POP-UP CONNECTIVITY AND POWER SOURCE FOR IoT PROJECTS

SUMMARY

The world of IoT is multifaceted. The projects come with varied industry requirements. Hence the connectivity solutions must meet various challenges that are hardly ever the same. While setting up enterprise sector connectivity needs sophisticated traffic management schemes and separate networks for multiple users and devices, remote IoT projects require custom powering and backup connectivity options. However, one thing is common across most IoT deployments: they are time-bound and need a quick setup.

CHALLENGE

A large portion of industrial IoT projects is outside of city infrastructure. Another considerable chunk comprises temporary or pop-up IoT solutions not tied to a single location. Some examples of these projects could be construction sites, temporary event locations, pop-up retail, or first responders and emergency services.

Naturally, such projects cannot rely on a wired connection and require alternative connectivity options. Besides, most of them do not even have access to a power source. As such, they need a solution that covers both of these challenges.

PARTNER - SpeedFi

SpeedFi provides a wide range of Wi-Fi services, such as network installations, temporary Wi-Fi for events, construction sites, mobile broadcasts, business continuity-emergency Internet. They also produce portable, high speed connectivity devices to assist organizations with mission-critical communication.

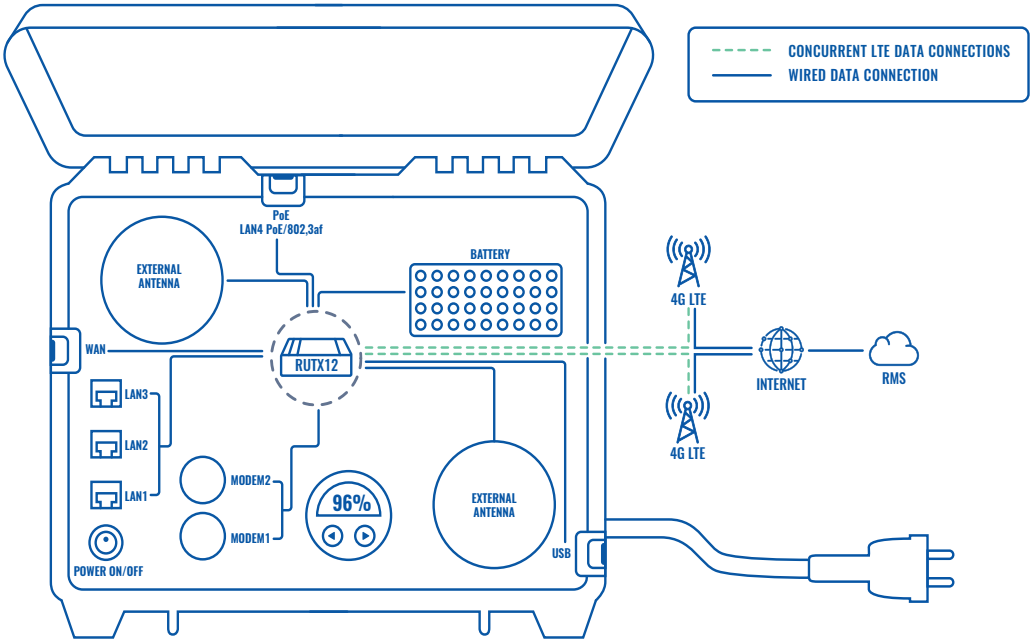
SOLUTION

Our partner SpeedFi offers an out-of-the-box solution to overcome connectivity and power challenges associated with remote and temporary projects. And it really does fit into one compact box of 42.01 x 33.1 x 17.37 cm! Their product features Teltonika Networks dual LTE Cat 6 cellular router with load-balancing functionality, helping reach very high speeds even in rural or industrial areas using two simultaneous connections.

This powerful router can connect various devices via multiple interfaces, including 5 Gigabit Ethernet ports, Wave-2 802.11ac Dual-Band Wi-Fi, Bluetooth LE, and USB. Dual SIM functionality also ensures next-to-zero downtime by utilizing different networks if one of them runs into any problems.

The solution works on a built-in battery, so even electricity is not required to set up a project. It can operate for a solid 35 hours before recharging! Designed to work as a close lid solution, it is entirely dust and waterproof when shut. It may also sustain an impressive temperature range from -20°C to 60°C, which is enough to withstand most of the outside and inside scenarios we could imagine.

TOPOLOGY



BENEFITS

- An out-of-the-box solution that is easy to use and does not require specialized technical knowledge.
- Provides both: connectivity and powering options, so all a user needs to do is connect the end devices, and the solution is ready to go.
- The load-balancing feature available on RUTX12 allows using multiple WAN sources to increase data throughput and minimize downtime.
- Multiple interfaces to connect various equipment: 5 Gigabit Ethernet ports, Wave-2 802.11ac Dual-Band Wi-Fi, Bluetooth LE, and USB.
- Can withstand harsh conditions, including heat, cold, humidity, and dust.

WHY TELTONIKA NETWORKS?

SpeedFi commented on why they chose Teltonika Networks: “The most important criteria when choosing a router for our project were durability, two LTE modems working simultaneously, and simple remote management.

Teltonika routers are known for their reliability and durability. The RUTX12 is built like a tank, resistant to vibrations and shocks. It can work in a very wide temperature range. Thanks to two modems, we can use two different mobile operators at the same time, which allows for instant failover and load balancing. This is important in constantly changing conditions. Another important aspect was the support for a fast and modern VPN such as Wireguard. Competitive industrial solutions still lack support for it.

Management and monitoring of multiple devices are done using the Teltonika Networks Remote Management System. Thanks to RMS and its personalization options, one look is enough to see the data that interests us. With the help of RMS CONNECT and RMS VPN, you can easily grant temporary remote access for our clients to devices connected to the router, for example, specialized construction equipment.”