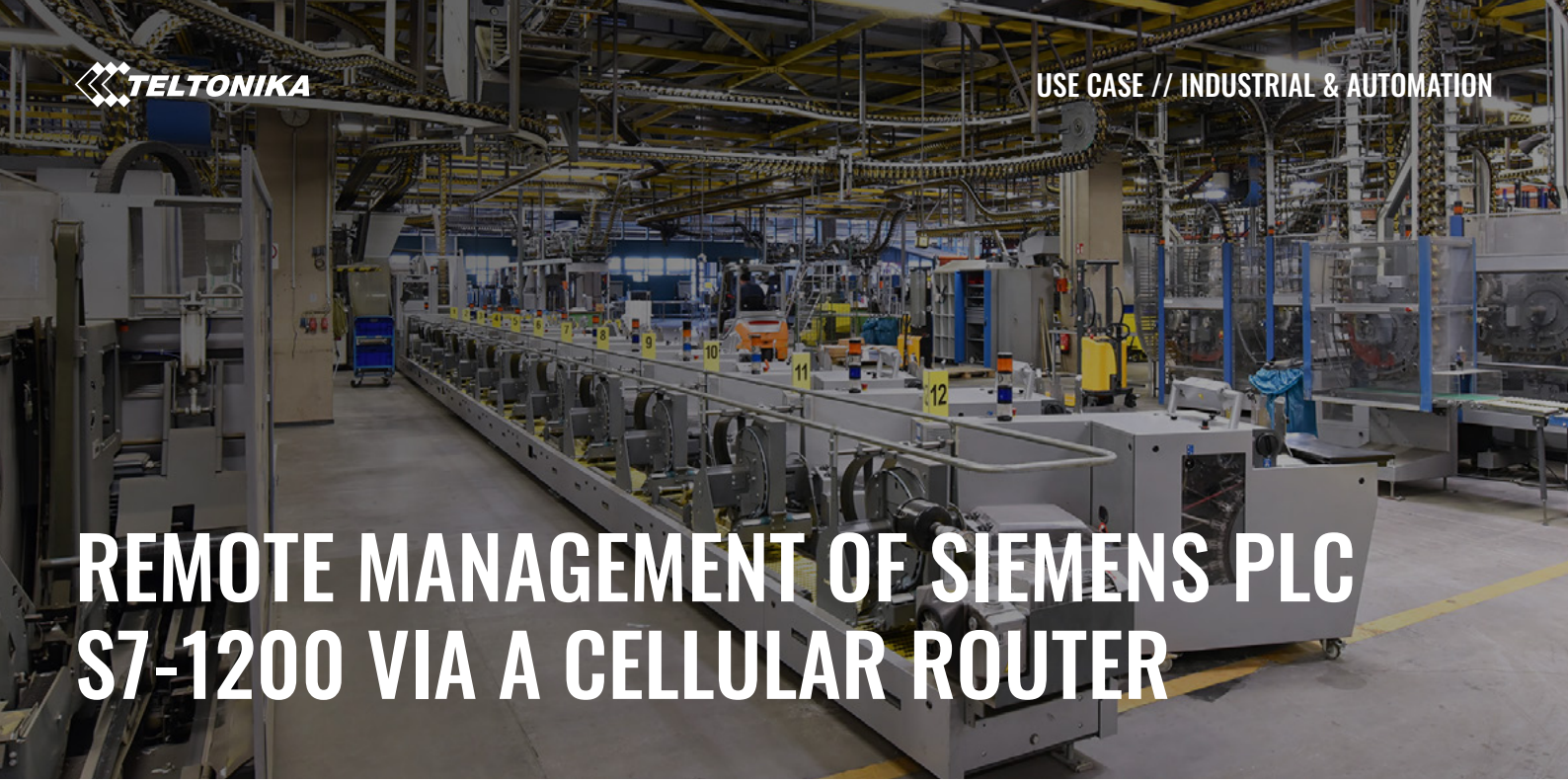


REMOTE MANAGEMENT OF SIEMENS PLC S7-1200 VIA A CELLULAR ROUTER

HIGHLIGHTS

- High Systems Electromechanics is an integrator based in United Arab Emirates that provides one-stop IoT solutions across sectors like industrial automation, solar energy, water treatment, and security.
- It had a challenge of achieving remote management over its Siemens PLC S7-1200 controllers, knowing that APN SIM cards and public IPs would be invalid choices.
- Our RUT200 cellular router and RMS duo came to the rescue, enabling simple and cost-efficient remote management and monitoring capabilities over VPN tunnels.

THE CHALLENGE – EXPENSIVE REMOTE CONTROL

Remote management of IoT solutions significantly changes the way they operate and how we interact with them, leading to a game-changing shift in most industries. Automating routine tasks, establishing remote diagnostics, and enabling access to IoT devices without physical travel to sites – remote management fosters increased efficiency and convenience.

