

PLUG AND PLAY CONNECTIVITY FOR EV CHARGING STATIONS

SUMMARY

The world is quickly moving to more sustainable technology, and this change encompasses everything from green energy production to smart IoT infrastructure. Besides decreasing the pollution, designers and city planners are also on a quest to lessen visual clutter in cities and make them more aesthetically pleasing.

CHALLENGE

In 2021 Elinta Charge started working on their next-generation EV charging station to help with the rapidly growing electric vehicle infrastructure. They needed something that would solve the connectivity problem in the new design. Teltonika Networks provided just the right connectivity solution that could meet all the requirements to put the smart engineering solution into a sleek urban design.

Another problem that urban engineering faces is implementing new additions to the infrastructure. New charging stations need a power supply, payment systems and connectivity. All of this usually requires access to the internet. If the internet infrastructure is unavailable in an area, it would be highly inefficient to lay down new groundwork only for implementing a charging station. Hence, wired connectivity is not always an option.

PARTNER - ELINTA CHARGE

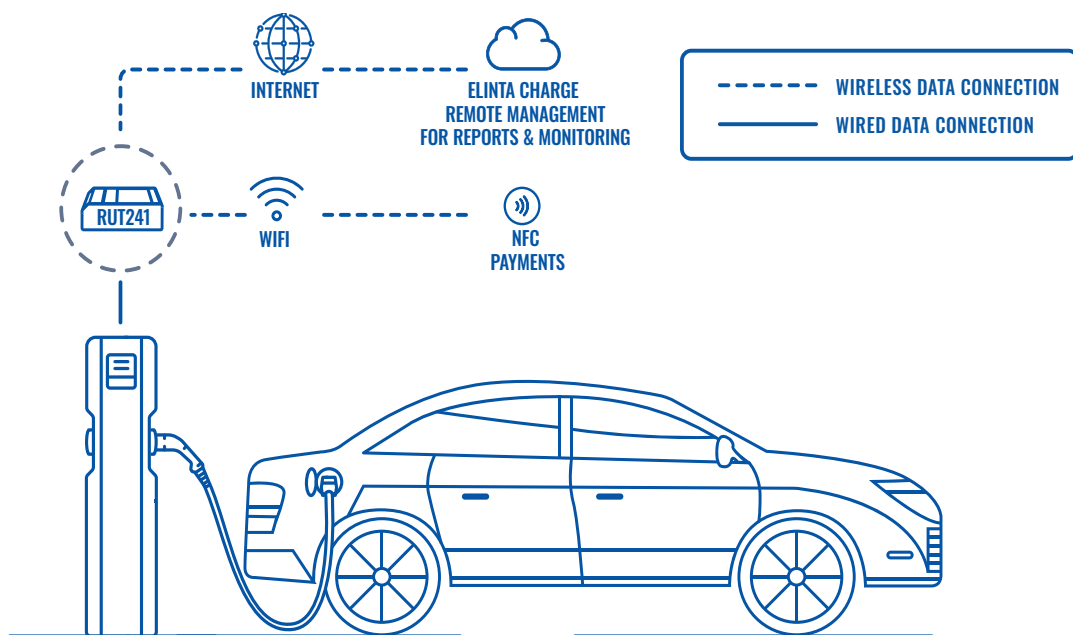
Elinta Charge is a Lithuania-based EV charging station manufacturing company and a part of the Elinta group, based on designing high-tech electronics and automated control systems. The company started its operations back in 2011 and has continually improved upon its designs since. Besides charging station manufacturing, Elinta Charge prides various EV accessories like adapters, controllers, home chargers and charge cables.

SOLUTION

Elinta Charge employs Teltonika Networks RUT241 industrial cellular router for their EV charging station IoT solution. The router enables internet access through cellular 4G connectivity without the need for any wired connection. Thanks to this connectivity, Elinta Charge is able to collect data from their charging stations and remotely manage them with their cloud-based management system. Remote management helps to change settings, perform firmware and payment system updates without visiting each charging station. Furthermore, it can also enable users to check the availability of charging stations and reserve them in advance.

Furthermore, RUT241 has a wireless access point functionality required for NFC (Near Field Communication) wireless payments. Clients can then pay using smart wallets or credit cards for their EV charging services. RUT241 can be easily integrated into an EV charger thanks to its compact design and plug-and-play functionality enabled by its wireless setup.

TOPOLOGY



BENEFITS

- Teltonika Networks router offers high-level security that any payment solution needs with the help of Firewall, Auto Cipher modes and client separation.
- RUT241 is compact which allows it to be integrated into a smart IoT solution without compromising the aesthetic.
- Routers' compatibility with remote management platforms enables 24/7 real-time analytics and surveillance, which provides information if there are any issues with the charging station.
- The cellular router offers high scalability with fast and easy installation, thanks to its plug-and-play approach.

WHY TELTONIKA NETWORKS?

In the words of the CEO of Elinta Charge, "I am proud to say we are from the same country as Teltonika Networks, Lithuania. Proximity plays a huge role, especially in these turbulent times, when supply chains face many challenges. We are familiar with the company and how well they are doing in further developments and implementing many innovations, and it all goes in line with our philosophy."

