

CELLULAR ROUTER FOR EV CHARGING STATIONS

HIGHLIGHTS

Solution Stations, high-tech electronics and automated control systems.

S To successfully deploy EV charging stations, integrate them with a charger management system, and enable NFC payments, a reliable connectivity device was essential.

The ideal choice for this was Teltonika's RUT241 cellular router, offering uninterrupted wireless connectivity, a compact design, and a robust set of security features.

THE CHALLENGE – TACKLING CONNECTIVITY HURDLES IN EV CHARGING

The rise of EVs is no longer a future prediction – it's happening now. With global EV sales expected to exceed <u>20 million in</u> <u>2025</u>, the shift towards cleaner transportation is accelerating at an unprecedented pace. As EVs continue their upward trajectory, the demand for widespread and accessible charging stations is becoming a necessity.

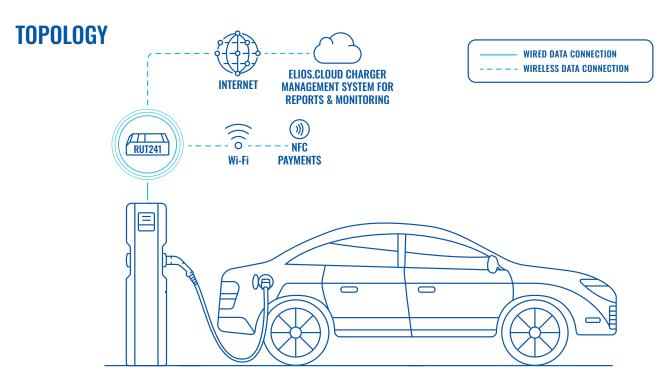
Recognising this challenge our Lithuanian partner, Elinta Charge, began developing a next-generation EV charging station. As it turned out, deploying new EV charging stations requires much more than a power supply. It also demands seamless connectivity for payment procedures, remote monitoring, troubleshooting, and data reports.

However, wired Internet is not always available, and installing dedicated infrastructure solely for a charging station is often overly complex. This creates a demand for flexible, wireless connectivity to ensure seamless operation – enabling NFC payments, real-time monitoring, and smooth integration with their <u>Elios.cloud</u> charger management system.

To address this challenge, our partner needed a reliable connectivity device.



USE CASE // SMART CITY



THE SOLUTION – COMPACT CELLULAR ROUTER TO THE RESCUE

To complete this IoT solution, the <u>RUT241</u> cellular router was a perfect choice!

It enables Internet access through cellular 4G LTE connectivity without the need for any wired connection, allowing lower installation costs and greater flexibility in station placement.

This 4G router also made possible to collect real-time data from its EV charging stations and manage it remotely via the Elios.cloud remote management system. With instant access to key metrics such as energy consumption, charging session status, and device health, our partner was able to proactively identify and resolve issues, minimising downtime and maintenance costs.

It also allowed users to check real-time charging station availability and reserve a station in advance, improving user experience, convenience, and operational efficiency. The RUT241 cellular router features a built-in wireless access point, enabling NFC payments directly at the charging station. This allowed end-clients to pay effortlessly using smart wallets or credit cards for their EV charging services.

With its compact size, standing at only 83 x 25 x 74 mm and plug-and-play functionality, the RUT241 cellular router fits seamlessly into EV chargers without requiring any additional modifications. Despite its size, the 4G router delivers industrial-grade reliability, capable of withstanding harsh outdoor conditions and continuous operation. It's <u>aluminium housing</u> protects the networking device from environmental factors such as extreme temperatures, dust, vibrations, and physical damage.

You can never be too secure! This cellular router features a built-in <u>firewall</u> and supports a range of VPN services, including OpenVPN, IPsec, <u>ZeroTier</u>, Stunnel, and more. With these robust security features, you can be confident that all aspects of your connectivity solution, from payments to sensitive data, are fully protected.

As the CEO of Elinta Charge says, "I am proud to say we are from the same country, Lithuania, as Teltonika. Proximity plays a huge role, especially in these turbulent times when supply chains face many challenges. We are familiar with the company and their impressive progress in development and innovation, which aligns perfectly with our philosophy.

So, don't miss out! Unlock seamless connectivity and robust security for your IoT solutions with Teltonika networking devices. Contact us to explore the possibilities!