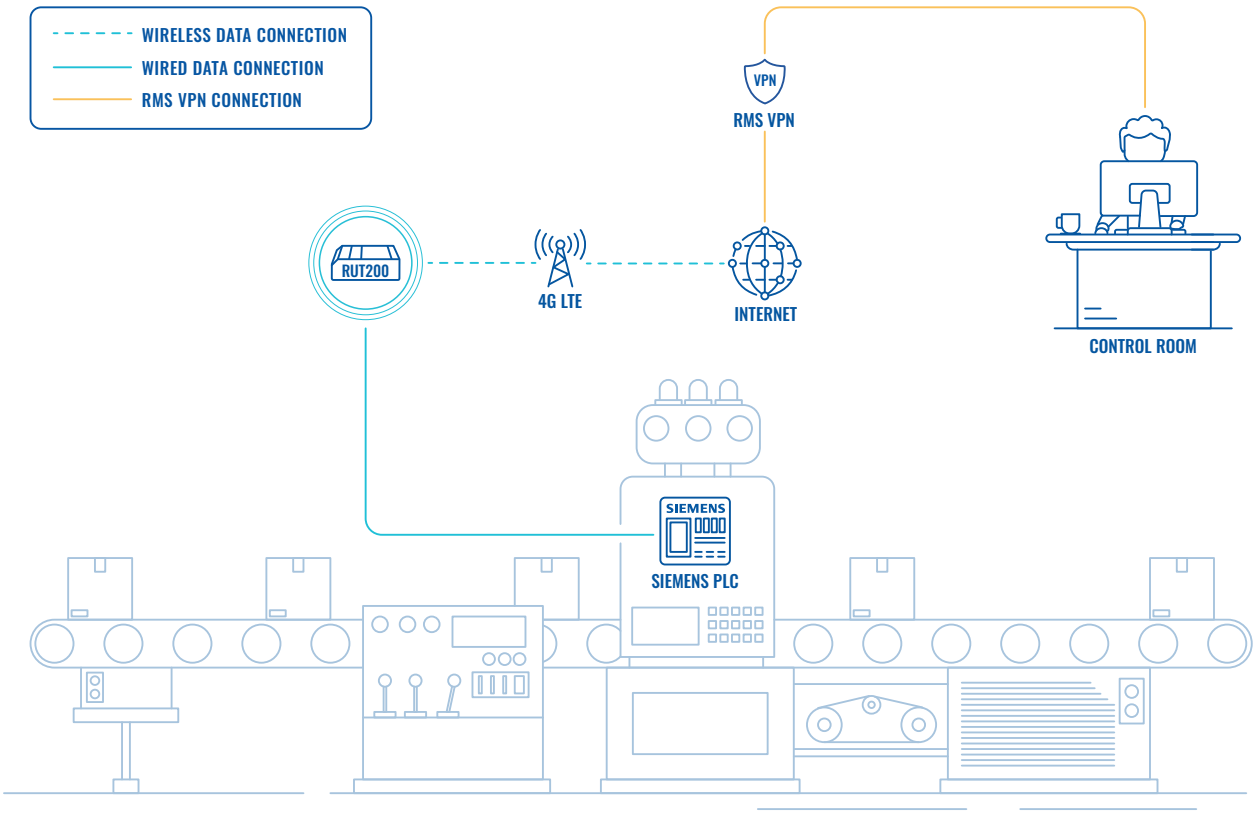
The most typical methods for remote management include using a private APN SIM card or assigning public IPs for simple and easy device communication via the Internet. Yet, they're far from perfect.

While private APN SIM cards are known for providing secure and isolated network infrastructures for IoT solutions, they're also a complex and expensive way of achieving remote management. This complexity arises because APN SIM card integration requires specialised know-how for setup and can become significantly more costly if a solution plans to scale.

Now, public IPs come with many security risks due to exposure on the Internet, scalability issues, and operational costs resulting from IPv4 limitations.

The best alternative to private APN SIM cards and public IPs for achieving remote management capabilities is through VPN tunnels, which can be seamlessly established using our Remote Management System (RMS) and compact RUT200 cellular router.

TOPOLOGY



THE SOLUTION – AFFORDABLE AND SECURE ALTERNATIVE

The combination of our RMS and the RUT200 4G router can certainly compete for the title of "best duo". Together, they establish a very cost-effective, secure, and simple way of establishing reliable remote monitoring and management capabilities, applicable not only to RMS-compatible devices but also to third-party ones. This is precisely why our client, High Systems Electromechanics, selected this combination to connect to their Siemens PLC S7-1200 controller remotely.

The RUT200 cellular router, connected to the Siemens PLC S7-1200 controller via Ethernet, fulfils a critical role – ensuring robust network connectivity support. This is essential for the entire system, as (to nobody's surprise) the absence of an Internet connection would simply remove the possibility of establishing remote management.

Since the RUT200 4G router and RMS support the OpenVPN protocol, our client creates a secure VPN tunnel using this protocol. Once the VPN tunnel using OpenVPN is launched, the client retrieves the Siemens PLC's IP address, which enables seamless remote control of the PLC from the client's remote office.

Here, the RMS VPN service and our RUT200 cellular router act as an affordable and secure link between the remote office and the PLC, as their duo erases dependency on private APN SIM cards or public IP addresses. This makes the duo of RMS and RUT200 a great choice for those seeking an easy way to keep their business cost-effective, private, and secure.