



# EMERGENCY NETWORK CONNECTIVITY FOR HOSPITALS

## SUMMARY

Access to comprehensive, quality health care services is essential for promoting and maintaining health, preventing and managing diseases, reducing unnecessary disability and premature death, and achieving health equity for all people around the globe. Hospitals are the backbone of every health care. They need to provide quality services because the lives of people depend on it.

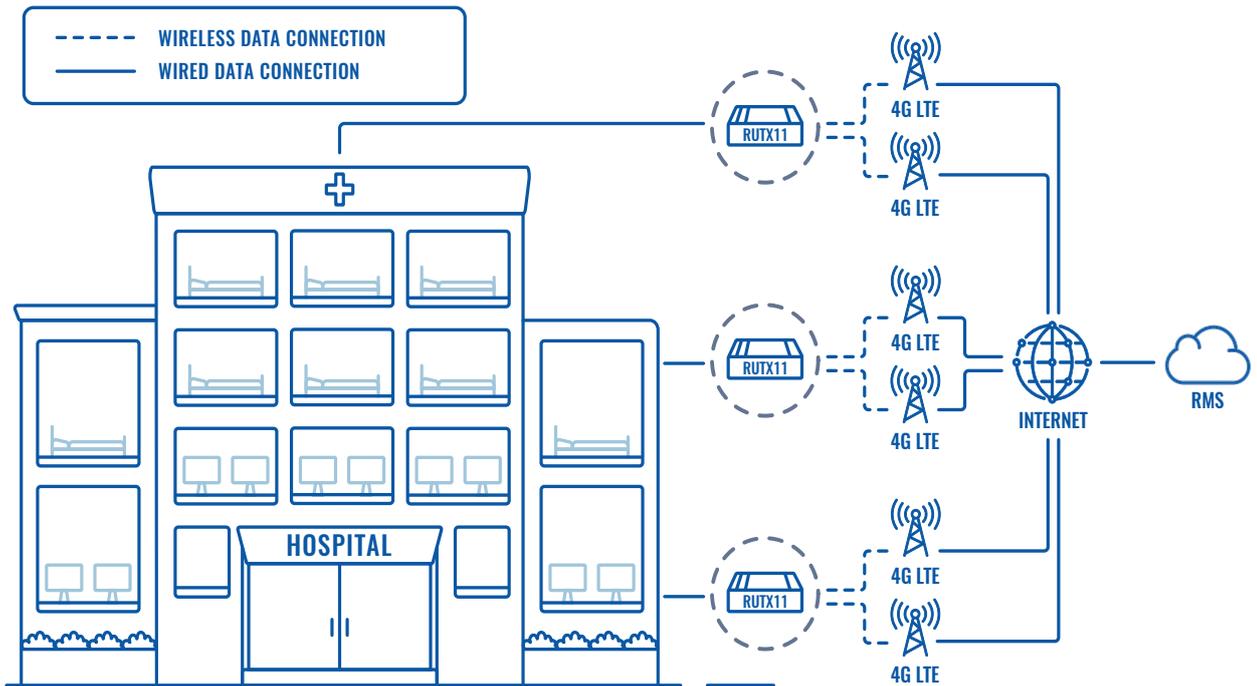
## CHALLENGE

Hospitals are fitted with a big variety of equipment. This includes simple handheld devices, various testing solutions, and even high-end technology medical devices such as PET/CT scanners, MRI machines, or lung ventilators. For the hospital staff to be able to do their work efficiently, all technology solutions must be connected into one seamless system. This is essential for the doctors to be able to access and exchange information such as lab test results, update patient profiles, and schedule different procedures. While different doctors work with different equipment, they all need that hospital communication would be as fast as possible and without any downtimes. Besides, currently, the hospitals around the world which are dealing with the extreme pandemic of Covid-19 are struggling to keep their networks secure due to increased hacker activities. Cyberattacks threaten not only the lives of patients, but also the broader fight against the coronavirus. The main challenge here is to ensure fast, reliable, and secure connectivity.

## SOLUTION

Currently, internet service providers are overwhelmed with the traffic because almost everyone is at home due to quarantine and are consuming significant amounts of internet. As presented in the topology below, the best solution for the hospitals or IT companies that provide services for them is to upgrade existing network infrastructure with cellular routers. This way, the separate cellular network can be established with strict security settings in place and be used exclusively for medical device communication. As cellular routers provide internet connectivity provided by the mobile operator, it can be arranged that the operator would prioritize hospital traffic with specific APN values to help deal with the pandemic response.

## TOPOLOGY



More importantly, cellular-based networks can be established with minimal time required – a large number of routers can be preconfigured off-site and deployed, creating a unified, secure wireless network. Professional cellular router RUTX11 with 4G LTE CAT 6 mobile capabilities is the ideal choice for this solution. It provides reliable connectivity with speeds up to 300 Mbps and Dual-Band Wi-Fi. Dual SIM functionality with Auto Failover adds additional solution reliability, leveraging the connection quality of two separate mobile operators. Security is one of the top priorities at Teltonika Networks. All our routers are equipped with multiple VPN options and firewall for security. And finally, RUTX11 is compatible with the Teltonika Remote Management System, which allows remote set-up, configuration, and management.

## BENEFITS

- Performance - RUTX11 with LTE CAT 6 cellular module provides speeds up to 300 Mbps.
- Connection reliability - Cellular routers provide additional-independent connectivity to medical network infrastructure.
- Security - Devices and software of Teltonika Networks meets high-security standards and offer advanced configuration scenarios to protect from cybersecurity threats.
- Easy setup of the router minimize the time spent at the site.
- Remote management - Remote Management System (RMS) allows to reach devices behind the router and manage the whole fleet of devices from initial set-up to periodic maintenance.

## WHY TELTONIKA?

Hundreds of solutions and various types of businesses are supported by Teltonika Networks devices, from retail markets to military projects. RUTX11 router with top security features and with the high bandwidth throughput enables IT operators and hospitals to deploy an additional-independent connection layer to the network infrastructure of the hospital.

