

LTE CONNECTIVITY IN SELF-SERVICE PARCEL TERMINALS

SUMMARY

The growing e-commerce market and the increasing pace of everyday living are changing the way we acquire goods. In fact, according to the Commerce Department of the USA, in 2019 online purchases have surpassed in-store purchases of products for the first time in history. Such enormous shift in consumer behavior poses significant logistical challenges for product deliveries. Some businesses are offering self-service parcel terminals which provide a convenient way to retrieve bought goods at a convenient time for the buyer.

CHALLENGE

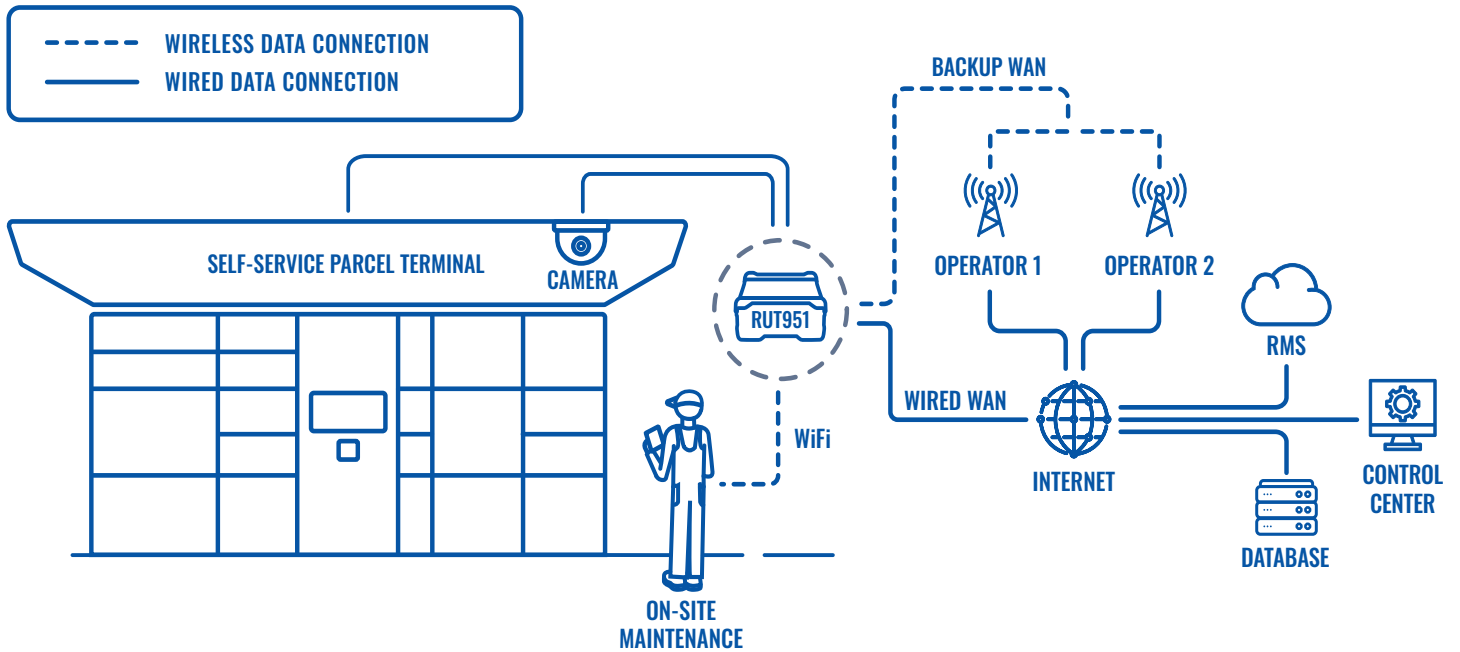
These Self-Service Parcel delivery terminals are complex systems consisting of multiple Pick-up locations. Terminals are automated machines with screens for human interaction and the ability to process cash and card payments. Finally, everything is controlled by dedicated software from the central server authorizing parcel pickup and making sure the user gets his/her goods instead of someone else's. Key functionality enabling these terminals is a reliable connection to the Internet. However, wired connectivity via fiber or DSL cannot offer 100% uptime which is essential to Self-Service Parcel Terminal operators.

SOLUTION

All connectivity challenges for this use case can be addressed by installing an industrial cellular router to provide primary or backup connectivity via 4G LTE. RUT951 by Teltonika Networks is ideal for this application because it is equipped with Dual SIM functionality which offers additional automatic redundancy in case one mobile GSM operator fails. RUT951 is being connected straight to the industrial computer controlling the whole Self-Service Terminal and managing the connection between wired and cellular backup WAN. When RUT951 detects that Internet connectivity via wired WAN is no longer available it automatically switches to 4G LTE until the service to the wired WAN is restored. This way, the router uses only as much mobile data as required while service to the Terminal users remain unaffected.



TOPOLOGY



BENEFITS

- Easy management and control – RUT951 is compatible with Teltonika Remote Management system, which is the single best monitoring and control platform allowing scalable and straightforward configuration and management even without Public IP.
- Additional device connectivity - Multiple Ethernet ports allow additional devices to be connected, such as CCTV cameras for security and anti-vandalism monitoring.
- Wi-Fi functionality with advanced authorization protocols supported allows local maintenance staff to securely connect to the whole system wirelessly and control system parameters during parcel delivery to the terminal.

WHY TELTONIKA?

Self-Service Parcel Delivery Terminals require industrial connectivity hardware that is reliable, secure and easy to use. Networking Protocols, such as Modbus, SNMP, MQTT, and support for various VPN services for additional data security, makes RUT951 an ideal device to provide primary or backup connectivity for the terminals. Best of all, RUT951 is Teltonika RMS compatible, which means you can conveniently monitor and manage both the router and devices connected to the router from anywhere, even without Public IP.

